



# ARMIDALE REGIONAL LANDFILL

*Environmental Assessment*

## Volume 2

## ARMIDALE REGIONAL LANDFILL

*Environmental Assessment - Volume 2 Technical Appendices A - D*

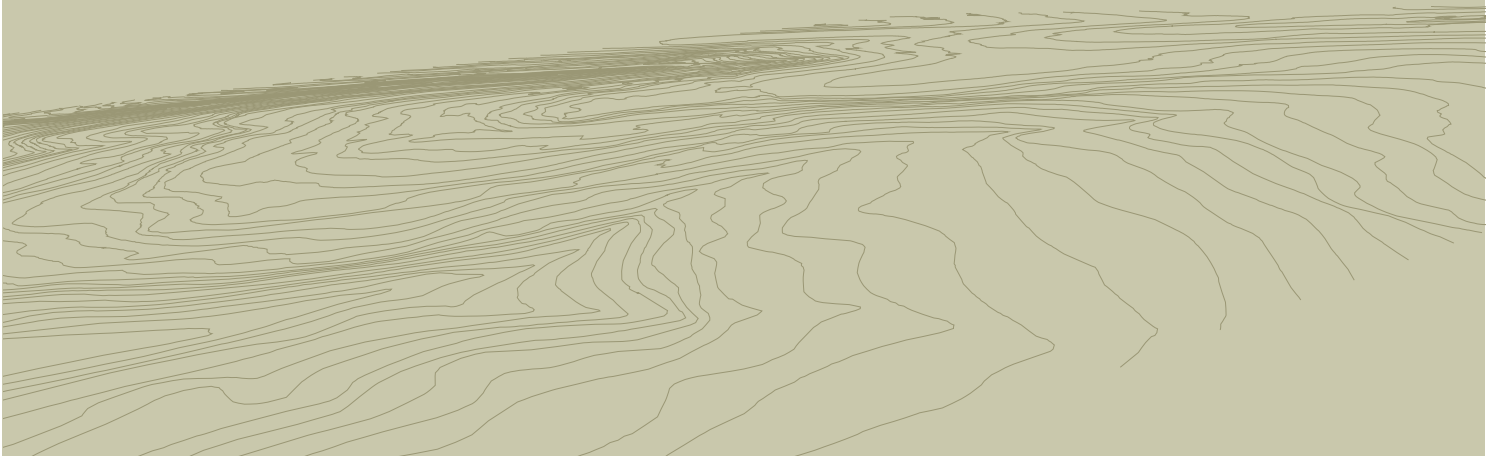
Prepared for  
**Armidale Dumaresq Council**  
135 Rusden Street, Armidale NSW 2350

April 2010



# ARMIDALE REGIONAL LANDFILL

*Environmental Assessment*





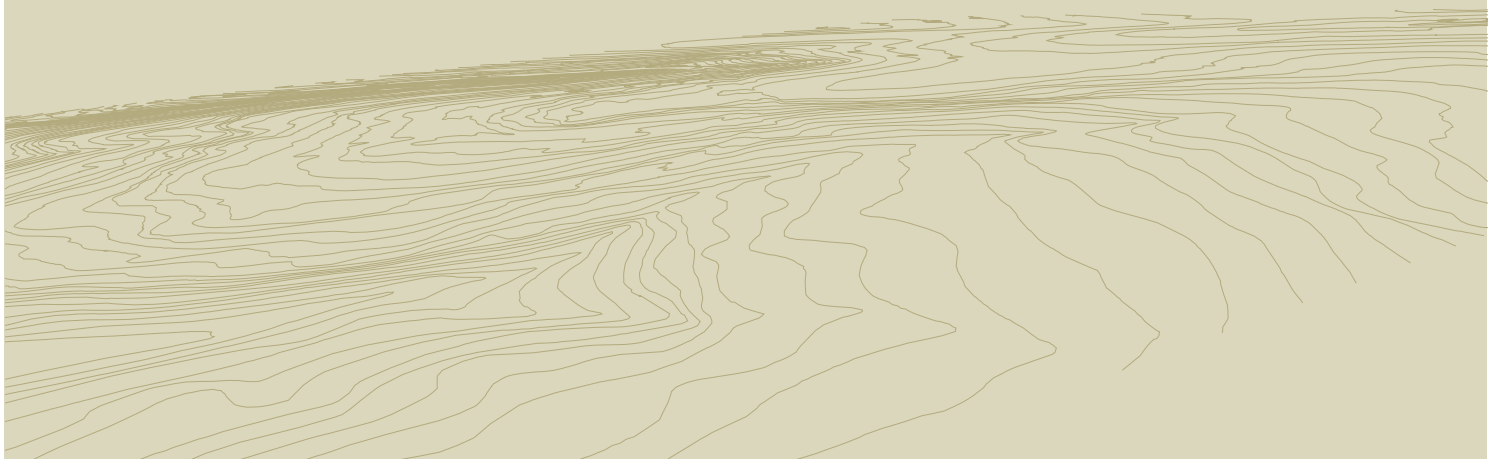


## Appendix A

*Director General's Requirements, 2005 and 2008;  
and Government Consultation*

# ARMIDALE REGIONAL LANDFILL

*Environmental Assessment*





NSW GOVERNMENT  
**Department of Planning**

**Major Project Assessment  
Industry & Mining**  
Phone: (02) 9228 6495  
Fax: (02) 9228 6466  
Email: [Megan.Webb@planning.nsw.gov.au](mailto:Megan.Webb@planning.nsw.gov.au)  
23-33 Bridge Street  
GPO Box 39  
SYDNEY NSW 2001

Mr David Steller  
135 Rusden Street  
ARMIDALE NSW 2350

Our ref: 9039587

Dear Mr Steller

**Armidale Dumaresq Landfill Project (06\_0220)  
Director-General's Requirements**

The Department has received your application for the Armidale Dumaresq Landfill Project.

I have attached a copy of the Director-General's requirements for the project. These requirements have been prepared in consultation with the relevant agencies, including the Commonwealth Department of Environment, Water, Heritage and the Arts, and are based on the information you have provided to date. I have also attached a copy of the agencies comments for your information.

Please note that the Director-General may alter these requirements at any time.

I would appreciate it if you would contact the Department at least two weeks before you propose to submit your Environmental Assessment for the project. This will enable the Department to determine the:

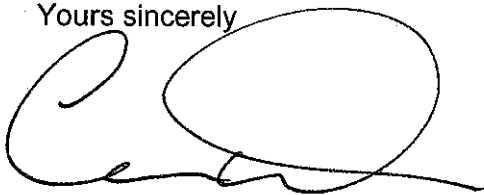
- applicable fee (see Division 1A, Part 15 of the Environmental Planning and Assessment Regulation 2000); and
- number of copies (hard-copy or CD-ROM) of the Environmental Assessment that will be required for exhibition purposes.

Once it receives the Environmental Assessment, the Department will review it in consultation with the relevant agencies to determine if it adequately addresses the Director-General's requirements, and may require you to revise it prior to public exhibition.

The Department is required to make all the relevant information associated with the project publicly available on its website. Consequently, I would appreciate it if you would ensure that all the documents you subsequently submit to the Department are in a suitable format for the web, and arrange for an electronic version of the Environmental Assessment to be hosted on a suitable website during the exhibition period.

If you have any enquiries about these requirements, please contact Megan Webb on 9228 6495.

Yours sincerely

A handwritten signature in black ink, appearing to be 'Chris Wilson', written over a large, faint oval shape.

21.11.08

Chris Wilson  
**Executive Director**  
**Major Project Assessment**  
As delegate for the Director-General



# Director-General's Requirements

Section 75F of the *Environmental Planning and Assessment Act 1979*

|                             |   |
|-----------------------------|---|
| <b>Application Number</b>   | 06_0220   |
| <b>Project</b>              | The Armidale Dumaresq Landfill Project which involves the development of a new landfill and associated infrastructure.  |
| <b>Location</b>             | Waterfall Way, Armidale (Parts of Lot 1 DP 253346, Lot 2 DP 253346 and Lot 1 DP 820271)   |
| <b>Proponent</b>            | Armidale Dumaresq Council   |
| <b>Date of Issue</b>        | 20 November 2008  |
| <b>General Requirements</b> | <p>The Environmental Assessment (EA) must include:</p> <ul style="list-style-type: none"> <li>• an executive summary;</li> <li>• a detailed description of the project including the: <ul style="list-style-type: none"> <li>– waste strategy for the region, and the need for the project within this broader strategic context;</li> <li>– alternatives considered, including not proceeding and expansion of the existing landfill;</li> <li>– plans of the proposed landfill, leachate management systems and associated infrastructure; and</li> <li>– proposed rehabilitation of the landfill;</li> </ul> </li> <li>• a risk assessment of the potential environmental impacts of the project, identifying the key issues for further assessment;</li> <li>• a detailed assessment of the key issues specified below, and any other significant issues identified in the risk assessment (see above), which includes: <ul style="list-style-type: none"> <li>– a description of the existing environment, using sufficient baseline data;</li> <li>– an assessment of the potential impacts of all stages of the project, including any cumulative impacts, taking into consideration any relevant policies, guidelines, plans and statutory provisions, including the <i>Environmental Protection and Biodiversity Conservation Act 1999</i> and associated Regulations (see below);</li> <li>– a description of the measures that would be implemented to avoid, minimise, mitigate, rehabilitate/remediate, monitor and/or offset the potential impacts of the project, including detailed contingency plans for managing any potential significant risks to the environment;</li> </ul> </li> <li>• a statement of commitments, outlining all the proposed environmental management and monitoring measures;</li> <li>• a conclusion justifying the project on economic, social and environmental grounds, taking into consideration whether the project is consistent with the objects of the <i>Environmental Planning and Assessment Act 1979</i>;</li> <li>• a signed statement from the author of the Environmental Assessment certifying that the information contained in the report is neither false nor misleading.</li> </ul> |
| <b>Key Issues</b>           | <ul style="list-style-type: none"> <li>• <b>Waste management</b>– including: <ul style="list-style-type: none"> <li>- cell and landfill lining design and integrity;</li> <li>- source, quantity and type of waste;</li> <li>- waste management, classification, receipt, separation and stockpiling;</li> <li>- input rates into landfill; and</li> <li>- litter and feral animal control;</li> </ul> </li> </ul>  |

|                     |   |
|---------------------|---|
|                     | <ul style="list-style-type: none"> <li>• <b>Soil and water</b> – including: <ul style="list-style-type: none"> <li>- details of soil structure and potential impacts;</li> <li>- a water balance for the site detailing water sources and quantity, water consumption and recycling, and the estimated quantity of leachate and stormwater;</li> <li>- surface water and groundwater impacts including potential impacts on the Gara River and the Oxley Wild Rivers National Park;</li> <li>- proposed leachate management systems including pond management and remediation measures, and potential risks on the Gara River and the Oxley Wild Rivers National Park</li> <li>- proposed erosion and sediment controls and stormwater management systems;</li> <li>- surface water and groundwater monitoring program;</li> <li>- water access and harvestable rights; and</li> <li>- flooding impacts;</li> </ul> </li> <li>• <b>Biodiversity</b> – including: <ul style="list-style-type: none"> <li>- impacts on threatened species, populations, or ecological communities and their habitats;</li> <li>- impacts on aquatic habitats and groundwater dependent ecosystems;</li> <li>- proposed biodiversity offsets and management; and</li> <li>- weed management, including potential risks to the Oxley Wild Rivers National Park ;</li> </ul> </li> <li>• <b>Odour</b> – including odour impacts from all operational sources at the nearest sensitive receivers; and control measures;</li> <li>• <b>Air quality</b> – including dust generation;</li> <li>• <b>Greenhouse Gas</b> – including: <ul style="list-style-type: none"> <li>- a quantitative assessment of the potential scope 1, 2 and 3 greenhouse gas emissions of the project, and qualitative assessment of the potential impacts of these emissions on the environment;</li> <li>- a detailed description of the measures that would be implemented to ensure that the project is energy efficient;</li> </ul> </li> <li>• <b>Noise</b> – including construction, operation and traffic noise;</li> <li>• <b>Visual</b> – particularly from surrounding residences and Waterfall Way;</li> <li>• <b>Traffic</b> - including details of traffic volumes likely to be generated during construction and operation, and an assessment of the predicted impacts of this traffic on the safety and capacity of the surrounding road network;</li> <li>• <b>Heritage</b> – including: <ul style="list-style-type: none"> <li>- impacts on the heritage values of the Oxley Wild Rivers National Park as part of the Gondwana Rainforests of Australia World Heritage Area; and</li> <li>- impacts on other Aboriginal and non-Aboriginal heritage;</li> </ul> </li> <li>• <b>Hazards</b> – including fire management; and</li> <li>• <b>Socio-Economic</b> – including any impacts on the surrounding agricultural activities.</li> </ul> |
| <b>References</b>   | The Environmental Assessment must take into account relevant State government technical and policy guidelines. While not exhaustive, guidelines which may be relevant to the project are included in the attached list.   |
| <b>Consultation</b> | <p>During the preparation of the Environmental Assessment, you should consult with the relevant local, State and Commonwealth government authorities, service providers, community groups and affected landowners.</p> <p>In particular you must consult with:</p> <ul style="list-style-type: none"> <li>• Commonwealth Department of the Environment, Water, Heritage and the Arts;</li> <li>• NSW Department of Environment and Climate Change;</li> <li>• NSW Department of Water and Energy;</li> <li>• NSW Department of Primary Industries</li> <li>• NSW Roads and Traffic Authority; and</li> </ul>  |



|                              |   |
|------------------------------|---|
|                              | <ul style="list-style-type: none"> <li>• Uralla, Walcha and Guyra Councils.</li> </ul> <p>The consultation process and the issues raised must be described in the Environmental Assessment.</p> |
| <b>Deemed Refusal Period</b> | 60 days   |

# Policies, Guidelines & Plans

| Aspect          | Policy /Methodology  |
|-----------------|--|
| Waste           | Waste Avoidance and Resource Recovery Strategy 2007 (DECC)<br>Waste Classification Guidelines (DECC)<br>Environmental Guidelines: Solid Waste Landfills (DEC)<br>State Environmental Planning Policy (Infrastructure) 2007   |
| Soil and Waters | Rural Land Capability Mapping (DLWC)<br>Agricultural Land Classification. Agfact AC.25. (NSW Agriculture)<br>State Environment Planning Policy No. 55 – Remediation of Land  |
| Soils           | National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)<br>National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ)<br>Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC)<br>Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC)<br>Managing Urban Stormwater: Soils & Construction (Landcom)<br>Managing Urban Stormwater: Council Handbook. Draft (EPA)<br>Managing Urban Stormwater: Treatment Techniques (EPA)<br>Managing Urban Stormwater: Source Control. Draft (EPA)<br>Managing Urban Stormwater: Harvesting and Reuse (DEC) |
| Surface Water   | Bunding and Spill Management (EPA)<br>National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)<br>NSW State Groundwater Policy Framework Document (DLWC)<br>NSW State Groundwater Quality Protection Policy (DLWC)<br>NSW State Groundwater Quantity Management Policy (DLWC) Draft  |
| Groundwater     |  |
| Biodiversity    | Environmental Protection and Biodiversity Conservation Regulations 2000 (Schedule 4)<br>Commonwealth Environmental Protection and Biodiversity Conservation Act 1999 – Guide to implementation in NSW (DoP)<br>Draft Guidelines for Threatened Species Assessment (DEC)<br>NSW Groundwater Dependent Ecosystem Policy (DNR);<br>Policy and Guidelines for Fish Friendly Waterway Crossings (DPI)<br>State Environmental Planning Policy No. 44 – Koala Habitat Protection  |

|                                |   |
|--------------------------------|---|
| <b>Odour</b>                   | Technical Framework: Assessment and Management of Odour from Stationary Sources in NSW (DEC)  |
|                                | Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW (DEC)      |
| <b>Air Quality</b>             | Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC)              |
|                                | Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC)                 |
| <b>Greenhouse Gas</b>          | National Greenhouse Accounts (NGA) Factors  |
| <b>Noise</b>                   | NSW Industrial Noise Policy (DEC, Dec, 1999)  |
|                                | Environmental Noise Control Manual (DECC)   |
|                                | Environmental Criteria for Road Traffic Noise (EPA, 1999)                                     |
| <b>Visual</b>                  | Control of Obtrusive Effects of Outdoor Lighting (Standards Australia, AS 4282)               |
| <b>Traffic &amp; Transport</b> | Guide to Traffic Generating Development (RTA)   |
|                                | Road Design Guide (RTA)   |
| <b>Heritage</b>                | Draft Guidelines for Aboriginal Cultural Heritage Assessment and Community Consultation (DEC) |



## **Attachment 1. Guidelines on EPBC Act matters – for reference**

The Commonwealth Minister for the Environment has declared the project to be a controlled action under section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Under the provisions of the Bilateral Agreement between the New South Wales and Commonwealth Governments, the environmental assessment of the impacts of the controlled action must be assessed under Part 3A of the EP&A Act.

The Assessment should also include enough information about the controlled action and its relevant impacts to allow the Commonwealth Environment Minister to make an informed decision whether or not to approve the controlled action under the EPBC Act.

This assessment is to be integrated into the assessment required for Part 3A of the EP&A Act. As a guide, the following matters in the EPBC Act and Schedule 4 of the EPBC Regulations 2000 should be considered.

### **1. General information**

The background of the action including:

- (a) the title of the action;
- (b) the full name and postal address of the designated proponent;
- (c) a clear outline of the objective of the action;
- (d) the location of the action;
- (e) the background to the development of the action;
- (f) how the action relates to any other actions (of which the proponent should reasonably be aware) that have been, or are being, taken or that have been approved in the region affected by the action;
- (g) the current status of the action;
- (h) the consequences of not proceeding with the action.

### **2. Description of the controlled action**

A description of the action, including:

- (a) all the components of the action;
- (b) the precise location of any works to be undertaken, structures to be built or elements of the action that may have relevant impacts;
- (c) how the works are to be undertaken and design parameters for those aspects of the structures or elements of the action that may have relevant impacts;
- (d) to the extent reasonably practicable, a description of any feasible alternatives to the controlled action that have been identified through the assessment, and their likely impact, including:
  - (i) if relevant, the alternative of taking no action;
  - (ii) a comparative description of the impacts of each alternative on the matters protected by the controlling provisions for the action;
  - (iii) sufficient detail to make clear why any alternative is preferred to another.

### **3. A description of the relevant impacts of the controlled action;**

An assessment of all relevant impacts that the controlled action has, will have or is likely to have on:

- (a) threatened ecological communities and threatened species potentially present and listed under sections 18 and 18A of the EPBC Act;
- (b) migratory species listed under the EPBC Act;
- (c) Ramsar Wetlands;
- (d) places listed on the National Heritage list;
- (e) World Heritage areas.

Information must include:

- (a) a description of the relevant impacts of the action on matters of national environmental significance;
- (b) a detailed assessment of the nature and extent of the likely short term and long term relevant impacts;
- (c) a statement whether any relevant impacts are likely to be unknown, unpredictable or irreversible;
- (d) analysis of the significance of the relevant impacts;
- (e) any technical data and other information used or needed to make a detailed assessment of the relevant impacts.

### **4. Proposed safeguards and mitigation measures**

A description of feasible mitigation measures, changes to the controlled action or procedures, which have been proposed by the proponent or suggested in public submissions, and which are intended to prevent or minimise relevant impacts.

Information must include:

- (a) a description, and an assessment of the expected or predicted effectiveness of, the mitigation measures;
- (b) any statutory or policy basis for the mitigation measures;
- (c) the cost of the mitigation measures;
- (d) an outline of an environmental management plan that sets out the framework for continuing management, mitigation and monitoring programs for the relevant impacts of the action, including any provisions for independent environmental auditing;
- (e) the name of the agency responsible for endorsing or approving each mitigation measure or monitoring program;
- (f) a consolidated list of mitigation measures proposed to be undertaken to prevent, minimise or compensate for the relevant impacts of the action, including mitigation measures proposed to be taken by State governments, local governments or the proponent.

## **5. Other approvals and conditions**

Any other requirements for approval or conditions that apply, or that the proponent reasonably believes are likely to apply, to the proposed action. Information must include:

- (a) details of any local or State government planning scheme, or plan or policy under any local or State government planning system that deals with the proposed action, including:
  - (i) what environmental assessment of the proposed action has been, or is being, carried out under the scheme, plan or policy;
  - (ii) how the scheme provides for the prevention, minimisation and management of any relevant impacts;
- (b) a description of any approval that has been obtained from a State, Territory or Commonwealth agency or authority (other than an approval under the Act), including any conditions that apply to the action;
- (c) a statement identifying any additional approval that is required;
- (d) a description of the monitoring, enforcement and review procedures that apply, or are proposed to apply, to the action.

## **6. Environmental record of person proposing to take the action**

The assessment must include:

- (a) Details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against:
  - (i) the person proposing to take the action; and
  - (ii) for an action for which a person has applied for a permit, the person making the application.
- (b) If the person proposing to take the action is a corporation — details of the corporation's environmental policy and planning framework.

## **7. Information sources**

For information given in an Environmental Assessment, the assessment must state:

- (a) the source of the information; and
- (b) how recent the information is; and
- (c) how the reliability of the information was tested; and
- (d) what uncertainties (if any) are in the information.

## **8. Consultation**

The assessment must include:

- (a) Details of any consultation about the action, including:
  - (i) any consultation that has already taken place;
  - (ii) proposed consultation about relevant impacts of the action;
  - (iii) if there has been consultation about the proposed action — any documented response to, or result of, the consultation.



(b) Identification of affected parties, including a statement mentioning any communities that may be affected and describing their views.

## **Attachment 2: Specific matters to be addressed**

In addressing the assessment requirements in Attachment 1, the assessment should include:

(a) A detailed monitoring program for ground and surface water quality on the site, at key areas adjacent to the perimeter of the site and at appropriate locations downstream on the Gara River to:

- (i) establish baseline data on current surface and ground water quality;
- (ii) be conducted at sufficient frequency to ensure early detection of adverse changes in water quality;
- (iii) detect water quality changes over time that may be caused by the construction and operation of the landfill;
- (iv) identify critical water quality values which, if exceeded, may potentially impact the heritage values of the Gondwana Rainforests of Australia World Heritage Area (GRAWHA);
- (v) identify remedial actions to be taken should these critical water quality values be exceeded, including the person(s) responsible for the undertaking of those remedial actions; and
- (vi) identify a period for review and evaluation of the effectiveness of the program and a process for its amendment.

(b) A management plan that identifies the potential impacts on the heritage values of the downstream GRAWHA, including:

- (i) identification of the values of the GRAWHA;
- (ii) inclusion of a water quality monitoring program (described above);
- (iii) identification of measures for the control of air and water borne weed propagules onsite;
- (iv) identification of measures for the control of invasive weed species downstream of the site in cooperation with adjacent landowners, state agencies and the World Heritage Area place managers;
- (v) identification of thresholds beyond which significant impacts on the heritage values of the GRAWHA may occur, and remedial actions to be undertaken should those thresholds be exceeded, including the person(s) responsible for the undertaking of those remedial actions;
- (vi) detailed contingency plans (including identification of the responsible party) should environmental events (such as local flooding) threaten containment of the landfill barriers; and
- (vii) a period for review and evaluation of the effectiveness of the plan and a process for its amendment.

(c) Information to demonstrate the efficacy of the proposed landfill lining in preventing leachate entering the ground water;

(d) Information relating to the remediation of the sediment and dry basins on site should the leachate pond overflow into either of these structures.

**Jacqueline Ingham - Armidale Regional Landfill**

---

**From:** <andrew.scott@dpi.nsw.gov.au>  
**To:** <Jacqueline.ingham@planning.nsw.gov.au>  
**Date:** 29/10/2008 17:32  
**Subject:** Armidale Regional Landfill

---

Hi Jacqueline,

I hope you received my apology for the planing focus meeting for the landfill. The following points are that which NSW DPI considers important to the surrounding rural land and rivers. Hence, should be addressed in the planning, development and operation phases and as such reflected in the environmental assessment.

- Plastic bags been blown off site can be ingested by inquisitive livestock causing digestive problems leading to sever weight loss and even death. Strategies should be put in place to protect neighbouring property owners and stock route against plastic bag contamination.
- Attraction of Feral animals and their access (Cats, foxes, Pigs and Dogs, Crows, bees) to food waste. Prevention of feral animal access is imperative to control the risk of endemic and exotic disease. Avoiding the attraction of pests helps avoid the increased damage they cause to primary production such as fox predation on lambs, bird damage to orchards etc.
- Harboursing of pest animals such as mice and cats is a concern as these can serve as a source of infestation for neighbouring landholders.
- Weeds spreading off site as a result of incomplete composting and dumping of green waste. Green waste needs to be composted according to Australian standards. If green waste compost is to be transported throughout the state the Landfill will need to consider composting in accordance with a compliance agreement accredited through NSW DPI.
- The planning and provision for a Drum Muster Depot for collection of chemical drums will support agricultural industries and the environment through the responsible collection and recycling of chemical drums.

For further information and planning discussions surrounding drumMuster please contact drumMUSTER

Phil Tucker (Northern NSW)  
 PO Box 372  
 Narrabri NSW 2790  
 Phone: 02 6792 5274  
 Fax: 02 6792 5274  
 Mobile: 0427 925 274  
 email: [chasmr@bigpond.net.au](mailto:chasmr@bigpond.net.au)

or

drumMuster Head office  
 Level 4, AMP Building 1 Hobart Place Canberra ACT 2601  
 GPO 816 Canberra City ACT 2601  
 Phone: (02) 6230 6712 Fax: (02) 6230 6713  
 e-mail: [drummuster@drummuster.com.au](mailto:drummuster@drummuster.com.au)

NSW DPI Aquatic Habitat Protection Unit (AHPU) has identified the following issues pertaining to



fisheries which should be addressed in the planning, development and operation phases to support our fisheries resources.

- Appropriate containment of refuse, rubbish, etc to ensure no net impact on receiving waters.
- Appropriate erosion and sedimentation controls along drainage lines in place to control sediment entering waterways after the construction phase is completed, and until the site has been fully stabilized to ensure that there is no net increase in runoff and no reduction in water quality of receiving waters.
- Provision of a vegetated buffer zone, around the disturbed area and re-instatement of riparian vegetation where possible along watercourses and drainage lines to ensure protection of water quality

Permits are obtained for any proposed dredging and reclamation works associated with the proposal in accordance with section 198-203 of the Fisheries Management Act 1994. Such works may include, but are not limited to, construction of waterway crossings, culverts, excavating or reclaiming the bed or banks of any waterways.

#### Definitions

The definitions given below are relevant to these requirements and are the definitions referred to in the Fisheries Management Act 1994:

Waters refers to all waters including flowing streams, irregularly flowing streams, gullies, rivers, lakes, lagoons, wetlands and other forms of natural or man made water bodies on both private and public land.

Dredging means any work that involves excavating water land.

Water Land means land submerged by water, whether permanently or intermittently.

Reclamation means any work that involves using material to fill in or reclaim water land, or depositing any such material on water land, or draining water from water land.

Please contact myself or David Ward (Fisheries Conservation Manager ph: 02 6765 4591) if you have any other concerns

Thank You,  
Andy

Andrew Scott  
Resource Management Officer  
North West (Barwon) Region  
Department of Primary Industries

4 Marsden Park Road  
Calala NSW 2340

ph: 02 6763 1142  
Mobile: 0427 245 313  
Fax: 02 6763 1222

<http://www.dpi.nsw.gov.au>  
e-mail: [andrew.scott@dpi.nsw.gov.au](mailto:andrew.scott@dpi.nsw.gov.au)

This message is intended for the addressee named and may contain confidential information. If you a



NSW Government  
Department of Water & Energy

Ms Jacqueline Ingham  
Major Development Assessments  
Department of Planning  
GPO Box 39  
Sydney NSW 2001

Contact: Rod Browne  
Phone: (02) 6740 2347  
Fax: (02) 6742 3129  
Email: [rod.browne@dnr.nsw.gov.au](mailto:rod.browne@dnr.nsw.gov.au)

Our ref: ER 20333  
Your ref:  
File: 90049728

4 November 2008

Dear Ms Ingham,

**Proposed Armidale Regional Landfill  
Waterfall Way, Armidale**

In response to your initial letter of 15<sup>th</sup> October 2008 on the above proposal and subsequent communications following the Planning Focus Meeting (PFM) on 22<sup>nd</sup> October, this letter is to confirm the Department's (DWE's) issues for inclusion in the Environmental Assessment (EA).

The proposed landfill site drains to the Gara River which has important environmental values and features downstream, while the site is likely to have an underlying groundwater regime which also drains to the river. Thus surface and groundwater management, the source of any on site water use or interception, and water quality monitoring, are the key matters of interest. The PFM minutes summarise the points raised at the site inspection. Attached for your assistance are DWE's general requirements for environmental assessment which provide more detail on these points.

Proposals in the EA for surface and groundwater water monitoring and queries on possible licensing and approvals under water legislation may require further consultation. Please refer my contact details as per above to the relevant consultants if this is the case.

Yours sincerely,

Rod Browne  
Senior Planning Officer  
Major Projects, Mine Assessments & Planning

## Department of Water and Energy

### General Assessment Requirements for Major Project Proposals Under Part 3A of *Environmental Planning & Assessment Act 1979*

The Department of Water and Energy (DWE) provides the following advice for consideration:

#### Relevant Legislation

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

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

In particular, proposals and management plans should be consistent with the Objects (s.3) and Water Management Principles (s.5) of the *WMA*.

#### Water Sharing Plans

Gazetted Water Sharing Plans (WSPs) prepared under the provisions of the *WMA* establish rules for access to, and the sharing of water between the environmental needs of the surface or groundwater source and water users. If the proposal is within a gazetted WSP area the assessment is required to demonstrate consistency with the rules of the WSP. Refer to: <http://www.dnr.nsw.gov.au/water/plans.shtml>

#### 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 State 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*

In addition assessments should consider the following strategies:

- *NSW Salinity Strategy*
- *NSW Water Conservation Strategy*

The majority of these documents can be found at:

<http://www.dnr.nsw.gov.au/water/legislation.shtml>

#### 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 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 (GDEs)

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.



The *Rivers and Foreshores Improvement Act 1948 (RFIA)* has now been repealed and the controlled activity provisions in the *WMA* have commenced. The provisions relating to controlled activities replaced the *RFIA* from 4 February 2008.

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.

Although Part 3A Major Projects are exempt from requiring a controlled activity approval (s91 of *WMA*), the assessment is required to take into account the objectives and provisions of relevant legislation and guidelines.

**Note:** Recommended Core Riparian Zones (as applicable):

- Minimum of 10m for any intermittently flowing 1<sup>st</sup> order watercourse;
- 20m for any permanently flowing 1<sup>st</sup> order watercourse or any 2<sup>nd</sup> order watercourse;
- 20m – 40m (merit based assessment) for any 3<sup>rd</sup> order or greater watercourse.

[Refer to DWE Guidelines for Controlled Activities (February 2008) – Riparian Corridors].

#### 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.dnr.nsw.gov.au/water/dams.shtml>

#### **Basic Landholder Rights**

The *WMA* identifies Basic Landholder Rights (BLRs) for access to water whereby landholders over an aquifer or with river or lake frontage can access water for domestic (household) purposes or to water stock without the need for a water licence (although a works approval may still be required). This has the potential to impact inequitably on existing licensed water users (under a WSP) in the case where riparian frontage continues to be subdivided, creating new basic rights for water extraction.

If this is an issue for the proposal the assessment should identify any potential for creation of new BLRs along the frontage to major waterways or over any sensitive aquifers. For those subdivisions fronting rivers/lakes, innovative subdivision design which allows the creation of additional lots without direct river/lake frontage or utilises collective or community title to manage the use of any existing BLR could provide a satisfactory way of managing this issue

whilst still allowing for subdivision. Subdivisions over a sensitive aquifer however, may be more limited in using this approach.

### **Sustainable Water Supply**

Many gazetted WSPs to-date have identified particular surface and groundwater systems that are currently over-allocated (that is, water licence volumes issued to landholders operating in these catchments exceed the sustainable volumes/flows within these systems). In the case of over-allocation, the systems have subsequently been embargoed and no new water licences are to be issued within these catchments. Any new or expanded development within such catchments will therefore be unable to obtain any new water entitlements directly and will have to enter the water trading market (if available within that catchment) to seek additional water. Therefore, there can be no guarantees of obtaining additional water via this mechanism and there is the potential of restrictions on further development within such catchments.

Whilst there is provision in the *WMA* to allow for limited growth in Town Water Supplies (TWS) this could still impact subsequently on other water users.

The assessment is required to address the issue of provision of a sustainable water supply for any project proposal. The assessment should include Water Management Plans detailing how a sustainable and efficient water supply can be sourced and implemented with minimal reliance on accessing valuable surface and groundwater resources.

Through the implementation of BASIX, Integrated Water Cycle Management and Water Sensitive Urban Design, any proposed development must also be able to exhibit high water use efficiency. Access to information on sustainability can be found via:  
[http://www.deus.nsw.gov.au/business\\_industry.asp](http://www.deus.nsw.gov.au/business_industry.asp)

\*\*\*\*\*

*Current as at July 2008.*

*Inquiries: Rod Browne  
 Senior Planning Officer  
 T 6740 2347  
 M 0427 920520  
 E [rod.browne@dnr.nsw.gov.au](mailto:rod.browne@dnr.nsw.gov.au)*



Department of  
**Infrastructure, Planning and Natural Resources**

Major Development Assessment  
Phone: 02 9228 6426  
Fax: 02 9228 6466  
Email: [scott.jeffries@dipnr.nsw.gov.au](mailto:scott.jeffries@dipnr.nsw.gov.au)

Ms Louisa Rebec  
Mausell Ltd  
PO Box Q410  
QVB Post Office  
SYDNEY NSW 1230

Our ref: 9039587  
Your ref:

Dear Ms Rebec

**Proposed Regional Landfill, Lot 2 DP253346, Lot 1 DP820271 and Lot 1 DP253346, Armidale – Armidale-Dumaresq Local Government Area**

I refer to your request for the Director-General's requirements for an Environmental Impact Statement (EIS) on behalf of the Armidale-Dumaresq Council for a proposed regional landfill at south-east of Armidale.

The Director-General requires the matters detailed below to be addressed as part of the Environmental Impact Statement. These requirements are valid for a period of two years from the date of this letter.

**Statutory Planning Provisions**

At the date of these requirements, the Department confirms that the following statutory definitions apply to the proposed development:

- the proposed development is zoned 1(a) Rural under the *Armidale Local Environmental Plan 1998*. Development for the purposes of a landfill is an innominate permissible use in this zone.
- the proposed development would constitute State significant development as under *State Environmental Planning Policy (State Significant Development) 2005* as it involves a regional putrescible landfill that would have a capacity to receive more than 650,000 tonnes of putrescible waste over the lifetime of the site.
- the proposed development is designated development because under the *Environmental Planning and Assessment Regulation 2000*, it is a 'waste management facility or work' that would dispose more than 200 tonnes per year of waste by landfilling at the site.
- the proposed development is classified as integrated development because in addition to development consent, it requires a licence under the *Protection of the Environment Operations Act 1997*, an approval under the *Rivers and Foreshores Improvement Act* and an approval under the *Roads Act 1993*.

**Part 3A Reforms to the *Environmental Planning and Assessment Act 1979***

It is noted that amendments to the *Environmental Planning and Assessment Act 1979* were recently announced by the Minister for Infrastructure and Planning in early June 2005. These amendments are expected to come into force by August/September 2005, and will impact on the processes applicable to State significant development. The Department will contact you at this time to inform you of any changes that may be applicable to this proposal.

**Form of the Environmental Impact Statement**

The Department advocates the preparation of concise, accessible and justified Environmental Impact Statements, focussing on the proposed development, its likely environmental impacts and the mitigation of those impacts. All Environmental Impact Statements should be prepared to allow the Department, government agencies (including the local council and integrated approval bodies) and the public to fully comprehend the environmental implications of the development. The Environmental Impact Statement should avoid the duplication of information and information that is not directly relevant to the environmental impact assessment of the proposed development.

Mandatory issues specified in the *Environmental Planning and Assessment Regulation 2000* must be included in the Environmental Impact Statement to the extent necessary and relevant to the

environmental impact assessment of the development. In addition, the Department has identified a number of key project-specific issues, through consultation with integrated approval bodies and other relevant agencies, which should form the key focus of the Environmental Impact Statement. These issues are detailed below.

### **Mandatory Issues**

Clauses 71, 72 and 73 of the *Environmental Planning and Assessment Regulation 2000* provide those issues that must be included in any Environmental Impact Statement (refer to Attachment No.1). The issues have been established through consultation with various Government agencies at the Planning Focus Meeting held for the proposed development on 31 May 2005. It is noted that requirements from the Department of Environment and Conservation (DEC) and Council with respect to its integrated development role were not received by the Department. You must consult directly with these agencies and address in the EIS issues as identified by these agencies.

You should ensure that each of these issues is detailed to the extent necessary and relevant to the environmental impact assessment of the development.

### **Key Project-Specific Issues**

The Department has identified that the following issues are likely to be of key significance to the environmental planning and assessment of the proposed development. These issues do not relieve the Applicant from assessing any other Key issues that it may identify during the preparation of the Environmental Impact Statement. The Environmental Impact Statement must:

1. clearly describe the proposed development, including the volumes and nature of wastes to be accepted at the site, and how these wastes would be stored and handled on site. The EIS should also provide detail on how the design of the development would be consistent with the benchmark techniques as detailed in the DEC's *Environmental Guidelines: Solid Waste Guidelines*.
2. provide an assessment of the strategic assessment of the development. This includes:
  - a. a clear justification of the demand for the development, having regard to the matters listed under clause 12 of *State Environmental Planning Policy No.48 – Major Putrescible Landfill Sites*;
  - b. consideration of Alternative Waste Treatment Facilities to support the proposed development and divert waste that would otherwise be disposed of in the landfill;
  - c. demonstration of the suitability of the site for the development, particularly with respect to potential land-use conflicts. This should be supported by the relevant site selection process undertaken for the site;
  - d. details of the future rehabilitation and end-use of the site, and demonstration that the intended end-use is consistent with surrounding land use and the strategic direction of the area. This should include details on the final landform of the development.
3. assess potential surface water, soil and groundwater impacts of the development. This must include:
  - a. an assessment on potential for the proposed development to cause surface water, soil and groundwater contamination, whether through direct impacts on the site, or indirectly through the movement of polluted waters/soils and leachate. Particular attention on the potential impacts on the Gara River and surrounding ground waters must be provided in the EIS.
  - b. an assessment of the potential impacts on groundwater users within the locality.
  - c. details of the proposed measures to be implemented to prevent or minimise the potential for surface water, soil and groundwater contamination must be provided. This should be supported by a quality assurance and quality control system, on-going monitoring, and contingency measures;
  - d. an assessment of the suitability of the soil at the site for the proposed development, and demonstration how potential salinity issues at the site would be appropriately minimised/managed;
  - e. detail the management and end-use of extracted materials at the site;
  - f. provide an assessment of harvestable rights for the site; and
  - g. an assessment of any potential impacts on local flooding regimes.
4. assess air quality impacts, especially dust and odour, in accordance with the *Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW* (EPA, 2001) and the draft policy *Assessment and Management of Odour From Stationary Sources in NSW* (EPA, 2001).
5. assess noise impacts from the proposed development in accordance with the *Industrial Noise Policy* (EPA, 1999). Road traffic noise must be assessed in accordance with the *Environmental Criteria for Road Traffic Noise* (EPA, 1999).
6. assess road transport implications of the proposed development, including:
  - a. provision of a traffic impact statement, in accordance with the *Guide to Traffic Generating Development* (RTA, 1993), which includes details of peak traffic flows, the type of vehicles,

- the origin and destination of heavy vehicles, the capacity, safety and design of key haulage routes to and from the development site and potential impacts of truck traffic on neighbouring land uses; and
- b. details of all necessary road infrastructure upgrades must be provided, including site ingress/egress and any impacts to local or regional roads from the proposed development.
  7. provide a detailed assessment of flora and fauna impacts particularly impacts on any threatened species, endangered populations or communities in accordance with section 5A of the *Environmental Planning and Assessment Act 1979*.
  8. assess the potential cultural heritage impacts of the development.
  9. provide details on the management of pests and vermin at the development.
  10. provide details of the visual impact of all components of the proposal must be provided, particularly from sensitive receiver locations, including private residences, other developments, and publicly accessible areas. Proposed management measures to be adopted to limit visual effect must be detailed.
  11. provide a clear management and monitoring program for the site, in the form of a Landfill Environmental Management Plan (LEMP). The LEMP should detail how the proposed development would comply with the requirements of the DEC's *Environmental Guidelines: Solid Waste Guidelines*.
  12. detail the results of any consultation with Department of Environment and Conservation, the Catchment Management Authority (Border Rivers/Gwydir and Northern Rivers), Department of Primary Industries, the Roads and Traffic Authority, the NSW Rural Fire Service, the Department of Environment and Heritage, the Local Aboriginal Land Council, adjacent Local Councils, the relevant Rural Land Protection Board, the relevant service providers, community groups and potentially-affected residents, including how any issues raised by these parties have been addressed as part of the preparation of the Environmental Impact Statement. The Environmental Impact Statement should justify the nature and extent of any consultation with any relevant party.
  13. have consideration to the Department's *EIS Guideline – Landfilling* and the Department of Environment and Conservation's (DEC) *Environmental Guidelines: Solid Waste Guidelines*.
  14. assess the development against the relevant heads of consideration in applicable environmental planning instruments, including *Armidale Local Environmental Plan 1998*, *Dumaresq Local Environmental Plan No.1*, *State Environmental Planning Policy No. 33 – Hazardous and Offensive Industry*, *State Environmental Planning Policy No.48 – Major Putrescible Landfill Sites*, *State Environmental Planning Policy No.55 – Remediation of Land* and *State Environmental Planning Policy (State Significant Development) 2005*; and
  15. assess the development against any relevant provisions of the *Border Rivers Catchment Blueprint*, *Gwydir Catchment Blueprint* and the *Northern Rivers Coast Catchment Blueprint*.

#### **Lodgement of Development Application**

The Department must be consulted at least one week prior to the lodgement of a development application for the proposal. This consultation is necessary to confirm the number and type (hard-copy or CD-ROM) required of the Environmental Impact Statement, development application and integrated approval body fees, and any other relevant arrangements for lodgement of the application. Prior warning of the intended lodgement of the development application will also assist the Department in coordinating timely public exhibition and notification of the application.

#### **Further Information**

The contact officer for this proposal is Scott Jeffries (phone: (02) 9228 6426, email: [scott.jeffries@dipnr.nsw.gov.au](mailto:scott.jeffries@dipnr.nsw.gov.au)). It is recommended that you keep the contact officer up-to-date with the progress of preparation of the Environmental Impact Statement, and seek clarification of any issues that may be unclear or may arise during this process.

Yours sincerely



27/7/05

Chris Ritchie

A/ Manager – Manufacturing and Rural Industries

**Major Development Assessment**

As delegate for the Director-General



ATTACHMENT NO. 1

STATUTORY REQUIREMENTS FOR THE PREPARATION  
OF AN ENVIRONMENTAL IMPACT STATEMENT UNDER PART 4 OF  
THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

In accordance with the *Environmental Planning and Assessment Act 1979* (the Act), an environmental impact statement (EIS) must meet the following requirements.

**Content of EIS**

Pursuant to Schedule 2 and clause 72 of the *Environmental Planning and Assessment Regulation 2000* (the Regulation), an EIS must include:

1. A summary of the environmental impact statement.
2. A statement of the objectives of the development or activity.
3. An analysis of any feasible alternatives to the carrying out of the development or activity, having regard to its objectives, including the consequences of not carrying out the development or activity.
4. An analysis of the development or activity, including:
  - (a) a full description of the development or activity; and
  - (b) a general description of the environment likely to be affected by the development or activity, together with a detailed description of those aspects of the environment that are likely to be significantly affected; and
  - (c) the likely impact on the environment of the development or activity, and
  - (d) a full description of the measures proposed to mitigate any adverse effects of the development or activity on the environment, and
  - (e) a list of any approvals that must be obtained under any Act or law before the development or activity may be lawfully carried out.
5. A compilation, (in a single section of the environmental impact statement) of the measures referred to in item 4(d).
6. The reasons justifying the carrying out of the development or activity 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, public and private decisions should be guided by:
  - (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and

- (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 is 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.

An environmental impact statement referred to in Section 78A(8) of the Act shall be prepared in written form. The prescribed form to accompany the environmental impact statement must comply with the requirements of clause 71 of the Regulation and be signed by the person who has prepared it.

Procedures for public exhibition of the EIS are set down in clauses 77 to 81 of the Regulation.

Attention is also drawn to clause 283 of the Regulation regarding false or misleading statements in EISs.

**Note**

If the development application to which the EIS relates is not made within 2 years from the date of issue of the Director-General's requirements, under clause 73(6) of the Regulation the proponent is required to re-consult with the Director-General.

Your Reference : 20017605:C058  
Our reference : 251457A1/02: DOC08/46028  
Contact : Tod Soderquist, 02 6773 7000  
Date : 26 September 2008

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

Attn: Mr Brad Deane

Dear Mr Wilson

## OFFSET PROPOSAL – ARMIDALE REGIONAL LANDFILL

In November 2006, the Department of Environment and Climate Change (DECC) provided advice on the proposed Armidale Regional Landfill regarding offset principles to be considered by the Armidale Dumaresq Council. Dr Liz Broese of EA Systems recently provided a proposed offset strategy. We have examined the documents provided and offer the following comments.

The main component of the offset strategy is that both woodland and grassland areas within the footprint of the landfill are offset by surrounding areas of protected land at a 3:1 ratio. Approximately 38 ha of woodland is proposed as an offset to the 12.7 ha of similar woodland within the landfill footprint, and approximately 20 ha of grassland is proposed as an offset to 6.5 ha of grassland.

As we previously stated, merely protecting areas of vegetation seldom 'maintains and improves' habitat quality. We note that the proposed offset strategy includes several management actions that potentially will improve the quality of habitat in the offset areas, thus potentially maintaining overall habitat quality. Primary among these actions are exclusion of grazing, control of rabbits and continuous weed control.

The DECC is satisfied that the offset proposal meets the principles outlined in our previous correspondence.

If you wish to discuss any matter raised in this letter please ring Todd Soderquist, Senior Threatened Species Officer in the Armidale office on 6773 7006.

Yours sincerely



Simon Smith  
Manager Armidale Region  
**Environment Protection and Regulation Group**

The Department of Environment and Conservation NSW is now known as  
the Department of Environment and Climate Change NSW

PO Box 494, Armidale NSW 2350  
85 Faulkner Street, Armidale NSW  
Tel: (02) 6773 7000 Fax: (02) 6772 2336  
ABN 30 641 387 271  
[www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)

Department of Environment and Climate Change NSW

*"This page has been left blank intentionally"*