

Armidale make it an area with significant development potential. If not it is due to a landfill dumped on our doorstep.

The same 'level of service' that led the proponent to select the site are the same reasons that the area is primed for future additional small allotments.

The proponent's acknowledgment of this is stated in the Site assessment for the proposed site.

Site Assessment for Site 7 'Sherraloy'

'Future Development - Potential area for future development, due to location;'⁵⁴

Due to inadequate buffer zones, dust and odour impacts should be assessed at the property boundary so not as to inhibit future landuse or development potential. In light of this and the acknowledged exceedence of DEC criteria into neighbouring properties I believe this site is unsuitable for use as a landfill.

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b) Noise

Site investigation noise (drilling etc) was reported to Council during the site investigation stage, indicating the high probability that typical landfill machinery will have considerable impact outside the proposed landfill site.

Poor site selection has resulted in the requirement to use engineered noise controls to attempt to make up for the shortcomings of the proposed site.

The noise impact assessment states;

'As the proposed landfill facility would be reliant on engineered noise control treatment, the ongoing maintenance of equipment will be critical to ensure the continuing compliance with the noise criteria'⁵⁵

The reliance upon 'engineered noise control' highlights the unacceptable proximity to neighbouring residences, property buffer zones and the incompatibility with surrounding land use.

The acknowledgement by the proponent that the facility 'would generally comply' with industrial noise level criteria is alarming, meaning that it sometimes or often, won't. The fact that Industrial Noise criteria (INP) is used in a quiet rural setting highlights the significant loss of local amenity.

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Executive summary – noise impact assessment

⁵⁴ Regional Landfill Siting Study Page 71

⁵⁵ Noise Impact Assessment Page 19

'With these and the additional mitigation measures discussed in Section 5.2.2 implemented, it is expected that the noise levels at the nearest receivers would generally comply with the INP criteria for the typical operational scenarios that have been analysed.'⁵⁶

Inadequate buffer zones will have significant impacts on neighbouring residences, wildlife and the local amenity of the quiet rural/residential environment. Construction of a new entrance road some 1.8 km, will have severe detrimental impacts on neighbouring residences and wildlife that have not been addressed in this EA.

S082_42

Below is an example of 'off site' noise exceeding recommended levels.

Armidale Regional Landfill - Noise Impact Assessment

AECOM

conditions. Under the maximum impact wind conditions outlined in the INP the noise levels would be expected to be 5-6 dB(A) higher than the levels in Table 13. However, these conditions have been shown to occur for less than 30% of any assessment period in any season and, in accordance with the guidance given in the INP are not considered to be significant.

Table 13 - All Construction Plant Operating During Daytime under Neutral Meteorological Conditions

Receiver	L _{max} dB(A)
Strathaven	35
Sherraloy	38
Riverton	28
4 North 1	32
5 North 2	34
8 North West	28

Below is a modification to the above table. dB(A) levels in brackets (below) have been formulated from the addition of 6 dB(A) due to unfavourable wind conditions, as per above statement. These figures may occur up to 30% of the time.

Receiver	L _{max} dB(A)
Strathaven	35 (42)
Sherraloy	38 (44)
Riverton	28 (34)
4 North 1	32 (38)
5 North 2	34 (40)
8 North West	28 (34)

⁵⁶ Noise Impact Assessment Page vii

Under the 'typical' plant configuration the noise objective of 40 dB(A) would not be met for 2 neighbouring residences. An increase in the minimum machinery noise as described as 'typical', would result in 4 residences being subjected to sound levels above the noise objective of 40dB(A). Of course neighbours access on their properties is not restricted to 'residences' and as such sound levels greater than 50 dB(A) that are propagated 'off site' will have significant impacts on local amenity, wildlife and current and future landuse potential.

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The background noise at neighbouring residences has been assessed by AECOM as approximately 30db(A). A 10dB increase is approximately a doubling of the perceived noise level.

Glossary of Acoustic Terminology

'Loudness

A rise of 10 dB in sound level corresponds approximately to a doubling of subjective loudness. That is, a sound of 85 dB is twice as loud as a sound of 75 dB which is twice as loud as a sound of 65 dB and so on⁵⁷

Therefore the increase in noise level from 30dB to 40dB as indicated in the assessment could double noise level at neighbouring properties.

It has been indicated that the construction phase would be approximately 8 months initially (Armidale landfill Project Plan – Construction Phase) and as such noise levels experienced 'off site' will be at unacceptable levels for periods far longer than neighbours should be subjected too.

S082_43

The below diagram [Figure 14 Unacceptable] Sound Levels shows noise impinging on neighbouring properties is above acceptable levels. Construction noise in site extremities will be considerably higher than the 'covering operations' shown. Noise abatement has only been proposed for permanent equipment, thus contractor machinery which is non-permanent remains unabated.

Site layout has been superimposed on chart to show property boundaries and insufficient 50m buffer.



Figure 7 Unacceptable Sound Levels

Noise from operation and construction of new road hugging neighbouring boundary has not been assessed. There is no data on the access road type. If 'cutting' into the hillside will be employed for construction of the road there must be reflected sound impacts on neighbours that have not been assessed. The noise from the entrance road as shown in the above diagram does not indicate this.

S082_44

There appears to be no assessment of this issue as direction of the intersection onto the Waterfall Way (As shown above) appears contradictory to the proponents statements that the road entrance will be perpendicular to the Waterfall Way.

There also appears to be conflicting statements from the proponent regarding the hours of operation which will have significant impact on the amenity of neighbouring properties with regards to site noise.

S082_45

The first statement says that the hours of operation and construction in the landfill will be adhered to at all times, yet immediately below the proponent says that if work needs to be undertaken outside these hours it can!. It is therefore clear that the hours of construction and operation will not be adhered to 'at all times'.

Extracts highlighting the inconsistencies are below.

LEMP Noise Control P 94

⁵⁷ Armidale Regional Landfill - Noise Impact Assessment p31

The following noise controls are to be implemented at the landfill site:

- The construction and operational hours as outlined in the Landfill Licence will be adhered to at all times. The proposed construction and operational hours are detailed in Sections 4.2.5 and 0.0 respectively. In the event that construction/operational works need to be conducted outside of the normal hours, residents will be informed.
- A 50m buffer zone has been included into the design of the landfill.

The proponent states

'The proposed landfill will typically operate from 6am to 5:30pm Monday to Friday, and 8am to 6:30pm on weekends and public holidays. Construction hours will be from 7am to 5pm Monday to Friday and 8am to 5pm on Saturdays'⁵⁸

Conversely

2.2 Proposed Operations

Waste would be processed at the existing landfill and transfer station on Long Swamp Road and would be transported between the transfer station and the site by truck. No direct public access to the proposed site would be provided.

The proposed landfill facility would operate seven days per week with the proposed operating hours from 7:00am to 5:30pm Monday to Friday and 8:00am to 6:30pm on Saturday, Sunday and Public Holidays.

The main activities on the site would be associated with the unloading, distribution and compaction of waste materials in the landfill cells and the loading, distribution and compaction of cover material. For the purpose of this report the operations occurring on the site are as summarised below.

- Three waste vehicles per day arrive from the Long Swamp Rd transfer station via Waterfall Way and the proposed site access road.

\\auvs01p002\Projects\20017605-00-ARMLANDFL\Eng\Plant Environment\EA Document\Port Adequacy Review EA 2009\revised reports\Appendix P Noise Assessment\Revised NoiseRpt_L15Pet10

EA LEMP P45

Landfill Environmental Management Plan
Armidale Regional Landfill Facility - Draft Landfill Environmental Management Plan

AECOM

Construction Hours

The normal construction hours of the landfill will be from 7am to 5pm Monday to Friday and from 8am to 1pm on Saturdays. No work will occur on Sundays or on Public Holidays. The Contractor will be able to work outside of these normal hours with prior permission from DECCW and Council.

The 'hours of operation' are unclear due to multiple conflicting statements. Both a 6am and 7am start time (landfilling activities) have been declared by the proponent.

Machinery movements at 6 am coupled with the stillness of the early morning air will have unacceptable 'off site' noise impacts.

Weekend activities ruined by landfill compacting and construction activities is unacceptable and highlights an atrocious site selection.

⁵⁸ Armidale Landfill DRAFT_rev2.doc Page 1

c) Insects

The proponent has made little attempt to address issues of pest and disease impacts from the proposed landfill site.

Birds, insects, rodents and other animals will be free to move on and off the site. Due to the unsorted nature of the waste and no sorting of household rubbish, any contaminated waste or piece of fruit with fly or other disease will be freely transferred to adjacent areas.

The Disease Monitoring Protocol has not yet been presented for comment in this EA and again is stated only as a commitment.

Plans have not been presented in the EA to address this issue.

It appears the only preventative measure presented in the assessment is a well maintained fence. This contradicts the stated use of 'wildlife friendly' fencing. GVEPA raises doubts that any fencing proposed by the proponent can stop the movement of rodents, predatory birds and insects, all which may spread weeds and disease off site.

'In the unlikely event that infected material is brought on site, well maintained fencing would minimise the risk of diseases such as foot and mouth being transferred off-site by pest or feral animals.'

There are currently few instances of olive tree diseases in Australia and those existing are controlled through either preventative or remedial measures. With respect to the olive grove on the adjacent Strathaven property, it is unlikely that the proposed landfill would give rise to nematodes and soil-borne fungi which may impact on the olive trees on the property given the mitigation measures identified in this section and the preparation and implementation of a Disease Monitoring Protocol (EA Systems 2010, Appendix E).'⁵⁹

d) Vermin

Unfortunately this is another area of the EA that cannot be commented on in any constructive form as little content is given and is again subject to change.

⁵⁹ EA page 207

'It is expected that the pest vermin and noxious weed controls will be refined during detailed design, construction and operation of the landfill. Consequently, the controls implemented may vary from those provided herein'.⁶⁰

The proponent's assertion that reliance is on an indication of 'instances of pests accessing the site' is concerning. Vermin such as rats and mice will readily move to neighbouring properties and increase in numbers. During the day they will remain hidden onsite. I am concerned that our adjoining property will have increased numbers of vermin but there are no indicators proposed to address this concern. Are nocturnal assessments proposed? How will fencing stop small vermin entering the site? What number of vermin on site will indicate that 'objectives' are not being met?

'Remedial Actions

In the event that the objectives of the pest, vermin and noxious weed control system are not being met, which will be indicated by the instances of pests accessing the site and the presence of weeds on the site, remedial actions will be implemented which may include:⁶¹

It is with great interest I note the operations manager will undertake daily site patrol to check for faecal droppings from rats and mice. I would suggest that combing 100 hectares of land for mice droppings daily will not occur. Surely this is a joke !

'The Operations Manager will conduct a daily patrol of the site. During this patrol, the Operations Manager will look for noxious weeds and animals or evidence of animals on the site (e.g. faecal droppings).'⁶²

e) Predatory birds

Once again the Management Plan is in embryo stage and will be modified at a later date.⁶⁰

The increased numbers of predatory birds and the affect on our adjoining property has not been adequately addressed. It actually doesn't appear to be addressed at all. There are no mitigation measures stated that actually address the issue.

'4.1.9 Increased abundance of undesirable native species

Impact:

An increase in aggressive native birds such as pied currawongs, magpies and noisy miners and carrion eaters such as crows and Australian ravens that may be displaced from the

clearing activities for the landfill or that may be attracted to the site during the operation of the landfill.

Mitigation measures:

- *The provision of areas for planting and rehabilitation using locally occurring native species particularly shrubs that will provide shelter for small native birds. These areas should be established and planted as early as possible in the construction phase; and,*
- *Control of exotic shrubs (e.g. Hawthorn) which provide food for aggressive native species.⁶³*

During lambing the increased numbers of crows and other predatory birds will create a significantly increased risk of removing the eyes from lambing ewes and killing the lambs. The obvious increase in vermin numbers and available food sources will attract the predatory birds and animals.

As the proposal is for a putrescible waste dump with an open tipping face during the day there will be an increase in predatory birds on and surrounding the site. This will also have impacts on the ability to carry agricultural activities such as aerial fertilizing.

Our airstrip south of the site has not been noted by the consultants but has been included in Section 6 c). Noting the prohibited zone around a commercial airstrip, I require assurance from the proponent that aerial activities on our property will not be affected by refusal of aerial contractors to fly adjacent to the proposed putrescible landfill.

f) Orchard/Vineyard exotic pests/diseases

We currently have a commercial olive and feijoa orchard 300m from the proposed dump site boundary, and recently obtained a bronze award from the Sydney Royal Show Society for our Extra Virgin Olive Oil.

Any contaminated fruit, vegetable, seed, animal, or item that is inadvertently or deliberately placed in the 'red lid' roadside collection bins remain unsorted and goes directly to the landfill, as does public waste.

Due to the unsorted nature of the waste and no sorting of household rubbish, any contaminated waste or piece of fruit with fly or other disease will be freely transferred to adjacent areas.

The Disease Monitoring Protocol has not yet been presented for comment in this EA and again is stated only as a commitment. This is a totally unsatisfactory. The proponent has had 12 years to formulate a 'plan'.

'Mitigation measures:

⁶⁰ Armidale Regional Landfill Environmental Management Plan Page 86

⁶¹ Armidale Regional Landfill Environmental Management Plan Page 92

⁶² Armidale Regional Landfill Environmental Management Plan page 92

⁶³ Flora and Fauna Assessment page 37-38

Disease Monitoring Protocol: Preparation of a disease monitoring protocol and appropriate contingency plans to deal with outbreaks that may be detected at some point in time during the operation of the landfill facility and for a nominal period of at least 5 years after rehabilitation works and decommissioning of the site.⁶⁴

I see no evidence presented in the EA which can give rise to the conclusion below. Currently the Olive Grove and Feijoa orchard enjoy protection from pests and disease due to the adequate buffer from other potential contamination sources. Transmission of disease by birds and vermin from the site is an obvious possibility and mitigation measures are not detailed.

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'With respect to the olive grove on the adjacent Strathaven property, it is unlikely that the proposed landfill would give rise to nematodes and soil-borne fungi which may impact on the olive trees on the property given the mitigation measures identified in this section and the preparation and implementation of a Disease Monitoring Protocol (EA Systems 2010, Appendix E).⁶⁵

The proponent contends that they will monitor and follow up control of invertebrate pests;

'Monitor and follow-up control of vertebrate (e.g. Rabbits and Foxes) and invertebrate pests (flies and insect pests which can infest olives, such as the olive lace bug Froggattia olivinia and black olive scale Saissetia oleae)and;

Employ professional exterminators if an outbreak is detected.⁶⁶

Can the proponent guarantee an 'organic' status for the orchard with the use of a professional exterminator and who will be qualified to undertake continual monitoring of the site and neighbouring properties?

The absence in the EA of a Disease Monitoring Protocol or plan is not acceptable. I must reiterate that over the last few years we have been told that all issues we have raised will be addressed in the EA. After 1 million dollars of consultant fees we know no details about mitigation measures.

S082_48

g) Livestock disease and pest transmission

The potential for dead animals or animal parts to be dumped in the landfill poses the potential for disease to be transmitted via vermin, birds, or insects to adjoining properties. There appears to be a

⁶⁴ Flora and Fauna Assessment – Disease p36

⁶⁵ EA page 217

⁶⁶ Flora and Fauna Assessment Page 36

conflict between the proposed use of 'wildlife friendly' fencing and the requirement to keep wildlife from contaminating adjoining properties.

Livestock disease and pest transmission has been inadequately addressed. The only mentioned mitigation action to address this issue is a well maintained fence! Well maintained fencing will not stop vermin such as mice, rats or scavenging and predatory birds from venturing on to neighboring properties dropping infected animal or animal parts and thus potentially spreading disease.

S082_49

'In the unlikely event that infected material is brought on site, well maintained fencing would minimise the risk of diseases such as foot and mouth being transferred off-site by pest or feral animals.⁶⁷

h) Air borne pollution bags etc

Ms Tania Rishniw handed down the EPBC decision on behalf of the Federal Government, stating the following.

'20. I found that weeds and rubbish were likely to escape from the landfill and enter the World Heritage and National Heritage area.⁶⁸

Windblown litter has not been sufficiently addressed in the EA. Nothing has changed since the PEA. Why would unconsolidated litter behave any differently with the same proposal?

The unpredictable nature of the wind means that proposed limited mitigation measures will still lead to vast quantities of litter off site. The fact that the proponent states that they will have to manually remove rubbish from neighbouring properties means there is acceptance that control measures will be inadequate. With prevailing winds being predominantly easterly in summer, our property is assured of having uncontrolled windblown litter polluting it.

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The proponent states;

'Ensuring that all wind blown litter that leaves the site is retrieved.⁶⁹

⁶⁷ EA Page 217

⁶⁸ Notification of referral decision – controlled action - Armidale Regional Landfill, NSW (EPBC 200713646)

⁶⁹ EA page P77

Unsanitary litter which makes its way to the Waterfall Way will create an undesirable amenity for tourists and residents who travel along the Waterfall Way (Tourist Drive no. 17). One only has to inspect Council's current landfill site to see the inability of Council to control litter. Bags stuck high in trees 'off site', rubbish stuck in fences are commonplace around the current site.

'Litter controls

Council's previous appalling record in this area and EPA's conclusion that 25 out of the 30 audited facilities were unable to fully contain windblown within site boundaries increase GVEPA's confidence that Council's inadequate 50m landfill property buffer zone is insufficient to contain its windblown pollution.

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i) Smoke Pollution

I have photographed Council's current landfill site on fire in 2008 whilst attending a BBQ. It is not reassuring that Council are unable to manage their current site to prevent pollution on adjoining properties.



Figure 9 Current landfill on fire

j) Fire danger to neighboring properties

During the last 10 years 3 major bush fires have come within 1 km of the proposed site. In June 2010 a bushfire damaged 800 acres of adjacent land and came within 100m of our house.

'Bushfire-prone land has been mapped by Council, in consultation with the NSW RFS. No bush fire prone areas currently exist within 1km surrounding the Project Site and the site of

*the proposed landfill is generally clear of vegetation due to the rural land practices that are the dominant land use in the area.'*⁷⁰

It is clear from aerial photography and the proposed 'offset area' that the site and neighbouring area is both grass and woodland.

Both olive and feijoa trees are not fire resistant and will be killed by fire escaping from the adjacent landfill boundary. I obviously will be restricted in the location of future plantings due to activities undertaken by an adjacent property owner. This is not acceptable.

Council's plan to 'control' burn the boundary area is disconcerting as their previous record satisfying environmental expectations and licensing conditions has been dismal.

Council state their measures to avoid explosion include.

*'Controlled burning at the periphery of the site.'*⁷¹

k) Water table/bore contamination

The licensed stock and domestic water bore on 'Strathaven' is only 50 metres from the proposed dump site. The bore is water bearing at 20 feet with a nominal flow rate of 2700 litres per hour.

It is with astonishment and disbelief I note the proponent's statement that the bore 50m from the Western Boundary of the site is in a 'different catchment' to the landfill facility.

*'Upon examination of the registered bore locations, it should be noted that all bores are located in different catchments to that of the proposed landfill facility. All of these bores are also separated from the site by waterways (rivers or streams). It is therefore expected that groundwater from the Project Site would not impact on nearby registered groundwater bores.'*⁷²

There are clearly no waterways separating my registered bore (GW305317) from the proposed landfill site as stated by the proponent. I would suggest if this were the case then it may be indicated in the below extract from the EA. I 'therefore' expect there may be impacts.

⁷⁰ EA page 250

⁷¹ EA page 251

⁷² EA page 160



In light of the acknowledgement by the proponent that they are unsure of the direction of aquifer flow, underlying geology and likely chemical component sources it can be concluded that the quality of groundwater in our bore 50m from the site boundary cannot be guaranteed.

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Some extracts from the EA proving unknown geological conditions on site are shown below;

'RCA report 5929-002/1; Geotechnical and Hydrogeological Investigation, Proposed Armidale Landfill, January, 2007 (Ref [1]) reported that one potential geotechnical constraint at the site related to the possible presence of a fault on the site with associated deeper weathered profile and fracturing. The drilling conditions encountered are considered likely to be due to either a subsurface void or a fault in the rock structure. The fault encountered could be part of the Mihi Fault which passes close to the southern extremity of the site. Two (2) bores were abandoned in the vicinity of BH9 due to loss of confining pressure as discussed in Section 2. The effect to groundwater of the presence of the fault/subsurface void cannot be established based on the amount of investigation undertaken to date. If further assessment of the fault/subsurface void is required.....'⁷³

'This was attributed to a layer of mudstone found immediately above the level of the argillite in BH5, which was not identified in the other bores. The topography in the well's vicinity also suggests that groundwater flows in the opposite direction to the general groundwater.'⁷⁴

'It is considered likely that the water sampled from BH5 is representative of, or is being impacted by a separate aquifer to that of the majority of the site, flowing from the north back toward the low point of the Project Site in the vicinity of BH4. Based on the limited number of wells in this section of the Project Site, groundwater flow direction could not be accurately interpolated. However, the estimation of groundwater flow direction, based on the available data and the observed topography, is considered to give a valid representation of the flow direction in the northern section of the site.'⁷⁵

'Therefore, an apparent source of the chloroform detected was not noted. Given the large volumes purged prior to sampling of the wells, it is not considered likely that the chloroform detected is from a source introduced by the sampling methods. Despite a potential source of the chloroform being unknown, the chloroform detected is not currently considered to be significant given the low concentrations.'⁷⁶

'Phenols have been detected in BH5. However, the concentrations detected do not exceed the site guidelines and are falling. No likely source of phenols was observed in the vicinity of BH5. Contamination of the well due to drilling is not considered to be a likely source as the phenols were detected over several months and the bore has been subjected to repeated rigorous development.'

⁷³ Hydrogeological Investigation Proposed Armidale Landfill P15

⁷⁴ Armidale WQMP_Mgm_Plan p 3-9

⁷⁵ EA page 157

⁷⁶ Hydrogeological Investigation RCA p13

*'The Total Organic Carbon concentrations detected in all wells is considered relatively low except for BH5. The TOC concentration in BH5 has risen markedly (740%) since measured in October, 2006. No apparent reason for this rise was observed, however variation in TOC is not unusual especially where groundwater recharge is intermittent and standing water levels fluctuate.'*⁷⁷

The consequences of contamination of our bore would be catastrophic and permanent. The proposed 50m site buffer is both inadequate and reckless. It is incomprehensible that a putrescible waste dump could be proposed in such close proximity to a potable water source.

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l) Farm animal ingestion of rubbish

The clear inability for the proponent to guarantee that their waste and rubbish will remain within their property boundary leads me to the conclusion that windblown rubbish will follow the prevailing winds and blow into our property for the majority of the year. The proponent acknowledges that they will have to retrieve rubbish 'off-site'.

*'Ensuring that all wind blown litter that leaves the site is retrieved.'*⁷⁸

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Retrieval of rubbish will not be instantaneous and will rely on the vigilance of neighbors or the illness/death of livestock to detect.

The proposed 1.8m site boundary fence is totally inadequate to guarantee litter will not be blown off-site. Large gusts of wind, Willy Willys or relocation of waste by birds or vermin could all cause waste to exit the landfill site.

Ingestion of bags will result in illness and death of inquisitive or hungry livestock.

m) Visual amenity neighbours

The proposed landfill site and entrance road will be an 'eye sore' and blight on the landscape.

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Neighbours should not be subjected to loss of amenity due to the inappropriate placement of a landfill. The below picture illustrates the high density of surrounding development.



Figure 10 Dwellings 1km Radius

All areas of the landfill will be visible from our property due to fact that the proponent has decided to share a common boundary for over 2.5 km. Enjoying a BBQ on our deck, guests and ourselves will be treated to leachate pond, entrance road and scarred landscape views. Artificial structures such as wheel wash, staff facilities and litter fences choked with rubbish will also add to the unacceptable visual amenity impacts.

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The below 3D modeling provided by the proponent appears to be directed only at dump area on the Northern area of the landfill. Omitted to the left of the modeled representation is 1.8 km of road which is fully visible from our residence and views overlooking the leachate pond and dry basin. All traffic which enters the site will be visible.

⁷⁷ Armidale WQMP_Mgm_Plan page 3-9

⁷⁸ EA page Page 77



Figure 30: View from Receiver 1 - Strathaven

Strathaven (1060 Waterfall Way) is located approximately 950 metres west of the proposed site. The view from the location of the residence at this property of the proposed landfill mass is effectively masked by existing landforms. No specific mitigation measures would be required with respect to potential visual impacts on this residence.



The proponents 'modelled view' appears to follow the green line as extracted from the EA page 255. It is apparent that views of the road and leachate ponds will result in loss of visual amenity. Why would the proponent show only a narrowed portion of our landfill 'view'? Will they be supplying blinkers to accompany the earmuffs?

It is concerning the proponent appears to only consider 'long term' visual amenity impacts significant and basis its conclusion on this fact. They freely admit that there will be short to medium term amenity impacts. The EA of course also assumes that we are not able to move around our properties or venture from our house area as impacts are only deemed important at the house.

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*'Exposed works areas and heavy vehicle movements would impact on the local landscape and visual character of the Project Site. These impacts would occur in the short to medium term but would be temporary, therefore no impacts to landscape and visual amenity are anticipated in the long term as a result of construction activities.'*⁷⁹

n) Visual amenity Waterfall way

Council's ridiculous assertions throughout the document can probably be summed up by the proponent's statement below.

*'The proposed landfill facility has been conceptually designed so that the final landform would complement the existing topography of the area'*⁸⁰

The Council and their contractors must be the only people in the world to possibly believe that a dump would 'compliment' the existing surroundings. Then again, in a 'conceptual world' anything is possible.



⁷⁹ EA page 253

⁸⁰ EA page 80

Figure 11 Site Viewed from Waterfall Way Tourist Drive

No modeling has been presented to show views from key areas on the Waterfall Way tourist route. The proponent considers that views from receiver 3 are 'reasonably significant'. It is apparent that views from the Waterfall Way, North East of the site would be appreciably more significant than that of receiver 3. This will have obvious tourist and Waterfall Way user amenity impacts.

*'The view of the proposed landfill mass from the residence at this property is also considered to be reasonably significant but would be partially masked by existing vegetation. The visual impact would be present for the duration of the proposed landfill life as the receiver has views across the whole site,...'*⁸¹

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The proponent also considers the view from receiver 6 'reasonably significant' this receiver looks over the Waterfall Way towards the site (as do receivers 4 and 5) and thus it is clear that therefore the view from the Waterfall Way will be more significant.

The picnic area to the North of the Site near the Gara Reserve has also not been accessed. Due to the Waterfall Way's heavy promotion and national and regional profile as a tourist route it appears that a choice of site in the proposed location off the Waterfall Way is a very poor one.

Landfill activities, clearing, dust, windblown litter, trucks, leachate ponds and road side dumping will all be clearly visible to tourists on the 'gateway to the World Heritage Oxley Wild Rivers National Park'

o) Process to get blown/lost rubbish collected

No processes are stated as to the procedure to have proponents rubbish removed from our property. I believe that for the next 50 years repeated phone calls are going to be required to get rubbish removed from our property. This will require Council staff or their contractors having to access our property.

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This will be unacceptable. There should be no rubbish exiting the site into neighboring properties. If this is expected to occur then the proposed 50m buffer is obviously insufficient. Council has already cut locks off our gate to access the watermain in our front paddock. They do not have an easement and gave us no notification. We were fortunate enough to see the Council vehicle driving around our paddock and notified Council who said it would not happen again. They were back again a week later!

Council cannot be trusted. I gave them permission to sample the water from our bore 50m from the site on the condition I was sent the results. Sampling occurred but the results were never sent.

⁸¹ EA page 258

I gave EA systems permission for a geologist to enter our property to undertake assessment of the 'fault line' I was informed that he did not enter our property but photograph 6 Volume 4 page 135 is clearly from our property.

Approximately 2 years ago I was called by a nearby resident who lives near the current dump site. She had given up calling Council to come and pick up windblown litter from her yard as the officers had been extremely rude and failed to remove rubbish in a timely manner. Bags we stuck high in her trees.

p) Animals and Rubbish dumped in adjacent bushland

Due to the sites close proximity to Armidale, people will consider it acceptable to dump rubbish and animals such as cats and dogs close to the dump site. Some members of the public consider that the availability of food in the putrescible dump will help with the survival prospects of former pets or unwanted animals.

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Unfortunately these side effects will result in an increase in feral animals on neighbouring properties. Signposting the area will have no impact on the type of people who dump animals illegally.

Signposting is not sufficient deterrent!

q) Weeds

Ms Tania Rishniw handed down the EPBC decision on behalf of the Federal Government, stating the following.

*'20. I found that weeds and rubbish were likely to escape from the landfill and enter the World Heritage and National Heritage area.'*⁸²

Again no new measures are proposed that are different from the PEA only more commitments and another empty plan, the Weed Management Plan (WMP). Again it is one of the future plans with lots of proposed mitigation commitments but is yet to be developed.

*'The plan would provide actions to:'*⁸³ (my emphasis)

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I am unable to comment on a hypothetical plan only to state the potential impacts.

⁸² Notification of referral decision – controlled action - Armidale Regional Landfill, NSW (EPBC 200713646)

⁸³ EA page 216

As the proposed landfill is intended to be of a regional nature weeds which are not currently in the surrounding area have the potential to impact on neighbouring properties. As the proposal is to send contaminated green waste to landfill, and the 'red lid' general wastes remain unsorted, any weed, seed or contaminated item has the potential to be blown or removed via insect or animal to our property.

Due to our adjacent commercial horticulture enterprise the incompatible proposed development impacts are magnified.

How does the proponent plan to identify weeds on adjacent properties that originate from their proposed development? There is again a failure to produce a plan, over \$1 million spent on consultants to produce very little non 'concept' information.

r) Inadequate Property Buffer.

Virtually all unacceptable local amenity impacts and future land use issues are due to the totally inadequate 50m site buffer proposed. Noise, dust, litter, odour and insects can not be satisfactorily addressed by anything other than a suitable buffer zone.

Armidale Dumaresq Council had an area of over 4200 square Kilometres within its own boundaries to search for a landfill site and approximately triple this with the inclusion of Uralla and Guyra shires.

It is unconscionable that a site with only a 50 m buffer zone can be considered for a Regional landfill facility. Our licensed stock and domestic bore is 80m away from the site, our orchard 300m and our house 600m from the nearest site boundary. The addition of a new road following our boundary fence will be an unwelcome, unsightly and noisy addition which should not be allowed.

I believe this issue could have been avoided if the proponent rejected the site once they had realized as highlighted in [Figure 26], that they had made a mistake and placed the property boundary in the wrong place by 300m. The failure of Council to immediately to reject the site on notification of this mistake has lead the proponent to accumulate error after error to justify its flawed decision.

6. Landuse Conflicts.

a) Surrounding property devaluation

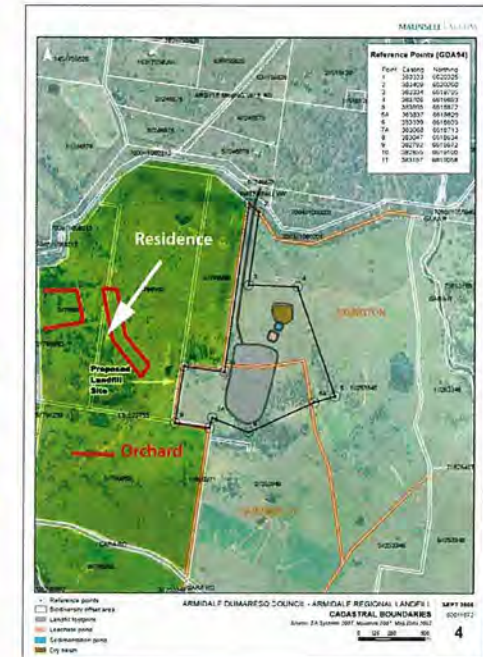
There is no acknowledgement of property devaluation in the EA. It has not been addressed.

Council had the entrance to the site rezoned from Rural Arterial 1(b) to General Rural. The previous zoning prohibited landfills within 400m of the arterial road and enabled subdivision. The small allotments opposite the proposed site were subdivided previously under the Rural Arterial Zoning.

We recently (August 3, 2010) sold 300 acres of agricultural land with a permanent watercourse through the block 2km West of the site for \$620,000 dollars.

1 potential buyer pulled out of the sale due to the proposed landfill being next door and reluctantly we had to significantly drop our price. Obviously the potential for construction of a dump would further devalue our block. The landfill site vendor (A Real Estate agent) valued his land at \$1.5 million dollars for 400 acres⁸⁴. Our land that sold for \$620,000 of superior quality (river flats, permanent water) therefore should have been worth more than \$1.1 million. Our land has therefore already been devalued by over 50%. Multiplying the devaluation of 50% over our remaining 1100 acres means devaluation in the order of \$2.2 million dollars.

The relationship between Proximity to a landfill site and the distance the property is from the site is widely recognized. P373 in the Journal, Measuring the Environmental Cost of Landfill (Xinlei Xu), University of Queensland, indicates this fact.



⁸⁴ Regional Landfill Siting Study - Draft

With a landfill adjoining our property for over 2km, with direct road and operational impacts it is clear property devaluation is at the maximum level.

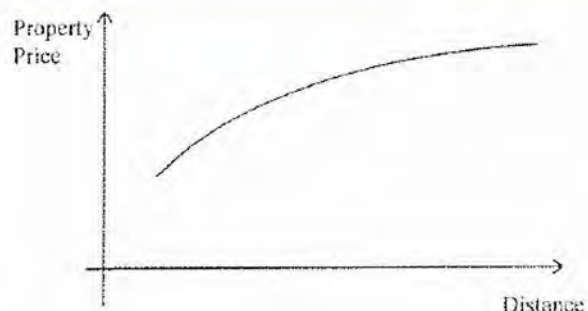


Figure 4. The Relationship between Property Price and Distance from Landfill

Figure 12 Property Price

Council admits land values will be affected and the horticultural and grazing industries affected. It is also apparent that future development in the area will be prohibited by zoning restrictions or just non-approval of developments, seriously affecting land values.

Proof of this is the re-zoning of the proposed site entrance (and neighbouring properties) from Rural Residential to Rural zoning in their new LEP 2008. Subdivision abilities have now been rescinded.

It is therefore of serious concern that the imposition of this proposed landfill and the many documented negative impacts to existing blameless residents, that the proponents only discussions and proposals have been with the vendors who have offered their land to Council for use as a Landfill.

Whilst 2 residences are listed below, the residence 'Strathaven' 952m west also as discussed earlier in section 5 has (due to prevailing winds) the negative dust, insect, vermin and noise impacts that that would be expected. It also has the added amenity issues of the visual impact of a landfill site and site entrance for over a kilometre. This is not the case with the vendors residence yet Council appears happy to compensate AND purchase the land from the owners as per the vendors proposition.

The proponent states

The proximity of the boundaries of the proposed landfill to the nearest, adjacent property,

"Strathaven", may result in landuse impacts on this property's olive grove via the potential spread of vermin. Additionally, impacts related to potential increases in noise, dust, odour, traffic, litter and vermin to the surrounding area may affect residents located within 1km of the proposed development footprint, ie:

□ Residence located 952m West; and

□ Residence located 410m South.

Due to land use and amenity impacts associated with the development of the proposed landfill, it is possible that land values in the immediate area may decrease in value. There will be a direct impact to the existing agricultural farming practices that are undertaken on the site due to the acquisition of the land required for the proposed landfill. However, monetary compensation will be offered and the land purchased by Council.

Is compensation proposed for neighbors who have been innocent parties in the dealings to date or is compensation only proposed for the vendors who have actively sought to sell their properties at vastly inflated prices?

I also love the proponent's efforts to keep the vendors happy at the expense of ourselves by running the road along our fence to minimize impacts on the vendors. Never mind the impacts on us!

Our property is 'Strathaven'

*'the route proposed to provide access to the landfill area would be aligned to run adjacent to the eastern boundary fence of the adjoining property known as 'Strathaven' in order to minimise the impacts on the existing agricultural land uses of the properties known as 'Edington' and 'Sherraloy'.'*⁸⁵

Prediction – Vendor's (Derry Crisp) house to be purchased by Council as Landfill Managers residence.

b) Loss of future development potential

The proposed Landfill site had previously been publically rejected in the press by Armidale Council and by the former general manager of Dumaresq Shire Council Don Tydd, who stated as early as 1994 that the use of the subject property was 'inappropriate'.

As an administrator will shortly be overseeing management of Armidale Dumaresq Council, zonings could change at any stage in the next 50 years as they already have in the last 50. Currently small

allotments exist to the North of the site, small allotment zoning currently finishes within our Western boundary. It is clear without a proposed landfill being constructed next door there would ordinarily be massive potential for future development. Not forgoing zoning changes, we already are able to subdivide our property into minimum 200 Hectare portions. Although the highest point in the property adjacent to the landfill would be the obvious location for a dwelling, it is certain Council would not approve the development adjacent to the dump. In the front (adjacent to site) paddock we also have a 300mm town water main and power available, again approval would not be granted by Council to build 50m from the proposed site.

S082_58

No one would want to build next to a regional dump. Even with the unrealistic commitments from Council claiming mitigation of all foreseeable negative impacts.

It is therefore clear that potential development will be restricted as a result of a proposed regional dump being constructed on adjacent land with the 'operational area' only 50m away.

c) Future and current land use restrictions

If the proposed landfill comes to fruition there will be immediate impacts on adjacent land use.

Can you imagine the impact on 'olive grove' tours and 'cellar door' sales when guests are treated to the noise, odours, dust, insect and birds whilst touring the grove only 300m from the site?

It has been commented that we should change our name from 'Waterfall Way Olives' to 'TipTop Olives', the grove beside the dump.

The ideally suited well drained Northern slope of the area adjacent to the dumpsite, would have been the next area for grove expansion. It may soon not be an option as being only 50m from the site the contamination risks are obviously too great for me to take.

S082_59

This has thus limited my land use.

What process will a neighbour have to go through to prove contamination originated from the dump. I can imagine, as identified by Council, if a contractor takes over the management of the site that denial will be the first line of any defense.

A stud ram or bull will certainly not be risked grazing amongst bags and escaped litter 50 m from the site.

Our existing property airstrip [Figure 20 'Strathaven' Airstrip] may become redundant if Aerial Contractors refuse to fly due to the proximity to the dump and the extra birdlife attracted.

If there is a prohibited zone around a commercial airstrip then I would think an adjacent property would have significant potential impacts for airplanes, pilots and therefore our farming activities.

S082_47

This issue has not been addressed.



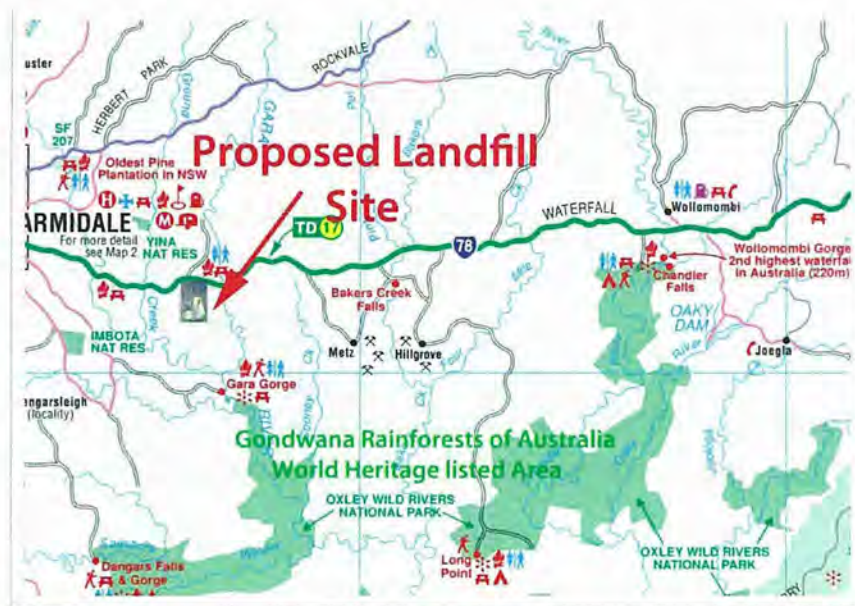
Figure 2

Figure 13 'Strathaven' Airstrip

7. Detrimental tourism impacts.

The spectacular Waterfall Way is synonymous with eco-tourism, wild rivers wilderness areas and breathtaking waterfalls. The World Heritage Values that have evolved over millions of years make this area a unique wilderness experience.

A regional waste and rubbish dump, run by a Council with a documented poor record of landfill management (see section 11) is not consistent with the international and national significance of this wilderness area.



The Waterfall Way stretches from Armidale in the West to Coffs Harbour in the East, linking the New England and Coffs Coast regions. The proposed landfill site is visible from the Waterfall Way for at least a kilometre. Many thousands of tourists and holiday makers use this main regional corridor route each year and all must pass this proposed landfill site.

The Waterfall Way, Tourist Drive No.17 has been voted by the NRMA as "One of the Ten Best Drives in NSW" and by Australian Traveller magazine as the third best drive in Australia (after the Great Ocean Road and the Great Tropical Drive).

Only a short distance along the Waterfall Way lie the Bakers Creek, Wollomombi and Ebor Waterfalls. The Wollomombi falls being the second highest waterfall in Australia.

Directly opposite the proposed landfill site on the Waterfall Way is the Gara Reserve rest and picnic area. The Gara Reserve is described as an area of 'key habitat' and is regularly frequented by bird watching groups, nature lovers and tourists enjoying a rest.

Three km downstream from the proposed site is the 'blue hole', Gara Gorge swimming and recreation area. Undoubtedly pollution contaminations in the form of litter or leachate chemicals have the potential to permanently affect this recreation area. Swimming in or ingesting water from a contaminated landfill source would halt the use of this area for public recreation.

Armidale Dumaresq Council's own documents highlight the importance of the World Heritage Areas East of Armidale and the significance tourism plays in positioning Armidale as a destination hub.

Armidale Facts and Figures 2008 Armidale Dumaresq Council

'the growth of activities centred on the food and wine industry as well as the World Heritage Listed Gorge Country have all enhanced Armidale's position as a destination and as a hub for business and leisure travel within the New England North West region of NSW.'

Recently there has been a very strong branding campaign called 'Waterfall Way Branding'. It is stated below that 'it's about tourism'. I don't think a dump on the Waterfall Way is going to portray the image that was hoped.

Waterfall Way Branding <http://www.waterfallwaytourism.com>

'The Waterfall Way Brand and this Toolkit are about marketing single and packaged experiences for locals and visitors. These nature-based and ecotourism products could include a variety of purely physical activities (walking, cycling, food and wine tasting) while incorporating family, indigenous and spiritual appreciations.

The Waterfall Way Brand has the potential to contribute significantly to the development of the regions it serves. It engages communities, facilitates partnerships, and contributes with tools that will foster the sustainable management of human, cultural and natural resources.

Local communities and stakeholders chose the name Waterfall Way to form the core of the exciting new brand for the New England to Coffs Coast region to be seen as one total eco- and nature-based tourism destination.

Waterfall Way is already widely known as one of the top tourist drives in Australia so, when it came to deciding on a name for the new brand, the overwhelming community response was to use the Waterfall Way name because it's about the region; it's about tourism; and it's already well known.'

Council's statements appear to be in total contrast to their actions. Council's former Mayor released the following statement on Council's website in 2004.

'The protection of our environment, together with its unique flora and fauna, for our children and their children, is one of the greatest challenges facing our community.'

And further

*'There is no way that Armidale Dumaresq Council will support or allow any landfill site to be constructed, should it be **any** risk to the World Heritage areas, or damage the environment.'*

'Should it be ANY risk'. I think some risk has been proven beyond reasonable doubt. Council again telling 'porkys'.

Currently their website states;

'The gateway, mostly along good sealed roads offers a choice of over 20 different national park visitor areas. Clearly, one of the great things about the New England Tablelands is that a short drive in almost any direction from the city centre can see you driving through gently rolling hills that quite suddenly come across gorges of prodigious depth and size or spectacular waterfalls.'

I would consider that if protection of the environment is one of the greatest challenges facing our community then the placement of a Regional Landfill adjacent to the Gara River, immediately above a World Heritage Area is a threat to the environment that should not be tolerated and makes the challenge simple. Don't put the dump there. !!

It is apparent that the significant loss of amenity from odours, dust, litter, noise and changes to the ecosystem due to predatory and vermin impacts will have a significant impact on the area. The visual impact of a scarred landscape is in strict contrast to the surrounding environmental beauty.

Tourists that travel upon the Waterfall Way or who choose to view the Wild Rivers area by helicopter are certain to have a lasting memory of the 'gateway to the world heritage area'.

It is also alarming that if the World Heritage Environment is damaged due to an irresponsibly located landfill that the impacts on tourists to the region could be significant.

S082_63

8. Lack of EA content including Landfill Design and mitigation measures.

a) Minimal design and construction information. 'Concept Design' only.

It is clear that although the proponent is clearly satisfied that all portions of the EA have been 'ticked off', little and clearly not enough is known about many aspects of the site which include inconsistencies and contradictions in key areas such as geology, geotechnical areas, availability of construction materials and soils.

Once again a host of commitments relating to the design and construction of the landfill are stated.

It is not possible to comment on a 'concept design' as it is exactly that, a concept in someone's mind.

The proponent concludes that their proposal should be allowed to proceed on the basis of the studies they have undertaken and the 'stringent' controls and management put in place. If the proponent really knew so much about their site, council would have supplied costings, budgets and a 'real' design for comment.

S082_64

Council's abysmal environmental management record, cost blow outs and public mis-information raise serious concerns as to the ability and willingness of Council to raise new issues to licensing authorities at a later stage. When even more public monies have been invested in the project they are unlikely to discontinue due to breaking a commitment.

S082_65

This has been evident when at last Council elections the standing Mayor stated that [Figure 37] due to the vast quantities of money expended on the project already that prospective Councillors should not make a commitment to oppose the location of the proposed dump.

Following the Federal EPBC decision which states that the project 'will or is likely to have significant impact on World Heritage Properties and National Heritage Places' Council, instead of realizing that the site was in an environmentally sensitive and inappropriate location, decided to opt for the commitment to run the dump as a pseudo 'non - putrescible' landfill. Of course this has been clarified with the line 'in the future'. In the future this Council won't exist to act on its promises!

b) Reliance upon 'ideal' Incomplete and underdeveloped Management Plans

Almost all Environmental Plans mentioned by the proponent are 'virtual plans' with no content. One would expect that plans such as a fire management plan should be complete; yet again there is very little content.

S082_66

The failure of the proponent to satisfy the Director General's Requirements in one of the 'plans' is highlighted in the extract below. The proponent states the potential impact and then the proposed mitigation measures.

'4.1.8 Disease

Impact:

The potential spread of disease from the landfill operation that may contribute to the loss of biodiversity or agricultural productivity (e.g. exotic animal diseases like foot and mouth).

Mitigation measures:

Disease Monitoring Protocol: Preparation of a disease monitoring protocol and appropriate contingency plans to deal with outbreaks that may be detected at some point in time during the operation of the landfill facility and for a nominal period of at least 5 years after rehabilitation works and decommissioning of the site.⁸⁶

Unfortunately the commitment to preparing another 'plan' is not a mitigation measure. Preparation of 'contingency' plans cannot satisfy proposed remediation DG requirements.

Some other examples of attempts to avoid addressing requirements are exemplified below with the Pest, Dust and Fire management plans, strategies or protocols included in the EA.

'It is expected that the pest vermin and noxious weed controls will be refined during detailed design, construction and operation of the landfill. Consequently, the controls implemented may vary from those provided herein'.⁸⁷

'Dust management strategies for the construction phase will be included in the Construction Environmental Management Plan (to be developed prior to construction works being undertaken).'⁸⁸

'It is expected that the Fire Management Plan will be refined during detailed design, construction and operation of the landfill. Consequently, the controls implemented may vary from those provided herein'.⁸⁹

S082_66

A massive portion of the document is dedicated to plans which include the following plans.

- Erosion and Sediment Control Plan (ESCP).
- Construction Noise Management Plan (CNMP).
- Construction Environmental Management Plan (CEMP)
- Vegetation Management Plan (VMP).
- Vegetation Clearing Protocol.
- Native Fauna Management.
- Fire Management Plan.
- Weed Management Plan (WMP).
- Pest Management Plan.
- Disease Monitoring Protocol.

⁸⁶ Flora and Fauna Assessment Page 36

⁸⁷ Armidale Regional Landfill Environmental Management Plan Page 86

⁸⁸ Armidale Regional Landfill Environmental Management Plan Page 87 Dust Control Plan

⁸⁹ Armidale Regional Landfill Environmental Management Plan Page 96 Fire Control Plan

- Pollution and Litter Management Plan.
- Water and Leachate Management Plan (WLMP).
- Indigenous Heritage Management Plan.

S082_66

Incredibly we are told by the proponent that the plans would be prepared at a later stage.

These plans contain, or should have contained virtually all of the data that should be totally defensible by the proponent yet the only plan the proponent reveals is a 'plan of commitments'.

'The LEMP would be prepared prior to any construction work being undertaken and would provide a detailed description of the construction staging, tasks and management measures. The LEMP would include appropriate strategies and management measures to control and manage environmental risks, assess environmental performance and comply with relevant statutory requirements during the construction and operation of the proposed landfill facility.'⁹⁰

It is unsatisfactory that over \$1million dollars of consultancy fees and 1600 Pages (plus 80 page addenda) of data of dubious relevance, that virtually all key areas of the project remain unpopulated and 'concept'.

The data is not of suitable quality or quantity to allow adequate public comment and has not satisfied the DGR's in this area.

9. General EA anomalies.

a) Failure to address Director General Requirements

Director General's Requirements	Comments
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> ;	- No economic justification, budgets or financial assurances
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	-No measures proposed to remediate potential impacts ie How do Council propose to remediate in case of groundwater pollution ? -No contingency plans
a description of the existing environment, using sufficient baseline data	-No GDE's no flooding data
plans of the proposed landfill, leachate management	-'concept design' are not plans

S082_67

⁹⁰ EA page 268

systems and associated infrastructure alternatives considered, including not proceeding and expansion of the existing landfill;	-Not seriously attempted	
cell and landfill lining design and integrity;	-Contradictory liner details throughout EA	
a water balance for the site detailing water sources and quantity, water consumption and recycling, and the estimated quantity of leachate and stormwater;	-Created from 'modelled' data	
proposed leachate management systems including pond management and remediation measures, and potential risks on the Gara River and the Oxley Wild Rivers National Park	-Remediation measures not stated -Potential risks not adequately addressed.	S082_67
water access and harvestable rights; and	-Harvestable rights not addressed	
flooding impacts; impacts on aquatic habitats and groundwater dependent ecosystems;	-Aquatic habitats not addressed	
weed management, including potential risks to the Oxley Wild Rivers National Park;	-Potential risks not addressed	

Table 1 Failure to address DGR's

As an example of the major failure to address the DGR's an example is selected below.

Council claim there are no Groundwater Dependent Ecosystems (GDE's) in the Oxley Wild Rivers National Park.

'No groundwater dependent ecosystems have been identified in the study area, nor in the Oxley Wild Rivers National Park downstream of the proposed new landfill (DNR 2002).

*Thus, the proposed new landfill is not likely to have any impacts on groundwater dependant ecosystems, either in the study area or further downstream in Oxley Wild Rivers National Park.'*⁹¹

S082_68

Highlighted in the below extract from the NSW Groundwater Dependent Ecosystem Policy it is CLEARLY STATED that GDE's include Fauna which directly depend on groundwater as a source of drinking water or that live within water which provide a source.

The proponent is therefore of the opinion that no Fauna drink or live in the water in the Oxley Wild Rivers National Park.

This is clearly wrong !!!

NSW Department of Water and Energy ((DLWC), 2002)

Groundwater Dependent Ecosystems (GDEs)

The assessment is required to identify any impacts on GDEs.

⁹¹ Flora and Fauna Assessment Page 33

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/ivers 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.

Noting also that the 'Precautionary Principle' applies to GDE's, Council's lack of knowledge and investigation is not a reason to proceed with this inappropriate site.

b) Selective use of data

See Section 2 c) [Selective use of available data]

c) Reliance upon previous data

The proponent's reliance upon data that has been proven incorrect in section 2 is concerning. Maunsell (AECOM) clearly post a disclaimer on their document excusing themselves of responsibility.

*'We also wish to highlight the fact that for the purposes of evaluation of sites, Maunsell were reliant upon data from previous site assessment and information supplied by various stakeholders being reasonably reliable.'*⁹²

*'Data review to be reliant on previous investigations performed on site, which are to be assumed as being reliable.'*⁹³

EA systems (a sub-contractor) also absolve themselves of responsibility

*'EnviroAg Australia therefore does not and cannot accept any responsibility and disclaims any liability for errors, omissions or misstatements contained in this report, which have resulted from EnviroAg Australia placing reasonable reliance on such client information and data.'*⁹⁴

It is apparent that the integrity of the data produced has been reliant on input data which for the selected site started in 1994. Aged data 16 years old has been used for the site selection process.

d) Modeling skepticism

The vast array of modeling used to justify selection of the site highlights concerns as to the real impacts of various issues.

S082_69

Recently I heard a chainsaw (whilst inside the house) in operation and thought that someone may be collecting firewood from our property. Upon investigation it was the vendor cutting fire wood below the proposed site some 1.5 km away. My thoughts are that the proponents have used modeling techniques which may or may not be accurate yet a simple test like someone calling out from the landfill boundary confirms the potential for sounds to be clearly heard at our residence. If I can hear a chainsaw inside the house then noise from compactors, reversing beepers and entrance road traffic noise will be significant. If I can hear a voice shouting from the landfill boundary (in the daytime) then my family is in desperate trouble.

Photographic evidence has been produced to rebuke Council's assertions that they are able to control floodwaters yet their 'modeling' concludes this is not a problem.

The proponent has managed to produce a new 'study' on liner integrity to prove that it will take millions of years for contaminated water to reach the World Heritage Area, yet they are unable to

⁹² Regional Landfill Siting Study Page 89

⁹³ Regional Landfill Siting Study Page 7

⁹⁴ Flora and Fauna Assessment EA systems - Disclaimer

explain why subsurface voids were found on site and what this really means in terms of potential groundwater flow. When Council produced their PEA technology has not changed since. All that has changed is Council's preparation of a new report based on some dubious modeling.

Modeling has been used by the proponent to justify virtually every area of the proposal in absence of fact. From odour assessment, dust and groundwater flow to noise and leachate pond sizing.

S082_69

A convenient new risk analysis has been provided by the proponent replacing the previous one commissioned by council [Figure 7 'Risk Analysis' DPWR 1]. The proposal really hasn't changed in 10 years yet somehow magically the risks have suddenly reduced. The World Heritage property and the Gara River have moved no further away and Council still plan to construct the dump according to the 1996 NSW EPA Solid Waste Landfilling Guidelines. It has been proven throughout the EA that the manipulation of data, 're-tweaking' assumptions and the use of 'new' modeling presents entirely different data.

The 'self – management' nature of the proposed landfill does not increase our confidence in the integrity of the project. The fact that the EPA does not undertake regular 'spot' inspections and address licensing issues means that Council can virtually hide, modify or ignore a host of defects and dangers as they have done previously. These issues have been highlighted in section 11.

S082_70

e) Other EA issues

Other concerns with EA issues are listed below;

Contractors

It is extremely concerning that Council pre-empt the outsourcing of the facility. If this is to occur the contractors primary consideration is financial gain. This must not be permitted to occur.

S082_71

*'This structure may differ, should Council elect to use a Contractor to manage the site on its behalf or operate the waste transfer vehicles. A Contractor would work under a contract stating strict key performance indicators to ensure correct operation.'*⁹⁵

Non-Putrescible facility

Council has applied for a putrescible facility. This is indicative of a deceitful Council.

S082_72

'it is Council's intention to seek an operating licence to landfill General Solid Waste (putrescible) material, including putrescible material and other general waste recognised

⁹⁵ EA page 76

by the DECCW under this “putrescible” definition for general solid wastes. It is Council’s longer term objective, however, to begin operating the landfill, as soon as possible in the future (and then until final closure) only as a General Solid Waste (non-putrescible) facility,⁹⁶

Traffic Flow

It is strange that Council estimate minimum numbers of traffic. Surely we should be supplied with maximum numbers.

‘It is estimated that the traffic flow to and from the proposed landfill facility would be a minimum of approximately six vehicles per day. This estimate is based on the following:’⁹⁷

S082_73

Waste Screening

It is absolutely absurd to believe that someone dumping a semi load of rubbish can monitor and ensure the following;

S082_74

‘The placement of waste would be monitored at all times to ensure that no liquid, hazardous or medical waste is placed in the landfill. This would be facilitated by:’⁹⁸

Understating EPBC decision

The EPBC decision clearly states the words ‘will, or is likely to’

‘26. In light of my findings, I was satisfied that the proposed action will, or is likely to, have a significant impact on the World Heritage values of World Heritage properties and the National Heritage values of National Heritage places’

Council prefer their watered down paraphrasing using the word ‘potential to’

‘On 3 August 2007 details of the proposal were referred to the (former) Commonwealth Department of Environment and Water Resources (DEWR, now DEWHA), requesting that a determination be made under the EPBC Act. DEWR responded on 1 October 2007, declaring the project to be a “controlled action” under the EPBC Act and indicating that the proposal has the potential to have a significant impact on the following:

⁹⁶ EA page 117

⁹⁷ EA page 78

⁹⁸ EA Page 79

☑ World Heritage Properties (pursuant to Sections 12 and 15A of the EPBC Act).

☑ National Heritage Places (pursuant to Sections 15B and 15C of the Act).

The determination considered that the proposed action has the potential to have a significant impact on the downstream values of the Oxley Wild Rivers National Park which is part of the GRAWHA.’⁹⁹

The paraphrasing to this extent is unacceptable and misleading.

S082_75

10. No financial information and alternative option details.

a) Lack of costings

The revised DGR’s of 2008 state the requirement for the proponent to address;

‘a conclusion justifying the project on economic, social and environmental grounds, taking into consideration whether the project is consistent with the objects of the Environmental Planning and Assessment Act 1979;’

There are no costings, budgets or indicative figures in the whole document. Therefore there is a failure to address this issue.

S082_76

Council state in their waste Management Strategy 2010 (Council, 2010) that the new landfill is;

‘To be funded by the new landfill annual charge introduced to meet costs of new landfill project. Charge will increase as the project progresses and actual costs are determined.’

‘Actual costs are determined’ is this Council serious ? How can they possibly be prepared to continue down a pathway of undetermined costs and no budgets? I suggest the ‘Kibble Report’ in Section 11 also demonstrates why an administrator is recommended to oversee the forced amalgamation of Armidale Dumaresq, Guyra and Uralla Shires.

Can Government regulatory bodies possibly approve a project where costs are unknown?

Can Council provide financial assurance in case of the requirement to remediate the site if contamination occurs?

⁹⁹ EA page 81

The DGR's require Justification on economic grounds. Obviously Council has failed to address this situation.

In the Preliminary Environmental Assessment cover letter on the NSW DoP website, David Steller from Armidale Dumaresq Council has signed the document to say that the information provided is true and correct. He states a figure of \$15 million as the TOTAL COST of the project. He has not told the truth. He has stated previously that 'stage 1' which does not include cells 2,3,4 and 5 would cost \$15 million.

S082_77

Please investigate this.

b) Outdated AWT investigations

Council last investigated AWT in 2002. In 2005 they produced a tender document but decided not to proceed due to financial constraints.

S082_78

This can not be considered a serious investigation of alternate technologies. No costings are given

c) Other considered options

Once again Council has provided an 'ideal' option and portrayed it as fact. A paragraph is provided to explain the wonders of the baling technique and what impacts it reduces.

S082_79

Unfortunately the highlight extract sums up Council's real commitment.

5.5.1 Alternatives Considered

*Since the landfilling of baled waste has no exposed work face and the bales can be easily stacked on top of each other, it is proposed that the lift heights for the waste can be up to 6 metres high. This proposed use of baling would also have the added benefit of minimising the need for daily and intermediate cover at the proposed landfill, thus reducing the various impacts of winning, transporting, storing and placing this cover material. It would also reduce the proposed landfill's longer term operational impacts. The viability of any future use of waste baling techniques has not been confirmed.*¹⁰⁰

¹⁰⁰ EA page 70

The proponent states:

'The implications of direction to either Tamworth or Coffs Harbour would be:

*Greater haulage costs and increased energy use;*¹⁰¹

The investigation into transportation to in particular Tamworth has been insufficient. No cost benefit analysis is presented.

S082_80

It is with interest that the proponent mentions the "Environmental and social impacts of transporting regional waste to another region;"

Tamworth is in our region and is part of the NIRW whose objectives as stated in 3.1.2 two of which are to

'- encourage partnerships & cooperation between member councils & external stakeholders in a collaborative approach to addressing sustainability issues for the overall benefit of the Region;

*- identify & investigate all opportunities for coordinated approaches in the provision of waste management services & the achievement of waste avoidance & waste minimisation within the region;*¹⁰²

The proponent statements on 'employment opportunities' are confusing.

No evidence has been presented as to the 'employment opportunities' gained or lost through this proposal, obviously employment would be created in transportation to the Tamworth Regional Facility and lost at the proposed site. If Council are stating that employment opportunities will be lost then the assumption is there must be a cost saving to ratepayers.

S082_81

11. Council's previous appalling environmental and financial 'track record'.

a) Appalling landfill management record

Armidale Dumaresq Council past environmental record and in particular the management and operation of its current landfill site raises serious concerns about Council's ability to manage its proposed landfill site.

S082_82

¹⁰¹ EA Page 36

¹⁰² EA Page 23

Council proven track record with its failure to satisfy the most basic of landfill licensing conditions is extremely disturbing. What is even more frightening is that contaminated wells were found nearby 'believed' to be from the landfill. The monitoring equipment put in place by Council is not able to isolate the source of the contamination.

S082_82

With a World Heritage Area at stake, is this the environmental 'track record' of a Council you would trust to uphold the World Heritage Values of the area?

Final Compliance Audit Report
Armidale City Council Solid Waste Landfill
Long Swamp Road
December 2000
Executive Summary

The findings of the audit indicate that the enterprise was not complying with a number of conditions attached to the Environment Protection Licence issued under the Protection of the Environment Operations Act 1997.

Issues of concern include the following:

Inadequate containment of contaminated soil undergoing remediation.

Inadequate maintenance of the bund wall forming part of the containment structure for the dedicated remediation area.

Inadequate and/or incomplete records relating to contaminated soil received at the premises.

An action program has been developed to ensure that the enterprise addresses these issues.

Issues of concern identified through further observations include:

The collection of uncontaminated surface water in the leachate collection system, increasing the quantity of leachate contaminated water that requires disposal

Scouring of the landfill batter located in the south eastern corner of the premise, allowing infiltration of surface water into the landfill.

The inadequate collection of surface water, contaminated by landfilling activities, likely to cause pollution of groundwaters.

The degradation of local amenity through inadequate litter controls and inadequate covering of waste.'

Further the report stated;

'Groundwater Contamination

The licensee has implemented a comprehensive water monitoring program involving quarterly sampling of surface and ground waters for a range of parameters. The first round of sampling in February 2000 indicated that high levels of contaminants were present in the groundwater in the well located adjacent to the northern boundary. It was reported that the high levels may have been caused by leachate contamination.

Subsequent testing in May 2000 confirmed the presence of contaminants in the groundwater with the report submitted to the EPA stating that "run-off" water and leachate from the north eastern section of the landfill that pools in a diversion drain close to LWI (the sampling well) is the likely cause".

The EPA is concerned that inadequate collection of surface water, contaminated by landfilling activities, may be causing pollution of waters. (See Appendix C for extract from Protection of the Environment Operations Act 1997)'

The proponents idealistic assertion in the EA that includes their 'statement of commitments' is not backed up by their previous dismal compliance record.

S082_82

Degradation, concern and inadequate are the words the EPA has used to describe Armidale Dumaresq Council's efforts to satisfy agreed licensing conditions. Australia's obligations to preserve a World Heritage Site should not be jeopardised by a local Council with a deplorable record of environmental management.



Figure 14 Current Dump Site

b) Other environmental disasters

Other well documented Council environmental disasters such as the [Armidale Gasworks Site](#), and the [Martin St Subdivision Contamination](#) demonstrate that Council's poor record with landfill management is not a 'one off' case.

c) Poor financial management

In May 2010 a NSW Government report into a review of local government service delivery in the New England Area was handed down. The report titled 'A Proposal for the Creation of a New England Regional Council' (Kibble, 2010) was commissioned by the Minister for Local Government, the Hon Barbara Perry MP. Gabrielle Kibble AO was engaged as facilitator to undertake a review of local government services currently provided by Armidale Dumaresq Council, Guyra Shire Council, Uralla Shire Council and Walcha Council.

Ms Kibble has recommended a forced amalgamation of Armidale Dumaresq, Guyra and Uralla Shires and recommended that an Administrator be appointed to oversee the implementation of the amalgamated Council.

The report is a damning indictment of Armidale Dumaresq Council's financial position, distrust within the Community and leads one to question Council's ability to adequately guarantee any of its many promised EA 'commitments'. Can Council service the project in the long term, remediate if required and guarantee Australia's World Heritage Obligations?

S082_83

A number of references are aimed specifically at Armidale Dumaresq Council poor financial position and management, summed up by Ms Kibble stating

5.2.1 Armidale Dumaresq Council (ADC) P18

'ADC's outstanding rates and annual charges over the last three financial years also highlight a poor record of debt control.'

The report also questions council's ability to deliver services to ratepayers

5.3 Conclusions P21

'Armidale Dumaresq's current financial position is of concern. Despite a reasonably stable revenue base of \$41 million for 2008/09, the Council still carried \$24 million in debt as at 30 June 2009 which will need to be serviced in future years. This will have an impact on ADC's ability to deliver services to the community in the medium term. Additionally, if Council continues to record operating deficits, the losses will erode its cash position, which will lead to significant pressures on the renewal of assets.'

It also appears that Council may be understating its debts and questions Council's ability to replace assets.

S082_83

This obviously has enormous potential to jeopardise many of Council's Statement of Commitments and questions Council's capacity to adequately manage the proposed landfill facility for the 50 years of operation and closure thereafter.

5.2.1 Armidale Dumaresq Council (ADC) P19

'However, there is a concern that, in recognising its Collateralised Debt Obligations investments as current assets, ADC may be overstating the liquidity and health of its finances to some degree.'

5.2.1 Armidale Dumaresq Council (ADC) P18

'ADC has recorded operating deficits after capital grants in three of the last five financial years with a cumulative loss of \$10.134 million. In 2008/09, ADC recorded an operating deficiency of \$1.223 million, including the early payment of the first installment of the Federal Government financial assistance grant (FAG) for the 2010 year of \$0.956 million. If ADC continues to record operating deficits, the continued losses will erode Council's cash position meaning the Council will not be able to provide for the replacement of its assets as they are being used.'

Previously in 2009 the financial sustainability review of Armidale Dumaresq Council rated Council 'Financially Unsustainable'. The fiscalstar [Figure 24 Fiscalstar ADC Financial Report] report goes on to say

'The stability and predictability of the council's rates, fees & charges are therefore at risk, and its ratings burden presently does not seem to be shared fairly between the council's present and future ratepayers.'

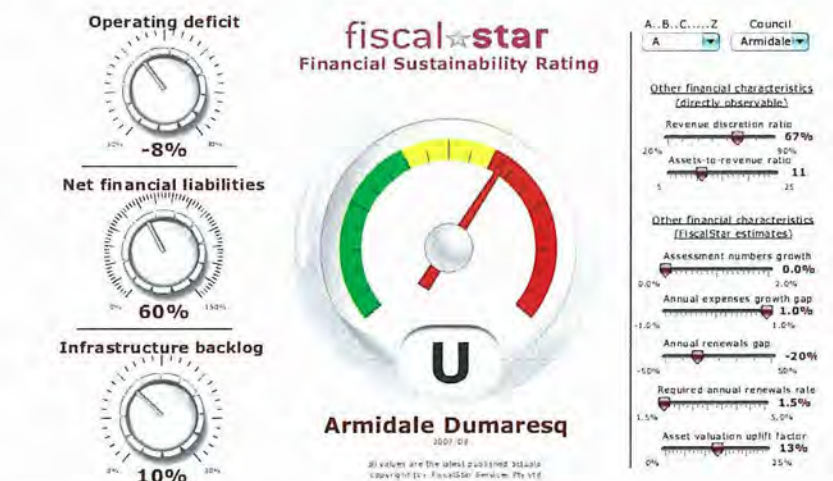


Figure 15 Fiscal Star 'dashboard' Armidale Dumaresq Council



Figure 16 Proposed new LGA. Unshaded is available area not in World Heritage catchment

Conclusion

The Environmental Assessment fails to address crucial aspects of the proposal. Remediation and mitigation measures are yet to be presented.

Inappropriate dealings, site selection and procedural issues have resulted in the site being selected.

The threats to water quality and the environment remain unresolved.

Significantly costings, budgets and economic justification have been omitted from the EA.

Armidale Dumaresq Council's proposed regional landfill cannot be justified on social, economic or environmental grounds.

Arnisdale Dumaresq
Council
Finance

New South Wales



The council's existing policies are assessed as financially sustainable. While the council's financial viability is certainly not in doubt, any separating office, irrespective of its size, will have a backlog of excessive debt that previously assets are together of such a magnitude that their correction will require substantial adjustments to existing revenue-raising and/or expenditure policy settings. The council's ability to maintain its stability and predictability of the council's rates, fees & charges are therefore at risk, and its ratings/budgetary position does not seem to be secured. Only between the council's present and future ratings.

Eastlake Fall

The 1987 season has been a difficult one for us in the softwood industry. The softwood market has been under a lot of pressure from the softwood market. The softwood market has been under a lot of pressure from the softwood market. The softwood market has been under a lot of pressure from the softwood market.

Exclusion: Financially unsustainable; zero

Annamalai Durairaj Council		2014-15	2015-16	2016-17
OPERATING DEFICIT RATIO (OD ratio) (NB: nil value & less than)		2%	3%	-8%
For operating deficit ratio to be calculated (OD ratio) (NB: nil value & less than)				
1	Net operating deficit	31.11	-25.97	10.00
2	Net operating income	31.00	4.12	0.00
3	Net operating deficit ratio	1.00	6.30	10.00
For operating deficit ratio to be calculated (OD ratio) (NB: nil value & less than)				
4	Operating deficit	8.44	8.44	1.28
5	Operating income	3.22	8.44	1.28
6	Operating deficit ratio	2.62	1.00	0.99
For operating deficit ratio to be calculated (OD ratio) (NB: nil value & less than)				
7	Operating deficit	1.11	1.11	0.00
8	Operating income	1.11	1.11	0.00
9	Operating deficit ratio	1.00	1.00	0.00
For operating deficit ratio to be calculated (OD ratio) (NB: nil value & less than)				
10	Operating deficit	1.11	1.11	0.00
11	Operating income	1.11	1.11	0.00
12	Operating deficit ratio	1.00	1.00	0.00
For operating deficit ratio to be calculated (OD ratio) (NB: nil value & less than)				
13	Operating deficit	1.11	1.11	0.00
14	Operating income	1.11	1.11	0.00
15	Operating deficit ratio	1.00	1.00	0.00
For operating deficit ratio to be calculated (OD ratio) (NB: nil value & less than)				
16	Operating deficit	1.11	1.11	0.00
17	Operating income	1.11	1.11	0.00
18	Operating deficit ratio	1.00	1.00	0.00
For operating deficit ratio to be calculated (OD ratio) (NB: nil value & less than)				
19	Operating deficit	1.11	1.11	0.00
20	Operating income	1.11	1.11	0.00
21	Operating deficit ratio	1.00	1.00	0.00
For operating deficit ratio to be calculated (OD ratio) (NB: nil value & less than)				
22	Operating deficit	1.11	1.11	0.00
23	Operating income	1.11	1.11	0.00
24	Operating deficit ratio	1.00	1.00	0.00
For operating deficit ratio to be calculated (OD ratio) (NB: nil value & less than)				
25	Operating deficit	1.11	1.11	0.00
26	Operating income	1.11	1.11	0.00
27	Operating deficit ratio	1.00	1.00	0.00
For operating deficit ratio to be calculated (OD ratio) (NB: nil value & less than)				
28	Operating deficit	1.11	1.11	0.00
29	Operating income	1.11	1.11	0.00
30	Operating deficit ratio	1.00	1.00	0.00
For operating deficit ratio to be calculated (OD ratio) (NB: nil value & less than)				
31	Operating deficit	1.11	1.11	0.00
32	Operating income	1.11	1.11	0.00
33	Operating deficit ratio	1.00	1.00	0.00
For operating deficit ratio to be calculated (OD ratio) (NB: nil value & less than)				
34	Operating deficit	1.11	1.11	0.00
35	Operating income	1.11	1.11	0.00
36	Operating deficit ratio	1.00	1.00	0.00
For operating deficit ratio to be calculated (OD ratio) (NB: nil value & less than)				
37	Operating deficit	1.11	1.11	0.00
38	Operating income	1.11	1.11	0.00
39	Operating deficit ratio	1.00	1.00	0.00
For operating deficit ratio to be calculated (OD ratio) (NB: nil value & less than)				
40	Operating deficit	1.11	1.11	0.00
41	Operating income	1.11	1.11	0.00
42	Operating deficit ratio	1.00	1.00	0.00
For operating deficit ratio to be calculated (OD ratio) (NB: nil value & less than)				
43	Operating deficit	1.11	1.11	0.00
44	Operating income	1.11	1.11	0.00
45	Operating deficit ratio	1.00	1.00	0.00
For operating deficit ratio to be calculated (OD ratio) (NB: nil value & less than)				
46	Operating deficit	1.11	1.11	0.00
47	Operating income	1.11	1.11	0.00
48	Operating deficit ratio	1.00	1.00	0.00
For operating deficit ratio to be calculated (OD ratio) (NB: nil value & less than)				
49	Operating deficit	1.11	1.11	0.00
50	Operating income	1.11	1.11	0.00
51	Operating deficit ratio	1.00	1.00	0.00
For operating deficit ratio to be calculated (OD ratio) (NB: nil value & less than)				
52	Operating deficit	1.11	1.11	0.00
53	Operating income	1.11	1.11	0.00
54	Operating deficit ratio	1.00	1.00	0.00
For operating deficit ratio to be calculated (OD ratio) (NB: nil value & less than)				
55	Operating deficit	1.11	1.11	0.00
56	Operating income	1.11	1.11	0.00
57	Operating deficit ratio	1.00	1.00	0.00
For operating deficit ratio to be calculated (OD ratio) (NB: nil value & less than)				
58	Operating deficit	1.11	1.11	0.00
59	Operating income	1.11	1.11	0.00
60	Operating deficit ratio	1.00	1.00	0.00
For operating deficit ratio to be calculated (OD ratio) (NB				

[illegible]

DEXIA

Received 26 April 1998; accepted 12 May 1998. This paper is part of a special issue entitled 'The Role of the Journal of Management Studies in the Development of the Discipline of Management Studies'.

Corresponding author. Tel.: +61 8 8302 4211; fax: +61 8 8302 4212; e-mail: john.burton@unimelb.edu.au.

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Paul

The following information is provided in response to issues raised in your fax sent today

- As Armidale City Council's responsible project officer, I have already made it my business to be familiar with all aspects of the project.

- With regard to the Sherraloy site, the owner specifically requested that nobody be informed of this land offer. In the circumstances, the importance of maintaining confidentiality with the property owner far outweighed any previous arrangements between the Councils. Naturally, I informed you at the earliest possible opportunity.

- The inability of the Shire Council to contribute towards Mackley's latest study is noted. In this instance it was most important to have the study completed at the earliest opportunity, given the urgency of the project.

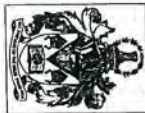
- I am confident that Council's landfill consultant, Mr Brian Mackney, is a leading expert in its field. With regard to the Meisz site, Mr Mackney has previously recommended that "Council consider either sites with a view to locating one which can be more easily and economically developed, and that more likely to meet the rigorous requirements of the EIS process." In addition, Mr Mackney concluded that "in view of the geology of the site we have considered that it is doubtful whether the site could be economically developed to meet Management Practice". In light of Mr Mackney's comments, I would not give the Meisz site serious consideration.

- The Preliminary Regional Landfill Siting Study which was commissioned by the Councils lists the area to the east of Armidale as one of the preferred areas. Although Dumaresq Shire did not favour the region to the east of Armidale earlier in the process, I am not aware that Dumaresq Shire has disagreed with any of the report's findings.

- I would be happy to discuss management and operational issues with you next Wednesday morning.

Regards

Regards,
Mark



ARMIDALE CITY COUNCIL
FACSIMILE TRANSMISSION

PO BOX 75A
ARMIDALE NSW 2350

PLANNING & ENVIRONMENTAL SERVICES

Phone (02) 6770 3571
Fax (02) 6772 9275

TO: Paul McFarland
RE: Regional Landfill Establishment
FROM: Mark Painter

DATE: 31/07/98
NO OF PAGES: 1

FILE: 30/1068
DESTINATION FAX NO: (02) 6772 9452
COPIES:

Figure 17 Fiscalstar ADC Financial Report

Figure 18 'Secret Offer

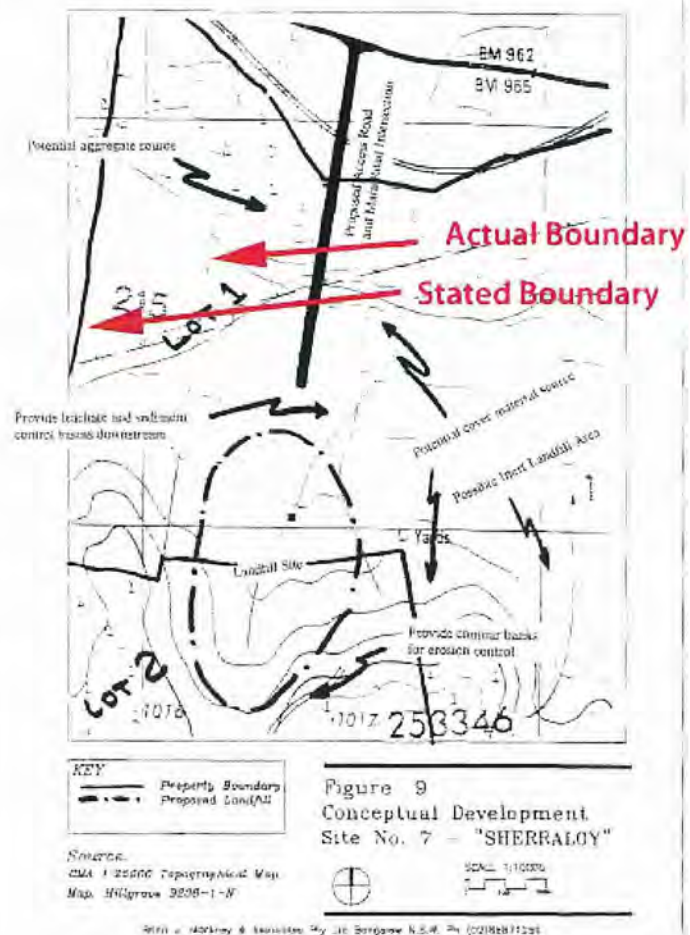


Figure 19

Civic Administration Building
135 Rusden Street
Armidale NSW 2350
Ph: 02 6770 3600
1300 136 833
Fax: 02 6772 9275
Email: council@armidale.nsw.gov.au
Website: www.armidale.nsw.gov.au
ABN 63 781 014 253



All Correspondence should
be addressed to
General Manager
Armidale Dumaresq Council
PO Box 75A
Armidale NSW 2350

Your Ref:

Our Ref: PD:NH A05/2410 O/2008/7173

5 September 2008

Dear Candidates

PROPOSED LANDFILL

It is likely that candidates for Armidale Dumaresq Council will be challenged at the forum to be held on Tuesday night, with respect to their position on the new landfill; seeking a commitment to it not going ahead on the proposed site.

I caution candidates from making this commitment in the absence of knowing all the facts. There has been considerable misinformation within the community, spread by a lobby group of predominately landholders in the area of the proposed landfill.

The landfill environmental assessment has cost Council over \$1 million and the process is nearly at the stage of submitting a DA for extensive public consultation. To jeopardise this investment without proper and considered justification, could result in substantial waste of ratepayer monies and would be denying the community an opportunity to have their say.

Since the assessment has not been finalised, candidates do not have these facts before them to make a considered decision and therefore it is suggested that an appropriate response at the forum would be to await the outcome of the environmental evaluation process before making the decision one way or another.

Yours sincerely

Peter Ducat
Mayor

thrive
in Armidale

Figure 20

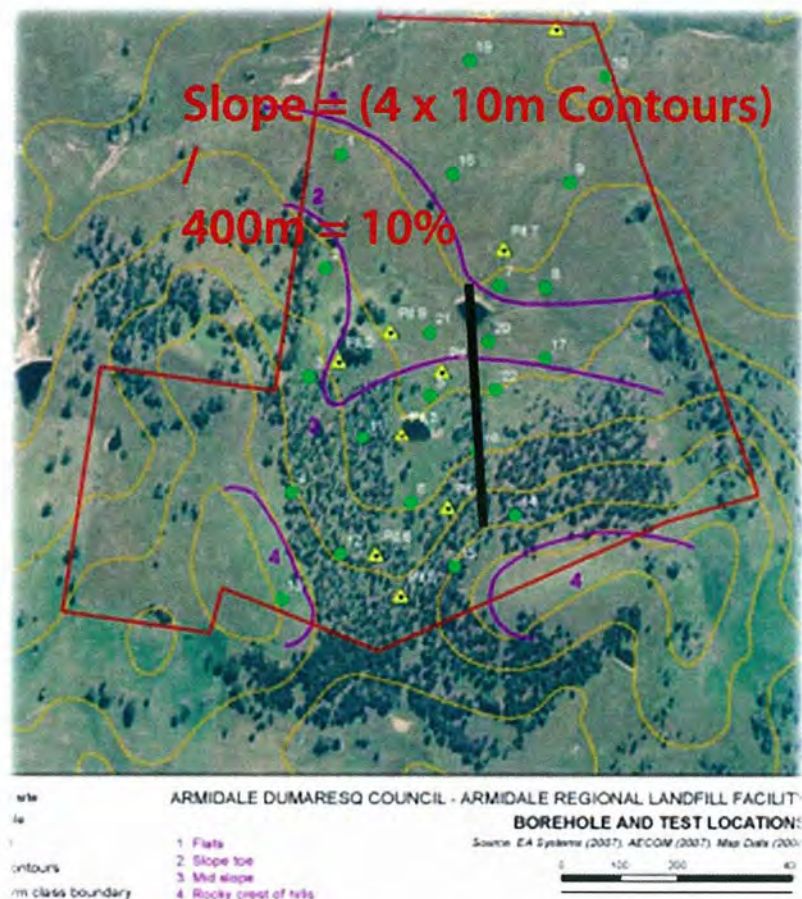


Figure 21

Criteria	Comment
Suitable geology	Assessed by reference to the PRLSS
Distant from waterways	Separation distance subjectively assessed, taking into account practical management of surface & groundwater.
Low ground relief	Sites with slopes > 5% discarded.
Good surface water control	Sites at head of catchment targeted
Minimal external catchments	Avoid through flow of run-off
Good erosion protection	Control of surface run-off & slopes
Compatibility with adjoining development	Adequate buffer distance > 1 km approx.
Low agricultural value	Defined by soils, geology, terrain.
Visually protected	Subjective assessment, subject to inspection
Minimal impact on local roadways	Limit distances to main road.
Adequate road access	Elevated, flood free, alignment.
Proximity to centres serviced	Locate nearest centroid of service area
Topography and terrain	Undulating with adequate protection
Elevated	Flood free
Capacity for 50 years minimum	Preferably 100 year capacity
Opportunity for expansion	Desireable
Orientation	North easterly preferred. Protected.

Table 1 - Site Identification Criteria

Figure 22



Figure 23

38

PRICE \$1.10 per EST. HY

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Nudge today

Advice on suitable landfill site

CONSULTANTS have advised Armadale Demaree Council that a suitable site for a new landfill is located 13km east of Armadale. The site would be the most suitable for its new land use. The consultants recommended to the council to purchase the land from the owner of the property 'Balthazar' will be put forward to the council. With the current waste management site on Long Swamp Road due to be closed in a few years, general manager Shane Burns said there is some urgency to make a decision. The Eastern Murrumbidgee Regional Council has already given notice that a closure plan for the current site and a strategy for a replacement is required. The council is currently in discussions with the Department of Public Works and Services to assess a suitable site for a new landfill. Since the search for a new waste management site began in 1996, considerations such as environmental impact and geology were included in the criteria.

Alarm activated

AT 3.30am on Friday an intruder alarm was activated at a motorcycle repair shop in St. Albans. Security and police attended and found that a concrete block was thrown through a window and entry was made into the premises. Inquiries are still continuing in relation to two male suspects.

Vandals target gates

BETWEEN 11pm and 11.30pm on Wednesday unknown vandals smashed the front gates to a home in McIntosh Cr.

FROM, Page 1

analysis and the site marked as order of suitability. The Mining Vale Road site came out 10 per cent ahead of the other two.

The consultants also assessed alternate technologies, based mainly on composting processes and investigations, but it is expected the new facility will continue.

"Council has been investigating possible locations for the new facility for a number of years, has commissioned a number of reports, inspected facilities in other council areas and consulted many firms," he said.

"We have held two workshops this year, one in April and one this month when the reports from the consultants were discussed in detail.

"We've simply run out of time and consultation are over that a decision must be made soon," he said.

"We have been in a difficult time to prepare an environmental impact statement (EIS) and a risk management plan, but we have been able to complete the development of the site."

The recommendation to council is that if the results of the EIS for the Mining Vale Road are satisfactory, then the most suitable site would be investigated.

Alarm

AT 3.30am on Friday an intruder alarm was activated at a motorcycle repair shop in St. Albans. Security and police attended and found that a concrete block was thrown through a window and entry was made into the premises. Inquiries are still continuing in relation to two male suspects.

Vandals target gates

BETWEEN 11pm and 11.30pm on Wednesday unknown vandals smashed the front gates to a home in McIntosh Cr.

FROM, Page 1

Figure 24 Ballantrae 10 % better



Dumaresq Shire Council

IN REPLY PLEASE QUOTE

OUR REF: PMC/DK/GRAF1352

Mr McFarland

YOUR REF: WHF:ML:CFG3/1/1

SHIRE CHAMBERS,
ARMIDALE, N.S.W.

TELEPHONE: (067) 72 5622

Fax No. 067 - 72 9453

12 September, 1994

The General Manager,
Mr W.D. Perry,
Armidale City Council,
PO Box 75A,
ARMIDALE, NSW. 2350

Attention: Mr W. Fisher

Dear Mr Fisher,

Re: No. 1352 Grafton Road, Argyle (Lot 1, DP 253346)

I refer to your recent letter requesting information to assist your investigations concerning the possible use of the subject land as a landfill disposal site to replace the Armidale tip.

The subject land is zoned part Rural 1(a) and part Rural 1(b).

The zoning of Rural 1(b) applies to a strip of land with a depth of 400 metres parallel to Main Road No. 74.

Waste management facilities or works are permissible with Council's consent in the Rural 1(a) zone.

The offensive and hazardous industries are prohibited in the Rural 1(b) zone and it is considered that the waste management facility or works, if carried out in a manner similar to the existing Armidale tip, would fall within this category and therefore would not be permitted on the land zoned Rural 1(b).

In addition, the land zone Rural 1(b) has a specific objective "to allow agricultural and related land uses while restricting the establishment of inappropriate traffic-generating uses along main road frontages."

I also advise that, using the comparison of the existing Armidale tip with the likely activity to be carried out on the subject land, the activity would be "designated" development in terms of schedule 3 of the regulation to the Environmental Planning and Assessment Act, 1979, and would therefore invoke all the relevant requirements under that Act. For further detail of the requirements under that Act, you should contact the Department of Planning in the first instance.

ALL CORRESPONDENCE TO BE ADDRESSED TO
THE GENERAL MANAGER
POST OFFICE BOX 546
ARMIDALE, N.S.W. 2350

DATE REC'D	14 SEP 1994
FILE NO.	
REFERRED TO	
ACTION REQ'D	
ACTION TAKEN	
COPIES TO	
COPIES MADE	
ENTERED REGISTER	

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Tasche*

(2)

As discussed in the meeting at Armidale City Council's office on Thursday, 30th September, 1994, Dumaresq Council is continuing to pursue the use of a regional waste disposal facility as a priority option and was of the understanding that, in the interest of the regional community, this option was also being pursued/investigated by Armidale City Council as a priority, particularly in view of the long-term environmental benefits and economies of scale which could result from a centralised regional facility. It is therefore of concern that while Dumaresq Council is attempting to relocate the existing landfill waste facility from Tilbuster to a regional facility, Armidale City Council is individually pursuing the option for a landfill site in Dumaresq Shire, in close proximity to the City, but in a location which appears to have no relationship to original strategy/benefit.

Having regard to the information in this letter my initial conclusion is that the use of the subject property for a landfill waste disposal facility is inappropriate.

I trust these comments are of assistance and should you have further enquiries do not hesitate to contact either myself or Council's Director - Environmental Services and Planning, Mr Paul McFarland.

Yours faithfully,

D.L. Tydd
D.L. TYDD
GENERAL MANAGER

ADC Councillor calls for immediate review of proposed new Landfill site



Councillor Herman Beyersdorf, Chair of Council's Waste Management Committee

Councillor Herman Beyersdorf has called for a moratorium on further work or preparations on the current new Landfill site on Waterfall Way until a full independent review can be undertaken of the suitability or otherwise of this proposed site.

Cr Beyersdorf was reacting to a "Referral Decision", a document of five pages, of the former Federal Department of the Environment and Water Resources (now the Department of Environment, Water, Heritage and the Arts or DEWHA) dated November 8, 2007, but not made available to Councillors (as part of a lengthy documentation of several hundred pages) until July 2, 2008.

"I feel extremely disappointed that I, as Chair of Council's Waste Management Committee, was not made fully aware of this document until very recently," Cr Beyersdorf said. "Prior to this date, we had only been made aware of a one-page document entitled 'Referral Decision - Controlled Action', and it was implied that this 'Controlled Action' was only another routine bureaucratic hurdle."

"A close reading of the entire document, however, reveals that, at the very least, DEWHA has major concerns about many aspects of the proposed site."

"In particular, the Commonwealth Department's 'Reasons for Decision' included that '... a number of World Heritage and National Heritage values are likely to be significantly adversely affected by the proposal to establish a landfill adjacent to the Gara River'."

"The assessment also found that 'the proponent's [ie ADC's] contention that World Heritage and National Heritage values will not be affected by the proposal was not supported by the information provided in the referral'."

"While these observations obviously could be attempted to be rebutted in an on-going approval

process, I am afraid that the fact that this five-page assessment was effectively hidden from Councillors and the Waste Management Committee, as well as from the general public, including residents potentially directly affected by this scheme, does not give me any confidence in the process so far, and I call upon Council to halt any further progressing of this particular proposal until it has been subject to a thorough transparent public review," Cr Beyersdorf said.

"Council needs, as a matter of urgency, to look at other options, which are less sensitive environmentally. In addition to progressing Alternative Waste Technology (AWT) as a matter of urgency, which would reduce and stabilise the waste going into Landfill, Council needs to have a look at whether the present Landfill at Long Swamp Road can be extended for a longer life-span if a suitable AWT is introduced in the next 12 months or so, otherwise Council needs to look at landfill sites again in areas less environmentally sensitive than the Gara River/Oxley National Park and World Heritage area."

"As the ultimate aim is for a truly regional landfill, Council should be looking for a suitable site not only in the Armidale Dumaresq area, but also in the neighbouring shires of Uralla and Guyra, bearing in mind that any future landfill (or extension of the existing landfill) should be a Class 2 Landfill, that is, not containing putrescible waste producing leachates and methane gas."

"As Councils have been instructed by the Department of Local Government that they are in 'caretaker mode' from August 4 till the election, I realise that the outgoing Council is probably unable to make such a decision at this time, so I call on the new Council that will take office after the election of September to address this as a matter of high priority," Cr Beyersdorf concluded.

New tip to be eco-friendly as Council seeks high-tech alternatives

Armidale is to pursue a landfill site which will pose no danger to the environment following a decision of Council's Waste Management Committee last night.

Committee members gave their unanimous support to a proposal from the Mayor Cr Brian Chetwynd that the city move towards establishing a site which would receive only inert waste.



This would entail new technology and techniques to separate putrescibles (vegetable and liquid matter) from waste destined for the tip. The rotting vegetable matter would be composted.

The Mayor, Councillor Brian Chetwynd and Councillor Herman Beyersdorf

Cr Chetwynd said the ultimate aim was to recycle up to 80 per cent of rubbish arriving at the city's Waste Management Centre in Long Swamp Road.

The remaining inert waste with no potential to leach out into the land and water ways would be sent to the landfill site.

"We have decided that there is no point in pursuing out of date methods of waste management when technology is delivering us much better solutions all the time," Cr Chetwynd said. "Of course, there are costs to consider and the new technology is not cheap."

"However, there are economies of scale and a very competitive market with new discoveries and better results being achieved all the time."

"There are some amazing developments with new waste treatment technology at Eastern Creek in Sydney and also an innovative approach from other councils such as Coffs Harbour, Port Stephens and Singleton."

The committee has approved a fact finding tour of these centres be undertaken by the Mayor, Deputy Mayor Cr Peter Ducat, Chair of the Waste Management Committee Cr Herman Beyersdorf and Committee member Cr Bruce Whan.

"It is a much better option for us to look at current best practice and the approach taken by local government in other centres before we make any final decisions," Cr Beyersdorf said.

"We also need to look at the innovative technology that is now available and use it to tailor our landfill site as far as we can possibly afford to achieve minimum environmental damage."

"As a community we cannot continue the careless and improvident dumping of rubbish practiced in the past. It is a new era that is requiring and regulating new levels of responsibility and this decision by the Waste Management Committee is certainly a step in the right direction for Armidale."

Committee members also stressed the importance of a community education campaign to increase the level of recycling and reduce the amount of putrescible waste currently ending up at the Waste Management Centre.

Contact details

Cr Brian Chetwynd

Tel: 02 6770 3522

adcexec@armidale.nsw.gov.au

All news: [by date](#) | [by topic](#) | [latest news](#)

Figure 27

Your Ref:
BC:AG:A02/0128
Our Ref:

18 August 2004

Mr Tony Windsor MP
Member for New England
P.O. Box 963
TAMWORTH NSW 2340

Dear Mr Windsor

PROPOSED LANDFILL SITE FOR ARMIDALE DUMARESQ

Thank you for your letter of concern, on the subject of Council's investigation into a proposed new landfill site.

Armidale Dumaresq Council is not proposing a "Mega-Dump" in a world heritage listed area, nor is this area or the environment at any risk whatsoever. Furthermore, Council will not under any circumstances proceed with a landfill site that will in any way endanger or place at risk the environment or the surrounding valuable ecosystem.

Various claims have been made that may have lead to a misconception about Council's Waste Management Strategy. Council has not resolved "to build a regional waste and rubbish dump", and furthermore it is not intended to service the "region for at least the next 100 years". On the contrary, Council intends that any proposed new landfill site will, as soon as possible, be a Class 2 site, that will accept inert waste only. Council also has a strategy to reduce landfill by 60% - 80% over the next decade and in the longer term to work towards achieving a zero landfill position.

Figure 28 'Inert' Class 2 landfill





Keyword Search

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00 Environmental Responsibility Primary Consideration in Waste Management Strategy

A message from the Mayor, Cr Brian Chetwynd, about Council's decision to select a landfill site and its environmental concerns, together with a list of Frequently Asked Questions.

"The protection of our environment, together with its unique flora and fauna, to our children and their children, is one of the greatest challenges facing our community. Armidale has a proud record of environmental responsibility and achievements. Council subscribes to the 'triple bottom line' decision making process and every deliberation takes both environmental and social issues into account, as well as economic. I am personally committed to the protection and preservation of our environment, with its special ecosystems and World Heritage areas. I will never be a party to, or involved in a decision that will put our environment at risk in any way and the valuable heritage it presents for future generations."

Frequently Asked Questions (FAQ's) about Armidale's Waste Management and Landfill Strategies:

1) Is Armidale constructing a 'Mega-Dump'?

NO. Armidale Dumaresq Council has not resolved to "construct" a "mega-dump". For than 10 years the search to find a new Landfill site was carried out by the former City Council. The new amalgamated council of Armidale Dumaresq formed a Community Consultative Committee to investigate every aspect of this and make a recommendation. Council of that period prepared site, for further detailed analysis. Members of GVEPA (Glen Environment Protection Association) were on this Committee.

2) Is the environment or the World Heritage areas at risk?

NO. There is no way that Armidale Dumaresq Council will support or allow any landfill be constructed, should it be any risk to the World Heritage areas, or damage the environment. Any prospective landfill site will be subjected to the most rigorous investigation including detailed geological and hydrological studies, as well as a strict Environmental Impact Study. This process could take up to two years and will be discontinued at any adverse environmental aspect is discovered.

3) Will Armidale accept Chemical and / or Clinical waste to landfill?

NO. Under no circumstances will Armidale accept "clinical (hospital) waste" and then or allow them to be "dumped" in any landfill. There has never been, nor is there any proposal or resolution by Armidale Dumaresq Council, or its predecessors, to accept "clinical" waste from anywhere in the region. This waste is dealt with by each hospital and disposed elsewhere, under strict conditions. Chemicals also must be disposed of likewise. It is dump this kind of waste, which is detrimental to the environment and Armidale does not will not allow such illegal waste be disposed of in any landfill site.

http://armidale.local-council.nsw.gov.au/environment/14/1092375277_7036.html

25/08/2004

Figure 29 Chetwynd

Civic Administration Building
 135 Rusden Street
 Armidale NSW 2350
 Ph: 02 6770 3600
 1300 136 833
 Fax: 02 6772 9275
 Email: council@armidale.nsw.gov.au
 Website: www.armidale.nsw.gov.au
 ABN 63 781 014 253



All Correspondence should be addressed to
 General Manager
 Armidale Dumaresq Council
 PO Box 75A
 Armidale NSW 2350

Your Ref:

Our Ref: PD:NH A05/2410 O/2008/7173

5 September 2008

Dear Candidates

PROPOSED LANDFILL

It is likely that candidates for Armidale Dumaresq Council will be challenged at the forum to be held on Tuesday night, with respect to their position on the new landfill; seeking a commitment to it not going ahead on the proposed site.

I caution candidates from making this commitment in the absence of knowing all the facts. There has been considerable misinformation within the community, spread by a lobby group of predominately landholders in the area of the proposed landfill.

The landfill environmental assessment has cost Council over \$1 million and the process is nearly at the stage of submitting a DA for extensive public consultation. To jeopardise this investment without proper and considered justification, could result in substantial waste of ratepayer monies and would be denying the community an opportunity to have their say.

Since the assessment has not been finalised, candidates do not have these facts before them to make a considered decision and therefore it is suggested that an appropriate response at the forum would be to await the outcome of the environmental evaluation process before making the decision one way or another.

Yours sincerely

Peter Ducat
 Mayor

thrive
 in Armidale

Figure 30

Information Source		Desktop		Site	
Flooding					
Surface Water Control	Sites should have minimal connectivity to external stormwater catchments;				
	An ideal site will be located at or near the head of the local stormwater catchment to avoid the path of and potential collection of water however, it is usually possible to divert stormwater around the site;				
Erosion Protection	Catchment areas and potential for flooding can be checked on-site or by photographic evidence;				
	Flooding down-catchment of and/or site not necessarily critical to land's operation;				
Distance from Waterways	Sites should have low ground relief and minimal external catchment opportunities for groundwater;				
	Evidence of surface water direction and control can be checked on-site;				
Visual Amenity	Clearly sloping land with a good level of cover will support erosion and sediment control;				
	Excavative soil erosion will be evident on-site;				
Visual Amenity	Distance from CDPs (formerly DCPs) Guidelines state an acceptable distance from intermittent or permanent waterways is at least 40 metres;				
	Topographic and site checks can be made;				
Criterion 4 - Local Amenity and Environmental Considerations					
Visual Amenity					
Visual Amenity	located within 250 metres of a residential zone, or a dwelling not associated with the facility;				
	local sites will be well protected from adjoining properties by gradient and landform;				
Visual Amenity	Vegetative screening can also be useful, however not as effective as landform barriers;				
	Particular notice must be paid to dwellings, public land (such as reserves or parks), rural and arterial roads visible from the site or limited access adjoining land;				
Visual Amenity	Visual amenity can be mitigated by the effective use of bunding or vegetative landscaping;				
	or vegetative landscaping;				

Figure 31 Site Visits



Rural Land CAPABILITY MAPPING

BY K. A. EMERY

SCALE 1:100 000



As part of a basic inventory of the rural lands of New South Wales, land capability maps of the Eastern and Central Divisions are being prepared by the Soil Conservation Service. These maps will form an integral part of the national resources information required for land use planning within the State.

The land capability classification used in this series of 1:100 000 scale maps is the standard eight-class system used by the Soil Conservation Service of New South Wales for evaluating rural land. It is based on an assessment of the biophysical characteristics of the land, the extent to which these will limit a particular type of land use, and the current technology that is available for the management of land. The classification also incorporates an assessment of the soil erosion hazards, with emphasis on a safe level of land use, thus avoiding environmental problems caused by soil erosion and sedimentation. The capability classes categorise the land in terms of its general limitations. Specific numerical values for individual

limitations such as climate, slope gradient, landform types, adverse soil conditions, rock outcrop, drainage and inundation and productivity of crops etc. are not given. Instead, the classification outlines the types of land uses appropriate for a particular area of land and the types of land management practices needed to prevent soil erosion and maintain the productivity of the land.

Definitions of the eight classes, together with the interpretations and implications appearing on the map legend are shown in Table 1. A complete description of each land capability class and the criteria used appears in Appendix 1.

Map Scale

Map scale is 1:100 000, i.e. 1 cm length is equivalent to 1000 m or 1 km distance. 1 cm is equivalent in area to 100 ha.

Map Sheet

Each map sheet corresponds to the standard 1:100 000 topographic series of maps produced by the Division of National Mapping or the Royal Australian Survey Corps and available from the Division of National Mapping.

Table 1 Land Capability Map Legend

LAND CLASSIFICATION AND SOIL CONSERVATION PRACTICES			INTERPRETATIONS AND IMPLICATIONS
SUITABLE FOR REGULAR CULTIVATION	I	No special soil conservation works or practices.	Land suitable for a wide variety of uses. Where soils are fertile, this is land with the highest potential for agriculture, and may be cultivated for vegetable and fruit production, cereal and other grain crops, moneys crops, fodder and forage crops, and sugar cane in specific areas. Includes "prime agricultural land".
	II	Soil conservation practices such as strip cropping, conservation tillage and adequate crop rotation.	Usually gently sloping land suitable for a wide variety of agricultural uses. Has a high potential for production of crops on fertile soils similar to Class I, but increasing limitations to production due to site conditions. Includes "prime agricultural land".
	III	Structural soil conservation works such as graded banks, waterways and diversion banks, together with soil conservation practices such as conservation tillage and adequate crop rotation.	Sloping land suitable for cropping on a rotational basis. Generally used for the production of the same type of crops as listed for Class I, although productivity will vary depending upon soil fertility. Individual yields may be the same as for Classes I and II, but increasing restrictions due to the erosion hazard will reduce the total yield over time. Soil erosion problems are often severe. Generally fair to good agricultural land.
SUITABLE FOR GRAZING	Occasional Cultivation	IV	Land not suitable for cultivation on a regular basis owing to limitations of slope gradient, soil erosion, shallowness or rockiness, climate, or a combination of these factors. Comprises the better classes of grazing land of the State and can be cultivated for an occasional crop, particularly a fodder crop, or for pasture renewal. Not suited to the range of agricultural uses listed for Classes I to III. If used for "hobby farms", adequate provision should be made for water supply, effluent disposal and selection of safe building sites and access roads.
		V	Land not suitable for cultivation on a regular basis owing to considerable limitations of slope gradient, soil erosion, shallowness or rockiness, climate, or a combination of these factors. Soil erosion problems are often severe. Production is generally lower than for grazing lands in Class IV. Can be cultivated for an occasional crop, particularly a fodder crop or for pasture renewal. Not suited to the range of agricultural uses listed for Classes I to III. If used for "hobby farms", adequate provision should be made for water supply, effluent disposal and selection of safe building sites and access roads.
	No Cultivation	VI	Soil conservation practices including limitation of stock, broadcasting of seed and fertilizer, prevention of fire and destruction of vermin. May include some isolated structural works.
OTHER	VII	Land best protected by green timber.	Generally comprises areas of steep slopes, shallow soils and/or rock outcrop. Adequate ground protection must be maintained by limiting grazing and minimising damage by fire. Destruction of trees is not generally recommended, but partial clearing for grazing purposes under strict management controls can be practised on small areas of low erosion hazard. Where clearing of these lands has occurred in the past, unstable soil and terrain sites should be returned to timber cover.
		VIII	Cliffs, lakes or swamps and other lands unsuitable for agricultural and pastoral production.
	U	Urban areas	CLASS SUBSCRIPTS
	M	Mining and quarrying areas.	SPECIAL USES
		c	Terrain developed for a specific crop (capability class range IV to VII) as a result of the combination of particular soil, terrain, climatic and economic conditions. The class includes such crops as grapes, bananas, avocados and pineapples.
		d	Terrain developed for intensive agricultural production and associated with flood irrigation. The class includes land developed for cotton and rice production.

Appendix 1 EPBC Report 5km Buffer



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Protected Matters Search Tool

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EPBC Act Protected Matters Report

24 July 2010 20:35

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Information on the coverage of this report and qualifications on data supporting this report are contained in the [caveat](#) at the end of the report.

You may wish to print this report for reference before moving to other pages or websites.

The Australian Natural Resources Atlas at <http://www.environment.gov.au/atlas> may provide further environmental information relevant to your selected area. Information about the EPBC Act including significance guidelines, forms and application process details can be found at <http://www.environment.gov.au/epbc/assessmentsapprovals/index.html>



This map may contain data which are
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 (Geoscience Australia)
 © PSMA Australia Limited

Search Type: Area

Buffer: 5 km

Coordinates: -30.545836,151.78252, -30.546327,151.783341, -30.55342,151.782117, -30.553438,151.785974, -30.556638,151.785649, -30.556664,151.786949, -30.559624,151.787431, -30.560496,151.783298, -30.560254,151.780519, -30.559763,151.779743, -30.556967,151.77956, -30.557018,151.780573



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[Details](#)

- [Matters of NES](#)

- [Other matters protected by the EPBC Act](#)
- [Extra Information](#)
- [Caveat](#)
- [Acknowledgments](#)

Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance - see <http://www.environment.gov.au/epbc/assessmentsapprovals/guidelines/index.html>.

World Heritage Properties:	1
National Heritage Places:	1
Wetlands of International Significance: (Ramsar Sites)	None
Commonwealth Marine Areas:	None
Threatened Ecological Communities:	1
Threatened Species:	21
Migratory Species:	13

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or

Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place and the heritage values of a place on the Register of the National Estate. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage/index.html>.

Please note that the current dataset on Commonwealth land is not complete. Further information on Commonwealth land would need to be obtained from relevant sources including Commonwealth agencies, local agencies, and land tenure maps.

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species. Information on EPBC Act permit requirements and application forms can be found at <http://www.environment.gov.au/epbc/permits/index.html>.

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Places on the RNE:	None
Listed Marine Species:	11
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

State and Territory Reserves:	2
Other Commonwealth Reserves:	None
Regional Forest Agreements:	1

Details

Matters of National Environmental Significance

World Heritage Properties [[Dataset Information](#)]

[Gondwana Rainforests of Australia NSW](#)

National Heritage Places [[Dataset Information](#)]

[Gondwana Rainforests of Australia NSW](#)

Threatened Ecological Communities [Dataset Information]	Status	Type of Presence
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Community likely to occur within area

Threatened Species [[Dataset Information](#)]

Birds

Anthochaera phrygia Regent Honeyeater	Endangered	Species or species habitat likely to occur within area
Lathamus discolor Swift Parrot	Endangered	Species or species habitat may occur within area
Rostratula australis Australian Painted Snipe	Vulnerable	Species or species habitat may occur within area

Frogs

Litoria booroolongensis Booroolong Frog	Endangered	Species or species habitat may occur within area
Litoria castanea Yellow-spotted Tree Frog, Yellow-spotted Bell Frog	Endangered	Species or species habitat likely to occur within area

<u>Litoria piperata</u> Peppered Tree Frog	Vulnerable	Species or species habitat likely to occur within area
---	------------	--

Mammals

<u>Chalinolobus dwyeri</u> Large-eared Pied Bat, Large Pied Bat	Vulnerable	Species or species habitat may occur within area
--	------------	--

<u>Dasyurus maculatus maculatus (SE mainland population)</u> Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population)	Endangered	Species or species habitat may occur within area
---	------------	--

<u>Petrogale penicillata</u> Brush-tailed Rock-wallaby	Vulnerable	Species or species habitat may occur within area
---	------------	--

<u>Potorous tridactylus tridactylus</u> Long-nosed Potoroo (SE mainland)	Vulnerable	Species or species habitat may occur within area
---	------------	--

<u>Pseudomys oralis</u> Hastings River Mouse	Endangered	Species or species habitat likely to occur within area
---	------------	--

<u>Pteropus poliocephalus</u> Grey-headed Flying-fox	Vulnerable	Foraging, feeding or related behaviour may occur within area
---	------------	--

Reptiles

<u>Delma torquata</u> Collared Delma	Vulnerable	Species or species habitat likely to occur within area
---	------------	--

<u>Elseya belli</u> Bell's Turtle, Namoi River Turtle, Bell's Saw-shelled Turtle	Vulnerable	Species or species habitat may occur within area
---	------------	--

Plants

<u>Bertya Ingramii</u> a shrub	Endangered	Species or species habitat likely to occur within area
---	------------	--

<u>Bothriochloa biloba</u> Lobed Blue-grass	Vulnerable	Species or species habitat likely to occur within area
--	------------	--

<u>Callistemon pungens</u>	Vulnerable	Species or species habitat likely to
--	------------	--------------------------------------

occur within area

<u>Diuris pedunculata</u> Small Snake Orchid, Two-leaved Golden Moths, Golden Moths, Cowslip Orchid, Snake Orchid	Endangered	Species or species habitat likely to occur within area
--	------------	--

<u>Eucalyptus nicholii</u> Narrow-leaved Peppermint, Narrow-leaved Black Peppermint	Vulnerable	Species or species habitat likely to occur within area
--	------------	--

<u>Haloraqis exalata subsp. velutina</u>	Vulnerable	Species or species habitat likely to occur within area
--	------------	--

<u>Thesium australe</u> Austral Toadflax, Toadflax	Vulnerable	Species or species habitat likely to occur within area
---	------------	--

Migratory Species [Dataset Information]	Status	Type of Presence
---	--------	------------------

Migratory Terrestrial Species

Birds

<u>Haliaeetus leucogaster</u> White-bellied Sea-Eagle	Migratory	Species or species habitat likely to occur within area
--	-----------	--

<u>Hirundapus caudacutus</u> White-throated Needletail	Migratory	Species or species habitat may occur within area
---	-----------	--

<u>Merops ornatus</u> Rainbow Bee-eater	Migratory	Species or species habitat may occur within area
--	-----------	--

<u>Monarcha melanopsis</u> Black-faced Monarch	Migratory	Breeding may occur within area
---	-----------	--------------------------------

<u>Myiagra cyanoleuca</u> Satin Flycatcher	Migratory	Breeding likely to occur within area
---	-----------	--------------------------------------

<u>Xanthomyza phrygia</u> Regent Honeyeater	Migratory	Species or species habitat likely to occur within area
--	-----------	--

Migratory Wetland Species

Birds

<u><i>Ardea alba</i></u> Great Egret, White Egret	Migratory	Species or species habitat may occur within area
<u><i>Ardea ibis</i></u> Cattle Egret	Migratory	Species or species habitat may occur within area
<u><i>Gallinago hardwickii</i></u> Latham's Snipe, Japanese Snipe	Migratory	Species or species habitat may occur within area
<u><i>Rostratula benghalensis s. lat.</i></u> Painted Snipe	Migratory	Species or species habitat may occur within area
Migratory Marine Birds		
<u><i>Apus pacificus</i></u> Fork-tailed Swift	Migratory	Species or species habitat may occur within area
<u><i>Ardea alba</i></u> Great Egret, White Egret	Migratory	Species or species habitat may occur within area
<u><i>Ardea ibis</i></u> Cattle Egret	Migratory	Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species [[Dataset Information](#)]

Birds

<u><i>Apus pacificus</i></u> Fork-tailed Swift	Listed - overfly marine area	Species or species habitat may occur within area
<u><i>Ardea alba</i></u> Great Egret, White Egret	Listed - overfly marine area	Species or species habitat may occur within area
<u><i>Ardea ibis</i></u> Cattle Egret	Listed - overfly marine area	Species or species habitat may occur within area

<u><i>Gallinago hardwickii</i></u> Latham's Snipe, Japanese Snipe	Listed - overfly marine area	Species or species habitat may occur within area
<u><i>Haliaeetus leucogaster</i></u> White-bellied Sea-Eagle	Listed	Species or species habitat likely to occur within area
<u><i>Hirundapus caudacutus</i></u> White-throated Needletail	Listed - overfly marine area	Species or species habitat may occur within area
<u><i>Lathamus discolor</i></u> Swift Parrot	Listed - overfly marine area	Species or species habitat may occur within area
<u><i>Merops ornatus</i></u> Rainbow Bee-eater	Listed - overfly marine area	Species or species habitat may occur within area
<u><i>Monarcha melanopsis</i></u> Black-faced Monarch	Listed - overfly marine area	Breeding may occur within area
<u><i>Myiagra cyanoleuca</i></u> Satin Flycatcher	Listed - overfly marine area	Breeding likely to occur within area
<u><i>Rostratula benghalensis s. lat.</i></u> Painted Snipe	Listed - overfly marine area	Species or species habitat may occur within area

Extra Information

State and Territory Reserves [[Dataset Information](#)]

Oxley Wild Rivers National Park, NSW

Yina Nature Reserve, NSW

Regional Forest Agreements [[Dataset Information](#)]

Note that all RFA areas including those still under consideration have been included.

North East NSW RFA, New South Wales

Caveat

The information presented in this report has been provided by a range of data sources as [acknowledged](#) at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the *Environment Protection and Biodiversity Conservation Act 1999*. It holds mapped locations of World Heritage and Register of National Estate properties, Wetlands of International Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

For species where the distributions are well known, maps are digitised from sources such as recovery plans and detailed habitat studies. Where appropriate, core breeding, foraging and roosting areas are indicated under "type of presence". For species whose distributions are less well known, point locations are collated from government wildlife authorities, museums, and non-government organisations; bioclimatic distribution models are generated and these validated by experts. In some cases, the distribution maps are based solely on expert knowledge.

Only selected species covered by the [migratory](#) and [marine](#) provisions of the Act have been mapped.

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as [extinct or considered as vagrants](#)
- some species and ecological communities that have only recently been listed
- [some terrestrial species](#) that overfly the Commonwealth marine area
- migratory species that are very [widespread, vagrant, or only occur in small numbers](#).

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites;
- seals which have only been mapped for breeding sites near the Australian continent.

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Acknowledgments

This database has been compiled from a range of data sources. The Department acknowledges the following custodians who have contributed valuable data and advice:

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- [Environmental Protection Agency, Queensland](#)
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- [Australian Bird and Bat Banding Scheme](#)
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- Natural history museums of Australia
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- [Australian National Herbarium, Atherton and Canberra](#)
- [University of New England](#)
- Other groups and individuals

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Submission S082

Issue Number	Topic	Response
S082_1	E3	<p>Sites were identified through several preliminary investigations involving consultation with three real estate agents regarding availability for sale of appropriate sites, consultation with the Department of Mineral Resources regarding the availability of current and former extractive industry sites and consideration of sites within appropriate geological areas. The principles outlined in the document <i>Landfilling – EIS Guidelines</i> (DUAP, September 1996) were then used to develop appropriate criteria and weightings for the assessment of the potential landfill sites identified from the preliminary investigations.</p> <p>During the site selection process, over 50 sites were evaluated, including consideration of environmental impacts and their likely magnitude at each site.</p>
S082_2	E3	<p>Price negotiations for the purchase of the land for the proposed landfill have not yet commenced. Land acquisition will be undertaken only once Major Project approval has been granted by the Minister for Planning.</p>
S082_3	E3	<p>The consultant engaged to undertake the regional siting study did so in a professional manner and in accordance with quality assurance procedures. Where errors were identified through the review process or after advice from the client or the public, these errors were rectified.</p>
S082_4	E3	<p>The ADLCCC was set up following a public meeting (29 January 2003) to review the site selection process carried out to that point in time and to move forward with the site selection process using this community consultative committee. Membership of the ADLCCC comprised:</p> <ul style="list-style-type: none"> • 3 Council representatives; • 6 (2 per site) representatives from the 3 short listed landfill sites under investigation, sites 7, 8 and 9; • 1 independent chair; and • 5 members of the public. <p>Mr Crisp was nominated and appointed as a representative for site 7. Only one other site owner (site 9) nominated for membership but was not appointed to the committee due to inadequate awareness of waste management issues. Representatives for sites 8 and 9 were close neighbours of those sites.</p> <p>Several members of the Gara Valley Environment Preservation Association (GVEPA) were members of the ADLCCC including:</p> <ul style="list-style-type: none"> • Mr David Laird representing site 7; • Mr Les Davis and Mr John Holthouse representing site 9 • Mr Dan Calvert (Mhning Vale Road) which is the access road to site 9; and • Ms J Grainger. <p>All these persons as well as Mr Crisp were involved in the ADLCCC's activities including adopting of selection criteria, weightings and the final selection of site 7.</p> <p>The potential conflict of interest or pecuniary interest associated with the appointment of Mr Crisp to the ADLCCC was raised by Mr Les Davis, President of the GVEPA, in a letter to Council's General Manager (28 April 2003). To quote from the General Manager's reply (30 April 2003): <i>"The issue of Mr Crisp's appointment and the question of conflict or pecuniary interest also concerned myself. However, upon enquiry with both ICAC and the Department of Local Government for advice, it would appear that he has the right to sit on a Community Advisory Committee, as it is only formulating recommendations for</i></p>

		<i>Council's decision. It was advised that Mr Crisp should declare his interest at the start of the meetings and he will be encouraged to do this." Mr Crisp's interest as an owner of part of the land involved in site 7 was always declared and understood, similar to all others on the committee that had interest as owners or close neighbours of a site under consideration. Note that Mr Les Davis President of the GVEPA and a member of ADLCCC representing site 9, was a recent past owner of the proposed Site 9 land and owned land in its immediate vicinity.</i>
S082_5	E3	<p>The title of the committee in the adopted Terms of Reference for the Armidale Landfill Siting Investigations Committee dated 26 May 2003 (commonly referred to as the ADLCCC) clearly indicates the committee's main purpose. Council terminated the committee when the current site was selected. The adopted Terms of Reference do not contain the requirement "to re-weight the evaluation rankings of 3 selected sites".</p> <p>At the ADLCCC meeting held 5 June 2003, the Committee made a recommendation to Council "that Council engage a reputable firm with appropriate expertise to draw up a strategy and criteria for selecting a site." At the Council meeting held 23 June 2003, Council amended this recommendation and resolved "That Council draw up a brief for the ADLCCC with a view to engaging a firm to review the selection criteria and strategy and that the firm work with the Landfill Committee to refine the selection criteria and apply weightings then recommend suitable sites if appropriate."</p> <p>AECOM (then Maunsell) tendered for and were awarded the contract to carry out this review and the scope of works included reviewing the criteria, recommending changes considered appropriate, applying weightings to criteria and reassessing the site selection matrix for the 9 sites listed in the Preliminary Regional Landfill Siting Study prepared by The Department of Commerce. The option to consider other sites remained open and one further site plus a combined site (Sites 3 and 4 considered together) were added to the review undertaken by AECOM (Maunsell, 2004).</p>
S082_6	P2	<p>The proposed site for the landfill (Site 7) was evaluated in detail as part of the <i>Regional Landfill Siting Study Final Report</i> (Maunsell, 2004) site selection study.</p> <p>Inherent with most siting studies is that selection criteria will be met in varying degrees by different sites. The weighting developed was a means by which this varying degree of compliance with the criteria could be expressed to allow comparison between the potential sites. The criteria and weightings applied in the Maunsell (2004) study were agreed in consultation with the Armidale Dumaresq Landfill Community Consultation Committee (ADLCCC).</p> <p>Site 7 was found to be suitable for a potential landfill, based on the selection criteria and in comparison to the other sites evaluated, it was found to be the most suitable site of the sites considered based on the work performed at that time.</p> <p>The studies undertaken as part of the environmental assessment have confirmed that the site is suitable for the proposed landfill and that engineering design and appropriate management measures can be implemented so that the proposal will not have significant residual impacts on the environment.</p>
S082_7	P2	It is estimated that since the mid-1990s a total of over 150 sites have been considered for the proposed landfill. These sites were made known to Council through various means and a majority of the sites were rejected because from the outset they did not meet certain essential criteria for the site of a regional landfill or there were prohibitive constraints associated with the site. Of these, 11 sites were formerly evaluated with the results presented in the <i>Regional Landfill Siting Study Final Report</i> (Maunsell, 2004). The evaluation included consideration of environmental impacts and their likely magnitude at each site.
S082_8	E3	Pressure was being applied prior to the 2008 election for Councillors to commit to

		not building the landfill. The Mayor wrote to all candidates not to make a commitment in the absence of all the facts; i.e. the environmental assessment studies being completed. Council considered this good governance.
S082_9	E3	Council refutes any suggestion of "handshake deals". Council has and will continue to maintain all negotiations within standard practices on matters of this nature. Council is of the opinion that the subject property owner was aware of the landfill proposal at the time of lodging his building application and this requirement is not part of the BA process.
S082_10	C1	Council's records and Minutes of meetings clearly show that Councillor Beyersdorf was not being kept in the dark. Councillor Beyersdorf was not aware of the meaning of the term "controlled action" under the EPBC Act and, following an explanation of the terminology, understood the planning process.
S082_11	E3	<p>In 2004, Council resolved to establish a landfill on the selected site and sought tenders from suitably qualified consultants to provide project management and consultancy services to manage the design, planning, environmental assessment, land acquisition and construction project management for the new regional landfill. AECOM was engaged by Council through this competitive tender process. Engaging one consultant to undertake the work from site selection through the environmental approvals process to land acquisition and commissioning does not present a conflict of interest; it is the nature of large tenders such as this that one consultant is engaged to undertake the work from feasibility through to construction.</p> <p>AECOM was contracted by Council through the normal tendering requirements of the Local Government Act and its regulations, to provide Council with project management services on a fee for services basis to establish a landfill on the selected site. This includes obtaining planning approval, design, environmental assessment and project management of the construction contract.</p> <p>As part of their commission to evaluate suitable sites for the proposed landfill, AECOM drafted a weighting system based on professional judgement, technical knowledge and extensive landfill experience. Every region places different importance on weightings based upon local perceptions and issues. For this reason, rather than just applying what AECOM thought best for the local project, AECOM presented the draft weightings to the ADLCCC to get local stakeholder input to the weighting process. The weightings were adjusted based on comments from the ADLCCC and the final weightings were agreed with Council and ADLCCC. The final weightings allowed for a more robust evaluation of the sites.</p> <p>AECOM has no vested interest in the landfill being constructed and the specific location of the proposed landfill is of no commercial concern to AECOM.</p>
S082_12	E3	At the commencement of the project, AECOM was provided a general timeline by Council, which set out the projected timing that capacity at the existing Landfill at Long Swamp Road was to be reached as well as the estimated timing required for a new landfill to be operational by. The preliminary programme that was made available to the public showed the projected timeframe that was proposed to obtain project approval and commissioning of the landfill in a manner optimised to fit in with the timeline provided by Council. As time progressed, the project timeframe was adjusted based upon actual tasks performed and the changing needs of Council for commencement of a new landfill. A decision was made at a later date that land acquisition would not be undertaken until Major Project approval has been granted by the Minister for Planning. Valuations of the land have been carried out, however no purchase agreements or price negotiations have been undertaken with the landowners.
S082_13	GS1	It is acknowledged in the landfill siting study (Maunsell 2004) as well as the EA that the site has relatively steep gradients of up to 30%. The evaluation of the site (Site 7) noted that the limited external catchment allows good erosion control

		opportunities but requires care to 'control potentially dispersive soils'. As stated in Section 8.1.2 of the EA, appropriate controls would be implemented to control soil erosion and destabilisation. The mitigation measures to be implemented are presented in Section 8.1.3 of the EA.
S082_14	W1	<p>The proposed landfill site is located within the upper reaches of the catchment (approx 275 hectares in area) and is sited between the Gara River to the east and Commissioners Waters River to the west. As outlined in the regional siting study, the topography of the site would allow effective surface drainage and stormwater management. The siting study acknowledged anecdotal localised flooding evidence near the site access.</p> <p>Flooding during high rainfall events will occur along the existing ephemeral creek and will ultimately discharge into the Gara River, approximately 1km downstream of the site. Flood extent calculations have demonstrated that the extent of the flooding will encroach the north-eastern boundary of the site (adjacent to the line of the creek) as per existing (natural) conditions, however the landfill itself and the water and leachate containment system (leachate pond, sediment basin and dry basin) are located on the upper ridges of the site and therefore well outside the extent of the predicted 1 in 100 year floodplain.</p> <p>It is noted that site access road would need to cross the creek floodplain. Road creek crossings at these locations will incorporate suitable designed pipe culverts to allow flows up to the 1 in 100 year ARI to pass through and/or overtop the roadway in a safe manner. During flood events, waste transport to the site could be postponed until such time that the flooding recedes and safe access to the site is possible. Procedures during times of flooding will be outlined in the LEMP. All works within 40 metres of the intermittent creek would be undertaken with minimal disturbance, suitable erosion and sediment control measures and appropriate revegetation and rehabilitation of disturbed areas.</p> <p>Manning's equation was used to predict the flood level of the 1 in 100 year ARI peak flow in accordance with the procedures outlined in Australian Rainfall and Runoff. The results indicated that flood levels would be approximately 1 to 1.5m above the creek banks resulting in a flow width of approx 50m through the valley and would encroach on the north-eastern boundary of the site (adjacent to the line of the creek) as per existing (natural) conditions. Given that the Dry Basin, which is the closest stormwater storage basin to the north-eastern boundary and the creek, is approximately 8m above the existing creek banks and is located approximately 200m upslope of the creek, it was concluded that the Dry Basin (and hence the proposed landfill site) is well outside the extent of the predicted 1 in 100 year floodplain.</p>
S082_15	P4 W1	<p>The Water and Leachate Management Plan details all aspects of the design and operation of the proposed water management system for the site including the Leachate Pond, Sedimentation Basin and Dry Basin which would contain all dirty water runoff and leachate water generated from the landfill.</p> <p>The water management system has been designed to contain the 24 hour duration, 1 in 100 year ARI surface runoff volume from the entire disturbed catchment area of the site in accordance with Australian Rainfall and Runoff guidelines. This is considered to provide adequate protection against heavy rainfall and ensure containment of onsite dirty and leachate water. The proposed stormwater pond (Dry Basin) incorporates adequate freeboard storage to contain the 24 hour duration, 1 in 100 year ARI surface runoff volume (which equates to 153 mm rainfall or approximately 19 ML storage) from the entire disturbed catchment area of the site, without further containment or storage actions needing to be implemented.</p>
S082_16	W1	Given that the landfill has a design life of 50 years and the leachate pond incorporates a freeboard to contain the 1 in 100 year event, then by definition, the

		probability of the pond over-topping from any particular event during the landfill life is 0.5% (or 1 in 200). The number of spill events occurring during the landfill life is less than 1 (i.e., there is a 50% chance that the pond will not be overtopped, or 50% chance the pond will be overtopped only once). In the event of an emergency, the sedimentation pond and/or dry basin have been designed with sufficient capacity to contain an emergency release from the leachate pond, with no release of leachate to the environment.
S082_17	P2	<p>Refer to response S082_11.</p> <p>The site evaluation process was iterative, that is, as new sites were made known to Council and AECOM these were evaluated using the amended criteria and weightings, which were agreed with Council and the ADLCCC. As new sites were progressively evaluated some were shown to be more suitable compared to the other sites and based on the agreed criteria and weightings. The <i>Regional Landfill Siting Study Final Report</i> (Maunsell, 2004) provided the outcome of the evaluation of the 11 sites and concluded that Site 7 was the most suitable site of the sites considered and based on the work performed at that time.</p>
S082_18	GS3	<p>The agricultural land classification of Class 4 for the site and surrounding area is classified as such by the Department of Industry and Investment (DI).</p> <p>There are two techniques currently used to evaluate rural land in NSW: rural land capability and agricultural land classification. The Rural Land Capability mapping is an 8 class system which considers the erosion hazards in the use of the land. The Agricultural Land Classification, which was referred to in the EA when describing land suitability, is a five class system which classifies land in terms of its suitability for general agricultural use. Agricultural land is classified by evaluating biophysical, social and economic factors that may constrain the use of land for agriculture. Higher quality lands (Classes 1 and 2) have fewer constraints and a greater versatility for agriculture than the poorer quality lands (Classes 3, 4 and 5).</p> <p>Although both systems are used to evaluate agricultural land, a direct comparison is difficult. Each system has a different aim and considers the various factors that influence land use in a different way. As stated in <i>AgFact AC.25: Agricultural Land Classification</i> (NSW Agriculture, 2002), specific comparison between the systems should not be attempted, because each system was established for a different purpose.</p>
S082_19	W1	Although appearing on the topographic map, the drainage line referred to in the submission does not have a 'defined channel where water flows intermittently' (<i>Controlled activities: Guidelines for riparian corridors</i> , NSW Office of Water August 2010).
S082_20	P4	<p>The existence of a geological fault at the site has been addressed and is summarised in Section 8.2.1 of the EA. Detailed field observations, structural measurements and examination of all available, relevant data do not support the existence of any significant geological fault within the vicinity of the Project Site.</p> <p>In accordance with recommendations by DECCW and as agreed with DoP, observations would be made and recorded during and/or on completion of the excavation works in the vicinity of the potential geological fault. Although considered unlikely, should evidence of a fault be encountered during the earthworks, further geotechnical and hydrogeological investigation would be undertaken and the appropriate mitigation measures (including design modifications) would be implemented to reduce the risk of potential impacts on landfill stability.</p>
S082_21	W1 GS1	Erosion and sediment control measures that will be implemented during construction and operation of the proposed landfill are detailed in Section 8.1.3 of the EA. An Erosion and Sediment Control Plan (ESCP) would also be prepared

		<p>and implemented. All works with the potential for erosion or stability impacts would be undertaken only with suitable erosion and sediment control measures in place. Revegetation and rehabilitation of disturbed areas would be undertaken where appropriate/required.</p> <p>Management measures proposed for the landfill are designed to prevent dirty water runoff during construction and operation of the proposed landfill facility. Mitigation measures include a water management system and leachate barrier and collection system. These measures have been designed in accordance with the DECCW Landfill Guidelines Benchmark Techniques. An assessment of potential construction and operational impacts on the surface water environment is provided in Section 8.3 of the EA. With the implementation of environmental controls and mitigation measures to manage dirty stormwater runoff, leachate containment and emergency storage, the magnitude of impacts to surface water, including the Gara River, would be negligible. The Surface and Groundwater Monitoring and Management Plan appended to the LEMP (Appendix B of the EA) outlines the monitoring that will be undertaken to monitor water quality during operation of the proposed landfill.</p>
S082_22	P4 GS1	<p>Potential impacts associated with soils are considered in Section 8.1.2 of the EA. Mitigation measures that will be implemented during operation and construction of the proposed landfill are presented in Section 8.1.3 of the EA and will be documented in the ESCP to be implemented on site.</p> <p>It is anticipated that clay volume requirements for at least the first two cells would be met by on-site sources from site excavation works. Clay required for cells 3 to 5 would be sourced on-site and supplemented with suitable off-site supplies if required.</p>
S082_23	C1	<p>Section 7 of the EA describes the consultation that has been undertaken during the environmental assessment process to date. Consultation with the community was strategically planned and targeted to include landowners nearest the proposal, as well as residents along the transport route, specialist interest groups and the wider community. A range of media have been used during community consultation, including newsletters, website updates, media releases, public displays and direct contact with neighbouring landowners. Key issues raised by the public have been considered during the preparation of the EA and specialist studies to support the EA.</p>
S082_24	E3	<p>As described in Section 5.5 of the EA, Council will seek an operating licence to landfill putrescible material to accommodate the essential intermittent need for disposal of material for which stabilisation or composting is not a practical option. Emanating from this commitment is the need to augment Council's current processing facilities to deal with putrescible waste by way of composting of organic waste or stabilisation of residual waste containing putrescible material before landfilling - commonly referred to as AWT.</p> <p>Council is currently trialling and evaluating AWT at the Long Swamp Road Waste Transfer Facility before full scale adoption and implementation. Once the appropriate additional off-site sorting and/or treatment technologies are able to be employed, Council is proposing to operate the proposed landfill as a non-putrescible facility until final closure. It is envisaged that the AWT would further contribute to Council's waste diversion from landfill and therefore minimise any future waste levy charges.</p> <p>Council staff and consultants had previously identified in relation to Site 7 that the facility was intended to operate essentially as a Solid Waste Class 2 or Non-putrescible landfill but would be licensing the facility as a Solid Waste Class 1 or Putrescible landfill. This is in order to cover the odd occasion when disposal of difficult putrescible material would be required where such material is not suited to the composting or stabilising process that is adopted for the proposed AWT</p>

		<p>facilities at the Long Swamp Road facility. It is noted that references to the disposal of inert waste may have been inadvertently misused.</p>
S082_25	H2	<p>An Aboriginal heritage assessment has been undertaken (refer to Appendix R of the EA) and the findings of the assessment are summarised in Section 8.11 of the EA.</p> <p>Of the five AHIMS registered sites within 10km of the Project Site, none are within the immediate vicinity. During the 2006 archaeology survey of the site, two Aboriginal sites were discovered, GL ISO1 and GL ISO2 (located within the Project Site). These two sites are not located within the landfill footprint and are unlikely to be impacted by construction or operation works. However, mitigation measures would be implemented to ensure the preservation of these items, including fencing of those sites.</p> <p>An Indigenous Heritage Management Plan (IHMP) would be prepared to set out appropriate mitigation measures to protect the known sites and management actions that would be implemented during construction and operation in the unlikely event that further artefacts are encountered.</p>
S082_26	P1	<p>The need and strategic justification for the proposal is presented in Section 2 of the EA. In 2004, DECCW approved a licence variation to extend the area of the landfill at the Waste Management Centre on Long Swamp Road as the landfill was approaching capacity. The extension was an interim measure to provide additional waste capacity until a new landfill can be constructed.</p>
S082_27	W2	<p>The Flora and Fauna Assessment (Appendix E of the EA) concluded that there were no ecosystems which have their species composition and natural ecological processes wholly or partially determined by groundwater within the study area.</p>
S082_28	W2	<p>The environmental assessment concluded that there are unlikely to be significant impacts on registered stock and domestic bores in the vicinity of the project site, including GW305317, based on the level of geological investigations undertaken at the concept design stage. The predicted residual impacts on the bore will be confirmed during detailed design and if further mitigation measures are required, these will be included in the LEMP, Water Quality Monitoring Programme and Management Plan, which will be subject to DECCW review and approval.</p>
S082_29	W2	<p>The landfill and pond design are based on recommended DECCW Landfill Guidelines Benchmark Techniques. The combination of composite landfill liner with a leachate collection system ensures maximum prevention of leachate leakage from the landfill into the surrounding environment. A review of available literature on the efficiency of different landfill linings was undertaken (refer Appendix I for detailed study). Although the Leachate Collection and Conveyance Systems have a finite life ranging from under 70 years to over 200 years, the system will have a higher operational life provided it is installed in accordance with the construction specifications including the CQA/CQC programmes and that the liner is protected from accidental tearing/piercing during construction. The LEMP that has been prepared for the site will dictate efficient operation and management of the landfill to ensure landfill structures are used appropriately and the risk of leachate leakage from the landfill site is minimised.</p>
S082_30	P4	<p>In order to undertake the assessment of potential environmental risk of a leachate leak, a conceptual site model (CSM) was developed. The CSM was informed by data collected in the field and by published literature in the form of geological maps and relevant other information.</p> <p>The leachate leakage risk assessment process for the proposed landfill (Refer to Appendix I of the EA) was conservative and used the site data that were available. The process showed the local geological environment to be reasonably complex having a series of different separate geological units, variable depths to groundwater and compromised groundwater quality. This indicated that the</p>

		<p>hydrogeological regime in the area appeared to be reasonably static with little demonstrable flow regime or hydraulic gradient (i.e. groundwater moving down hill toward an eventual discharge point). In the risk assessment the discharge point was considered to be the Gara River.</p> <p>It is likely that in the greywacke, slate, claystone, conglomerate geological units present at the site there would be limited porosity and groundwater would be mostly contained in fractures, faults, bedding planes and so on. It appears apparent from the variable depths to groundwater reported by RCA that these units are not well connected laterally and have low hydraulic conductivities (a measure of a geological unit's ability to transmit water).</p> <p>In this type of hydrogeological regime high residence times for groundwater would not be unusual and flow paths would be tortuous, slow and unlikely to be direct to the Gara River. The risk assessment undertaken assumed that groundwater would flow in the direction of the Gara River and eventually discharge to it, both of which are potentially conservative assumptions.</p> <p>In a fate and transport model, such as that developed in the Hydrogeological Leachate Assessment, an estimated flow time of 700-800 years is a very long time and in effect implies that the pathway for compounds migrating in groundwater is not likely to be realised.</p>
S082_31	P4	The environmental assessment concluded that there are unlikely to be significant impacts on registered stock and domestic bores in the vicinity of the project site, including GW305317, based on the level of geological investigations undertaken at the concept design stage. The predicted residual impacts on the bore will be confirmed during detailed design and if further mitigation measures are required, these will be included in the LEMP, Water Quality Monitoring Programme and Management Plan, which will be subject to DECCW review and approval.
S082_32	W2	Water chemistry of the groundwater at the site was assessed as part of the hydrogeological investigation undertaken by RCA. The chemical analysis was used to characterise the groundwater geochemistry across the site, which in turn provided an understanding of the nature of the baseline groundwater environment. The groundwater monitoring to be undertaken, as set out in the Surface and Groundwater Monitoring and Management Plan appended to the LEMP (Appendix B of the EA) would use the baseline information to determine any changes in groundwater chemistry during construction and operation of the proposed landfill.
S082_33	W4	In the absence of containment and mitigation and management measures, the impact on surrounding groundwater would be critical. However, the likelihood of this occurring is low and stringent mitigation measures would be implemented to reduce the likelihood of significant impacts. The residual risk is therefore reduced.
S082_34	FF1	Baseline flora and fauna information is determined by interrogating the DECCW NPWS Atlas of NSW Flora and Wildlife databases, respectively. A 20km radius search was used to capture records of threatened species within a reasonable distance of the site as well as records of species within the site itself. The flora and fauna surveys undertaken on the site for the proposed landfill provided more detailed understanding of the potential habitat and species present on the Project Site.
S082_35	FF2	An assessment of biodiversity including potential impacts of the proposed landfill facility on threatened species such as the Box-gum woodland and on habitat connectivity was presented in Appendix E of the EA and summarised in Section 8.8 of the EA. The impacts will be minimised through implementation of the mitigation measures outlined in Section 8.8.16 of the EA and Section 4 of the Flora and Fauna Assessment. Mitigation measures proposed include minimising the extent of clearing; staged approach to clearing; progressive rehabilitation and revegetation of spent landfill areas; and provision of approximately 61 hectares of

		<p>compensatory habitat (biodiversity offset).</p> <p>Less than 1 ha of the Box Gum Woodland and 3.3 ha of the grassland (degraded Box Gum Woodland) will be cleared from the TSR for the access track. This is unlikely to be significant to the long term survival of the EEC. Approximately 0.6 hectares of Box-gum woodland in the TSR would be cleared in the construction of the access road. This loss of habitat would be offset within the biodiversity offset area of approximately 61 hectares that would be provided as part of the proposal. It would surround the landfill footprint and connect to the TSR.</p> <p>Impacts associated with vegetation clearance will also be managed through implementation of a suite of management plans including a VMP, Biodiversity Offset Management Plan (Appendix H of the EA) and Vegetation Clearing Protocol. Further details of the contents of these plans are provided in Section 4 of the Flora and Fauna Assessment (Appendix E of the EA). These plans will be developed during detailed design of the landfill and prior to construction. The plans would be prepared in consultation with relevant government agencies (e.g. DECCW and DSEWPC) and in accordance with best practice guidelines and Recovery Plans for threatened species.</p>
S082_36	FF2	No threatened frogs or reptiles were detected in fauna surveys of the site. Revegetation would be undertaken along fringes of proposed water storages to provide habitat for reptiles and amphibians.
S082_37	AQ1	The Air Quality Assessment is presented in Appendix O of the EA and summarised in Section 8.5 of the EA. Modelled predictions of odour levels were compared against relevant air quality criteria set by DECCW. Odour levels at the 99 th percentile were shown to be well within the 7 ou odour goal at the nearest receiver and at the site boundary – refer to Figure 23 of Appendix O. That is, odour goals were predicted to be met 99% of the time, in accordance with DECCWs odour goals.
S082_38	AQ1	Predicted odour levels at the rest area on Waterfall Way would be less than 1 ou at the 99 th percentile, with a maximum odour level of less than 5 ou.
S082_39	AQ1	Odour levels at the 99 th percentile were shown to be well within the 7 ou odour goal at the nearest receiver and at the site boundary – refer to Figure 23 of Appendix O. That is, odour goals were predicted to be met 99% of the time, in accordance with DECCWs odour goals.
S082_40	AQ2	Predictive modelling of dust generation was presented in Appendix O of the EA. The assessment concluded that dust impacts from the landfill would be low and would be unlikely to cause exceedances of the DECCW criteria for particulate matter concentrations or the criteria for dust fallout (deposited dust) at sensitive receivers. As shown in Figures 6 to 17 of Appendix O of the EA, predictions for total suspended particulate matter, particulate matter (PM ₁₀) and deposited dust are within DECCW criteria at all receivers.
S082_41	N3	<p>Noise impacts during construction are expected to arise from the equipment used in ancillary site preparation works, including the partial clearing of the site, the construction of the site access and maintenance roads, drainage works, landscaping works and some excavation of the landfill area. A worst-case scenario was used to model construction noise where the equipment is predominantly working at the extremities of the construction area nearest to Receiver 1 (Strathaven). Similarly, a worst-case scenario was used to model operational noise from the Project Site and traffic noise generated from haulage trucks and other vehicles.</p> <p>With the mitigation measures implemented, including noise attenuation on dozers, excavators, scrapers and compactors and use of sound output adjusting reversing alarms, noise levels at Receiver 1 (Strathaven) and in the vicinity of the olive grove would comply with the environmental criteria for the site, with minimal</p>

		<p>impacts to noise level amenity. It is important to note that the requirement for engineered noise controls and mitigation measures does not indicate that the site is unsuitable for the proposed landfill.</p> <p>Assessment to the INP is mandatory for a development such as this regardless of location. The rural criteria have been used and the resulting criteria for operations are as low as it is possible to be for an industrial development.</p>																
S082_42	N2	<p>Noise emissions are expected to comply with the environmental criteria for the site under the neutral meteorological conditions that have been shown to be typical of the site given mitigation measures are implemented. Minor exceedances of the criterion of up to 3dB(A) may occur at Receiver 2 (Sherraloy) at certain times near the end of the operating life of Cell 1, however the modelling assumed a worst case scenario where all equipment would be working in unison at the extremities of construction area. In general however, the equipment and therefore the noise generated, would generally be distributed across the site, with minimal impacts to noise level amenity.</p> <p>The INP requires assessment of adverse wind conditions only when they are shown to occur for more than 30% of the time. The highest occurrence of wind speeds 0-3 m/s during the daytime is 16%.</p> <p>Noise mitigation measures, including noise attenuation on dozers, excavators, scrapers and compactors and use of sound output adjusting reversing alarms, would be implemented to mitigate the impacts on noise amenity. Best practice noise management would be applied to minimise noise emissions from the site during construction. Construction noise control measures that would be implemented as appropriate are presented in Section 5.3.2 of the EA.</p>																
S082_43	N1	<p>Section 5.3.2 of the Noise Impact Assessment (Appendix O of the EA) outlines best practice construction noise control measures that will be employed at the site. A Construction Noise Management Plan (CNMP) will be prepared and will outline reasonable and feasible noise mitigation measures, include a noise monitoring program, a complaint management strategy and contingency plans if noise exceedances or justified complaints were to occur. The CNMP will be prepared by the construction contractor, in consultation with an acoustic engineer, prior to construction. This is standard for every construction project in NSW.</p>																
S082_44	N1	<p>Truck movements along the access road during construction have been assessed as part of the Noise Impact Assessment (Appendix O of the EA). Section 5.3 of the assessment outlines the equipment that was included in the construction scenario assessment, including 20 truck movements per day along the site access road, with a peak of 5 movements per hour.</p> <p>The access road will follow the contour of the land and will not require a cutting.</p>																
S082_45	N1	<p>The proponent acknowledges inconsistencies in the EA and appendices regarding operating hours for the proposed landfill. The construction and operation hours are clarified below:</p> <table><tr><th colspan="2">Construction</th></tr><tr><td>Monday to Friday</td><td>7:00am to 5:00pm</td></tr><tr><td>Saturdays</td><td>8:00am to 1:00pm</td></tr><tr><td>Sundays and Public Holidays</td><td>No work unless emergency</td></tr><tr><th colspan="2">Operation</th></tr><tr><td>Monday to Friday</td><td>7:00am to 5:30pm</td></tr><tr><td>Saturdays</td><td>8:00am to 6:00pm</td></tr><tr><td>Sundays and Public Holidays</td><td>No work unless emergency</td></tr></table>	Construction		Monday to Friday	7:00am to 5:00pm	Saturdays	8:00am to 1:00pm	Sundays and Public Holidays	No work unless emergency	Operation		Monday to Friday	7:00am to 5:30pm	Saturdays	8:00am to 6:00pm	Sundays and Public Holidays	No work unless emergency
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		<p>Work outside normal construction hours would require permission from DECCW and only with appropriate noise mitigation measures in place.</p> <p>The landfill would only operate on Sundays and public holidays in the case of emergencies.</p>
S082_46	O2	<p>Pest and vermin monitoring would be undertaken on a regular basis at the Project Site. Daily cover of the landfill would also discourage vermin and reduce odour emissions. During the day dispersion methods would be undertaken to ensure the open face is free from pests, vermin and predatory birds. The success of mitigation would be reviewed to ensure impacts to threatened species do not occur as a result of predation. Should the proposed techniques be unsuccessful in deterring pests and vermin, further investigations for additional measures would be undertaken such as engaging a specialist firm of exterminators if required.</p> <p>A Pest Management Plan will be developed to minimise the potential impacts of pest animals such as rabbits, rodents, cats, crows and flies. This plan will include measures such as provision of fencing, poisoning of pest animals, redistribution of log piles, covering of waste and ongoing monitoring. A Disease Monitoring Protocol would be prepared which will identify potential pests and diseases and appropriate management measures for controlling these. Contingency plans to deal with outbreaks that may be detected on site during operation will be prepared.</p> <p>The above mitigation measures are considered sufficient to deter predatory species from the site.</p>
S082_47	LU1	<p>The location of the Strathaven airstrip to the south of Gara Road is noted. The proposed landfill will be managed in accordance with the LEMP and EPL for the site. Good management practices of minimising the tipping face and daily covering of waste will be employed to minimise access to food supply for birds. Other management measures including dispersal tools (pyrotechnics, gas cannon, distress caller) would be investigated if required, however it is unlikely that aerial activities from the airstrip would be affected by the proposed landfill.</p>
S082_48	V3 O2	<p>The proposed landfill facility will accept General solid waste (putrescible) which includes household waste, disposable nappies, food waste and litter bin waste collected by local councils. No toxic or chemical wastes would be disposed of at the proposed landfill facility. Waste would be screened and sorted at the existing Waste Management Centre prior to transportation to the proposed landfill. The generator, transporter or Armidale Waste Management Centre staff would be requested to assess and classify the material prior to its arrival at the proposed new landfill. Loads arriving at the proposed landfill would be checked for non-conformance.</p> <p>Litter management was considered in Section 5.5.6 of the EA. The LEMP (Appendix B of the EA) sets out the control measures to prevent impacts from litter. A Pollution and Litter Management Plan for the operation of the landfill would be prepared and implemented for the site to ensure litter is contained and not transferred to adjacent areas.</p> <p>As part of the approvals process, the relevant agencies will prescribe approval conditions the proposed landfill facility will be required to meet. These conditions would be incorporated into the detailed management plans and protocols and presented to the relevant agencies such as DECCW prior to construction.</p> <p>The SoC would formulate part of the approval conditions for the project and as such Council is required to comply with those conditions. As such, the Disease Monitoring Protocol would be prepared prior to construction and implemented for the duration of the life of the landfill and five years post closure.</p>
S082_49	O2	<p>A Disease Monitoring Protocol would be prepared which will identify potential</p>

		<p>pests, including fruit fly, and diseases and appropriate management measures for controlling these. Contingency plans to deal with outbreaks that may be detected on site during operation will be prepared.</p> <p>Waste would be sorted at the existing Waste Management Centre prior to transportation to the proposed landfill. The proposed landfill facility will accept General solid waste (putrescible) in accordance with the EPL, which includes household waste, manure, disposable nappies, food waste and litter bin waste collected by local councils. No toxic or chemical wastes would be disposed of at the proposed landfill facility. Unless in emergencies, animal carcasses will not be accepted at the proposed landfill, therefore the potential for infectious disease spread from the landfill is unlikely.</p>
S082_50	V3	<p>Litter management was considered in Section 5.5.6 of the EA. The LEMP (Appendix B of the EA) sets out the control measures to prevent impacts from litter. A Pollution and Litter Management Plan for the operation of the landfill would be prepared and implemented for the site to ensure litter is contained. Contingency plans for the management of windblown litter to neighbouring properties will form part of the LEMP.</p> <p>The purpose of the PEA document was to scope the potential environmental issues as well as identify likely mitigation measures that would be required to minimise those potential impacts identified. The EA is designed to demonstrate further assessment and detail since the original scope, including the provision and development of more detailed mitigation measures. The EA included the provision of more detailed management plans including the development of the LEMP and Pollution and Litter Management Plan.</p> <p>The height of the litter fence will be designed to provide sufficient interception of windblown litter.</p>
S082_51	P6	<p>Council acknowledges that windblown litter was a problem identified in the 2000 audit undertaken by DECCW. Council took immediate action to respond with the erection of improved litter fences and clean-up patrols of the neighbourhood. Consequently, the existing landfill premises has a much improved record regarding this matter and compliance is strictly enforced by Council's waste management superintendent.</p> <p>The proposed landfill facility would be subject to an EPL issued by the DECCW. Council will be required to comply with the conditions for litter management in the EPL in addition to conditions in any approvals. The 50m vegetated buffer would form part of the biodiversity offset area (Stringy bark woodland and grassland) that will surround the site, providing additional visual screening and a physical barrier to windblown litter.</p>
S082_52	HR1	<p>A Fire Management Plan would be prepared and implemented for the landfill site (including the surrounding bushland) which would provide for monitoring of fuel loads, fuel reduction techniques and other management controls. The potential for explosions will be minimised through the implementation of gas accumulation monitoring, remediation of uncontrolled landfill gas emissions, as well as controlled burning at the site periphery to reduce fuel availability around the perimeter of the landfill. Suitable fire fighting equipment would be kept on site and an Emergency Response Plan would be prepared to provide management measures for identified hazards during construction and operation.</p>
S082_53	W2	Refer to S082_28
S082_54	V1	<p>Visual montages of the various viewpoints were considered as part of the EA. All existing trees and known tree heights were included in the visual montages in addition to the final profile of the proposed landfill mass (refer Figures 30 to 35 of the EA). It should be noted that these montages did not take into account future screening from the proposed biodiversity offset area.</p>

		<p>It is noted that views towards the Project Site from Receivers 4 and 5 (and indicatively of the Waterfall Way) are considered to be reasonably significant, however these views would be partially masked by existing vegetation. Further, it is expected that views of the site (including those of the access road, ponds and other ancillary components) would be further obscured by offset vegetation once matured.</p> <p>Further, several mitigation measures would be implemented to accommodate visual absorption capacity such as daily covering of waste, provision of a biodiversity offset area, capture and removal of windblown litter and building design (including suitable colour schemes). Visual impacts of the site are therefore considered to be temporary and manageable.</p>
S082_55	V3	<p>Illegal dumping of waste and littering is an offence. Legal responsibility would rest with the offender. The <i>Protection of the Environment Operations Act 1997</i> provides a tiered range of fines for illegal dumping. These range from on the spot fines for individuals to substantial fines and jail sentences for causing harm to the environment through disposal of waste. Illegal dumping can be reported to Council or DECCW.</p> <p>In practice, litter clean ups are periodically conducted along Council maintained roads by Council staff and volunteers. Council or the operator of the site would be responsible for coordinating litter collection activities as necessary.</p>
S082_56	FF4	<p>A referral for the proposal was lodged with DSEWPC (formerly DEWHA). It was determined that the proposal constitutes a controlled action under the EPBC Act. The nature of the assessment process is such that proposals are assessed assuming no mitigation is in place. However, mitigation measures proposed in the EA, including environmental controls to manage litter, weeds and pests, dirty stormwater runoff, leachate containment and emergency storage, would be implemented and would reduce the likelihood of impacts to surface and groundwater to negligible levels.</p> <p>The purpose of the PEA document was to scope the potential environmental issues as well as identify likely mitigation measures that would be required to minimise those potential impacts identified. The EA provided further assessment and detail since the original scope, including the provision and development of more detailed mitigation measures. The EA included the provision of more detailed management plans including the development of the VMP, which will take into account neighbouring properties as well as the OWRNP.</p> <p>The potential impacts from weeds are addressed in Section 8.8 and 5.5.6 of the EA, respectively. The preparation and implementation of a VMP and management measures therein would minimise the spread of weeds within the proposed landfill site and to adjacent areas of native vegetation and neighbouring properties. Mitigation measures include actions to control existing weed infestations on the site prior to construction, use of a wheel wash facility for all vehicles entering or leaving the site to prevent transport of weeds as well as targeted monitoring and control of invasive species that are harmful to threatened species and EEC or other potential habitat for fauna species.</p> <p>Measures would also be identified in the VMP which would outline ongoing monitoring and follow-up controls of weeds that establish on disturbed areas, with particular attention to the eradication of noxious weeds.</p> <p>As part of the approvals process, the Statutory Authorities will prescribe approval conditions the proposed landfill facility will be required to meet. These conditions often refer to the Proponents SoC which would be incorporated into the detailed design plans and are presented to the relevant agencies such as DECCW prior to construction.</p>
S082_57		An extensive evaluation of over 50 potential sites was undertaken as part of the

		<p>site selection study, which was conducted between the mid-1990s and 2004, including sites in surrounding LGAs. Despite the large availability of land within the region, not all areas satisfy the selection criteria for the landfill, which included:</p> <ul style="list-style-type: none"> • Strategic planning guidelines; • Statutory planning issues; • Ground and surface water environment; • Local amenity and environmental considerations; • Level of Service; • Adequacy of existing services; • Set-up costs; • Operational costs; • Site features required; and • Social issues. <p>The management measures proposed for the site are considered adequate to minimise impacts on groundwater and surface water, visual amenity, noise, dust, litter, odour and insects, as demonstrated in the relevant sections of the EA.</p> <p>The Project Site is located some 10 km from the town of Armidale, and maintains some screening from the north at the Waterfall Way where an area of dense vegetation abuts the road. The closest residential property is located approximately 400 m south of the Project Site.</p> <p>A report by Reichert <i>et al.</i> (1982) found whilst negative impacts on market value are historically experienced in major metropolitan areas, dependent on distance from landfill, negative impacts on property value in predominantly rural areas are generally minimal to nonexistent. Significant effects on property/land values of rural properties generally located within 2 km of the Project Site (refer to Figure 5 of the EA), and the main township of Armidale are not expected. It is unlikely that property/land values would be significantly affected as the proposed landfill facility will be:</p> <ul style="list-style-type: none"> • Well managed in accordance with the LEMP; • Screened with landscaping provided around the entrance and boundaries to the Waterfall Way; and • Fully secured and locked when not in operation. <p>It is also noted that research points to the large number of variables used to determine the impact of a landfill on property prices including:</p> <ul style="list-style-type: none"> • Design features of the landfill, including its physical profile, volume and nature of waste handled and other site characteristics; • A well designed landfill, built and operated to modern standards (can be a good neighbour and have no statistically negative impact on surrounding property values (Bleich, Findley and Phillips, An Evaluation of the impact of a Well-Designed Landfill on Surrounding Property Values, The Appraisal Journal (April 1991)); • Nature of housing for sale – size of lot, number of rooms, internal layout, condition of building and so on; • Location, siting and position; and • Local, regional, national and global economic variables. <p>The 'monetary compensation' referred to in the EA relates to the proposed purchase of the land on which the landfill will be sited.</p>
S082_58	SE5	
S082_59	LU1	<p>The existing landfill on Long Swamp Road has been in operation since the 1960s and has not impeded development in the surrounding area. This demonstrates, in addition to several other industrial uses in Armidale, that mixed land uses can</p>

		<p>coexist without prejudicing other businesses.</p> <p>The proposed landfill facility would not sterilise the surrounding area for other land uses nor would it restrict the development of other agricultural industries or businesses in the vicinity. Further, the proposed management measures are designed to ensure all contaminants are contained on site.</p> <p>Potential impacts on the adjacent land use (including the olive grove) will be minimised by the mitigation measures proposed in the EA. These include measures contained in the Pest Management Plan to minimise the potential impacts of pest animals, such as provision of fencing, poisoning of pest animals, redistribution of log piles, covering of waste and ongoing monitoring. A Disease Monitoring Protocol would be prepared and appropriate management measures for controlling disease as well as contingency plans to deal with outbreaks, will be implemented during operation. The Litter Management Plan will set out the measures to mitigate the potential for litter escaping from the site and the proposed offset area will provide a vegetated buffer between the landfill and the adjoining property.</p> <p>An analysis of the socio-economic impact, including tourism, of the proposed landfill facility was undertaken and described in Section 8.9 of the EA. The proposed landfill facility would utilise the Waterfall Way as an access route. It is noted that the Waterfall Way is a National tourist drive and this is acknowledged in the EA.</p> <p>It is envisaged that views of the proposed landfill facility from Waterfall Way would be partially obscured by existing vegetation and further masked once the vegetation of the offset area has matured. The existing landfill on Long Swamp Road has been in operation since the 1960s and has not impeded development or tourism in the surrounding area. Similarly, the tourist value of the Waterfall Way is not expected to be impacted by the proposal.</p> <p>It is noted that views towards the Project Site from Receivers 4 and 5 (and inductively of the Waterfall Way) are considered to be reasonably significant, however these views would be partially masked by existing vegetation and further obscured by offset vegetation once matured.</p> <p>Predicted odour levels at the rest area on Waterfall Way would be less than 1 ou at the 90th percentile, with a maximum odour level of less than 5 ou.</p> <p>Potential visual impacts on the rest area are considered to be temporary in nature as offset plantings would obscure future views of the site from this location.</p> <p>Stringent environmental controls to manage dirty stormwater runoff, inactivate contaminants and emergency storage would be implemented and would reduce the likelihood of downstream impacts to surface and groundwater.</p> <p>Impacts on the recreation values of the Blue Hole are not expected. Water quality monitoring would be undertaken downstream of the site (upstream of the Blue Hole).</p> <p>It is noted that the Waterfall Way is a National tourist drive and this is acknowledged in the EA. It is envisaged that views of the proposed landfill facility from Waterfall Way would be partially masked by existing vegetation and further obscured by vegetation once the offset area has matured.</p> <p>The proposed landfill facility would not significantly affect or impede tourism in the area. Armidale Dumaresq Council supports the promotion of tourism in the region through the Tourism Information Centre, provision of funding for local community infrastructure including public facilities for tourists and sponsorship of events to promote tourism in the region.</p> <p>It is noted that the Waterfall Way is a National tourist drive and this is acknowledged in the EA. Impacts on visual amenity are addressed in Section</p>
S082_60	SE3	
S082_61	V1	
S082_62	SE2	
S082_63	SE3	

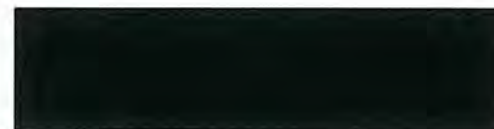
	V1	<p>8.16 of the EA. The proposed landfill is not expected to detract from the scenic value of the Waterfall Way. Visual montages of the various viewpoints considered existing trees and known tree heights in addition to the final profile of the proposed landfill mass (refer Figures 30 to 35 of the EA). It should be noted that these montages did not take into account future screening from the proposed biodiversity offset area.</p> <p>It is acknowledged that views from the air are not able to be masked to the extent of ground level views. However, several measures will be implemented during the operation of the proposed landfill that will indirectly accommodate visual absorption capacity such as daily covering of waste, capture and removal of windblown litter and sympathetic building design (including suitable colour schemes).</p> <p>Based on the detailed assessment of impacts provided in the EA and the mitigation measures that will be implemented, significant impacts on the GRAWHA as a result of the proposed landfill are not anticipated. It is not expected the proposed landfill facility would significantly affect or impede tourism in the area.</p>
S082_64	P4 SE4	<p>The concept design for the site forms the basis of the detailed design that will be prepared. The concept design presented in the EA will be assessed by the Minister for Planning. Once approval has been granted for the project, any significant changes to the approved concept design would require a modification under Section 75W of the EP&A Act. The modified design would require detailed assessment, which would need to demonstrate that environmental impacts associated with the modification are manageable.</p> <p>The estimated cost for the construction of the landfill is \$14 million for the first two cells (which includes water and leachate collection and management systems, access road, amenities) and \$10 million for the remaining three cells, a total of \$24 million over the life of the landfill. The annual operational cost is likely to be in the order of \$1 million per year.</p>
S082_65	E3	<p>The landfill will be operated in accordance with the conditions specified by the EPL and/or approval conditions. Council is committed to monitoring and rehabilitating the site and the proposed offset area during construction, operation and post-closure for a time yet to be specified in any approvals.</p> <p>Also refer to S082_8.</p>
S082_66	P4 P6	<p>Management plans that required preparation during the EA (as set out in the DGRs and correspondence from government authorities) have been prepared including:</p> <ul style="list-style-type: none"> • LEMP (Appendix B of the EA); • Water and Leachate Management Plan (Appendix A of the LEMP); and • Water Quality Monitoring Programme and Management Plan (Appendix B of the LEMP). <p>Detailed engineering, operation and other management plans would be prepared during the detailed design stage. As part of the approvals process, the relevant agencies will prescribe approval conditions the proposed landfill facility will be required to meet. These conditions will include the preparation of management plans and detailed design plans, which would be prepared in consultation and agreement with government agencies such as DECCW and other relevant authorities, prior to construction.</p> <p>The SoC (Section 9.3 of the EA) outlines the mitigation measures and management plans that will be prepared for the proposed landfill. The SoC will form part of the approval conditions for the project and Council is required to comply with all conditions of approval.</p>

S082_67		Refer to S041b for responses to table in submission.
S082_68		<p>The flora and fauna assessment (Appendix E of the EA) concluded that no groundwater dependent ecosystems have been identified in the study area or in the OWRNP.</p> <p>The proposed works are not likely to significantly impact on ecosystems which have their species composition and natural ecological processes wholly or partially determined by groundwater within the study area or further downstream in the OWRNP.</p>
S082_69		<p>Modelling is used to predict the potential environmental impacts of a project such as noise, air quality, dust, hydrogeology and flooding. Modelling is a tool that allows the potential impacts of a project on the environment to be quantified. The assumptions and therefore the outputs of the modelling undertaken for the specialist studies in the EA were generally conservative and were used to determine 'worst case' potential impacts. Comparing existing environmental conditions with the outputs of the modelling helps to determine the magnitude of potential impacts associated with the project. With the understanding of the magnitude of potential impacts of the project, the most appropriate mitigation and management measures can be designed to reduce the likelihood of impacts on the environment.</p> <p>There will be noise generated by the construction and operation of the proposed landfill. Noise generating activities were modelled to quantify the magnitude of impacts of the proposal on noise amenity. The assessment concluded that the levels of noise will comply with the DECCW criteria, considering the worst case nature of the modelling.</p>
S082_70	P6	<p>Regulatory authorities would be able to audit the site at any time. Non-compliance with EPL conditions would result in notice given from DECCW including a set of requirements that must be met within a specified timeframe. Depending on the nature of non-compliance, recovery actions may be required. Council will implement all required measures to ensure the facility meets the requirements of any approvals and EPL.</p>
S082_71	P6	<p>The management of the facility will ultimately be the responsibility of Council. The operational arrangements are yet to be confirmed, however a Contractor may be employed to manage operations on Council's behalf at the proposed landfill. Employing a contractor to operate the facility is common in the waste industry.</p>
S082_72	E3	<p>As described in Section 5.5 of the EA, Council will seek an operating licence to landfill putrescible material to accommodate the essential intermittent need for disposal of material for which stabilisation or composting is not a practical option. However, once the appropriate additional off-site sorting and/or treatment technologies are able to be employed, Council is proposing to operate the proposed landfill as a non-putrescible facility until final closure. It is envisaged that the AWT would further contribute to Council's waste diversion from landfill and therefore minimise any future waste levy charges. However it is recognised that an AWT facility is not a substitute for landfill.</p> <p>Council staff and consultants had previously identified in relation to Site 7 that the facility was intended to operate essentially as a Solid Waste Class 2 or Non-putrescible landfill but would be licencing the facility as a Solid Waste Class 1 or Putrescible landfill. This is in order to cover the odd occasion when disposal of difficult putrescible material would be required where such material is not suited to the composting or stabilising process that is adopted for the proposed AWT facilities at the Long Swamp Road facility. It is noted that references to the disposal of inert waste may have been inadvertently misused.</p>
S082_73	E1	<p>Section 5.5.6 of the EA erroneously stated that the traffic movements generated by the proposal would be a <i>minimum</i> of approximately six vehicles per day. The</p>

		<p>proposal would generate a <i>maximum</i> of 6 vehicles per day.</p> <p>The assessment of traffic noise modelled impacts based on a <i>maximum</i> of six vehicles per day (Section 8.7.3 of the EA). The traffic and transport assessment (Section 8.14.2 of the EA) also stated the traffic generation as 6 movements (one way) per day and noted:</p> <p><i>'that traffic generation for the purposes of this assessment is considered a worst-case scenario as it is considered unlikely that all vehicle movements would occur during the same day, or at the same time during the same day.'</i></p>
S082_74	P6	<p>The proposed landfill facility will accept General solid waste (putrescible) in accordance with the EPL which includes household waste, manure, disposable nappies, food waste and litter bin waste collected by local councils. No toxic or chemical wastes would be disposed of at the proposed landfill facility. Waste would be screened and sorted at the existing Waste Management Centre prior to transportation to the proposed landfill. The generator, transporter or Armidale Waste Management Centre staff would be requested to assess and classify the material prior to its arrival at the proposed new landfill. Loads arriving at the proposed landfill would be checked for non-conformance.</p>
S082_75	E3	<p>Comment noted. The paraphrasing of the EPBC decision did not affect the assessment of likely impacts on the GRAWHA or the outcome of the assessment.</p>
S082_76	SE4	<p>The estimated cost for the construction of the landfill is \$14 million for the first two cells (which includes water and leachate collection and management systems, access road, amenities) and \$10 million for the remaining three cells, a total of \$24 million over the life of the landfill. The annual operational cost is likely to be in the order of \$1 million per year.</p>
S082_77	E3	<p>The major project application form was submitted in October 2007 and the capital investment value for the project at the time was estimated as \$15,000,000. Since the application was made the capital investment cost for the project has been updated based on the refined concept design. The current estimated cost for the construction of the landfill is \$14 million for the first two cells (which includes water and leachate collection and management systems, access road, amenities) and \$10 million for the remaining three cells, a total of \$24 million over the life of the landfill. The annual operational cost is likely to be in the order of \$1 million per year.</p>
S082_78	P3	<p>Council has considered the implementation of various AWT technologies. AWT refers to technologies such as MBT, thermal treatment or a combination of both MBT and thermal treatment. Council has demonstrated its commitment via its active pursuit of AWT processes over a number of years. Council is currently trialling and evaluating AWT at the Long Swamp Road Waste Transfer Facility before full scale adoption and implementation. Further facilities and processes to recover materials for re-use will be added in future as markets and recovery costs dictate.</p> <p>A review of the costs of AWT technologies would be undertaken should the trial be successful and more accurate costing information is available based on its trial and adoption at the existing facility.</p>
S082_79	P3	<p>The baling of waste at the Armidale Waste Management Facility prior to transport to the proposed landfill is under consideration. The alternative is for the waste to be transported in covered trucks to the proposed landfill and compacted on site. The viability of baling will be confirmed during the detailed design of the proposed landfill.</p>
S082_80	P3	<p>Disposal of Armidale's waste to Tamworth or Coffs Harbour, being the closest potentially available landfills to accept the waste, was considered in the EA (refer to Section 4.1.4). This is not considered a viable option for waste management in</p>

		<p>the long term as:</p> <ul style="list-style-type: none"> Haulage and disposal costs to transport waste to Coffs Harbour or Tamworth landfills would be significant; Socio-economic impacts associated with waste generated in one region being transported to another region for disposal; The impact on landfill life of surrounding regional landfills; An unresolved need to provide a long-term waste disposal solution for the region; and Unforeseeable cost escalations for transport and disposal due to both market forces and changes in policy legislation.
S082_81	SE1	<p>As described in Section 8.9.2, the construction phase of the proposed landfill facility would employ up to 15 people. It is estimated that 2 people would be permanently employed on site during operation of the proposed landfill. There may also be other indirect employment opportunities during operation, including carrying out environmental monitoring of the proposed landfill, suppliers of goods and services and so on.</p>
S082_82	N6	<p>Council would implement the mitigation and management measures as outlined in the LEMP and other management plans. The LEMP prepared for the site (Appendix B of the EA) dictates efficient operation and management of the landfill to ensure environmental impacts are minimised.</p> <p>The landfill will be operated in accordance with the conditions specified by the EPL and/or approval conditions. Council is committed to monitoring and rehabilitating the site and the proposed offset area during construction, operation and post-closure for a time yet to be specified in any approvals.</p> <p>Issues raised regarding the existing landfill are not the subject of this EA and consequently are not addressed in detail in this Submissions Report. Issues regarding the management and environmental impacts of the existing landfill facility should be raised with Council in a separate forum. It is noted however, that the existing landfill has an excellent environmental record, which can be confirmed by Council's EPL Annual Monitoring Reports on the DECCW website.</p> <p>The audit referred to in the submission was carried out by a Sydney-based DECCW audit team and covered many rural councils. For the Armidale premises, the 'issues of concern' identified in the submission were in relation to works being undertaken in 2000 by the Federal Government (DASCHM) as part of the Martin Street Sub-division remediation works at the Long Swamp Road waste management centre. These works were supervised by Federal Government Officials responsible for ensuring that the works met all environmental requirements. Issues identified were rectified immediately the audit was completed.</p> <p>The Armidale Gas Works site is a legacy that dates back to decisions made over 100 years ago and practices undertaken without understanding of environmental impacts. Council has taken action through a Voluntary Remediation Agreement to rectify the actions of previous generations, which demonstrates Council's determination to take responsibility and ameliorate the problem to protect the environment. The Martin Street subdivision contaminated land works again demonstrates Council's commitment to environmental remediation and protection.</p>
S082_83	SE4 E3	<p>The costs for implementing the safeguards and controls at the site have been incorporated into the cost estimates for the project and significant additional remediation costs are not likely to be incurred as the management measures to be incorporated into the site, such as a surface water management system, leachate containment and storage system, will reduce the likelihood of off-site environmental issues. The proposal is unlikely to have significant impacts on the</p>

		WHA. Council has the ability to raise funds by loans and any loan will be serviced by the waste management charge that is set by Council. Council has identified their long term financial situation and is establishing a process with the community to ensure viability and sustainability. New statutory integrated planning and reporting will provide ratepayers with long-term financial plans that will ensure the long term capacity of Council to meet its obligations to the community and authorities, including its commitments to environmental management of the proposed landfill in the long-term.
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PCU013262

2nd August 2010

Major Development Assessment,
Department of Planning
GPO Box 39
Sydney NSW 2001



Dear Sirs/Mesdames,

**Armidale Dumaresq Council Landfill Project (06_0220) –
Exhibition of Environmental Assessment**

We have previously noted our objections with a previous submission within this process, dated 5th September 2007 to the Referrals Section (EPBC Act) Approvals and Wildlife Division of the Department of the Environment and Water Resources.

S083_1

The outcome there in 2007, the Australian Government's Environmental Protection and Biodiversity Committee (EPBC) ruled that the Council's proposed landfill "will, or is likely to have a significant impact upon World Heritage values in the Oxley Wild Rivers National Park".

Being the first neighbour of this Landfill we know all too well just how much water moves through this proposed area and there is no possible way of containing surface water from the site, should there ever be a problem or issue down stream, once it gets into the gorge system it could never be contained or treated. (Photos encl.)

S083_2

Because of the time factor involved in this process (nearly ten years), so much has changed and therefore continues to build the argument against having such a development in our Council region, other Council regions, ours and others waterways and in particular, the site nominated in this project.

In a world of depleting resources new technologies continue to surface to replace these resources that are lost with "greener" alternatives to the old and antiquated methods of rubbish disposal such as Landfills.

S083_3

Key Issues we feel that should guarantee without a shadow of doubt that this development should not go ahead are.

- It will require substantial clearing of regrowth timber that has taken forty years to recover. We know, because the previous owners of [REDACTED] owned the area in question. The major difference being they sold the paddock in question forty years ago and continued clearing and grubbing regrowth on [REDACTED] into the sixties and seventies to the point that we have been

S083_4

planting trees by the thousands in the past five years and will continue to in the next twenty years to compensate.

- It will affect the habitats of Koalas, Platypus, Quolls and many rare birds including Wedge Tailed Eagles and other natives. They will all be put at risk. S083_4
- Its close proximity to our beautiful river, the Gara River, longest tributary of the Macleay River catchment, existing and possible future extension to water supplies of many coastal towns and cities on that Eastern seaboard strip. S083_5
- The close proximity to our World Heritage area. The Gara flows into the Gondwana Rainforests of Australian World Heritage Area. S083_6
- The fact that NO guarantee can be given that leaching will not occur. S083_7
- It will emit greenhouse gases. Landfill gas from the breakdown of rubbish is about 40-60% methane and the rest carbon dioxide. S083_8
- It is recognised world wide that Landfills will produce offensive noise, odour, litter, dust, insects and vermin which will be coupled with a modified and scarred landscape. S083_9
- It will be in full view of a Tourist road (The Waterfall Way) voted number three in Australia. The Waterfall Way provides the gateway to a host of eco-tourism activities. Only a short distance along the Waterfall Way lie the Bakers Creek, Wollomombi and Ebor Waterfalls plus the National Parks which make up the World Heritage listed "Gondwana Rainforests of Australia". S083_10
- It will create the kinds of wastes that undergoes chemical changes inside a landfill and the leachate ("garbage juices") that develop and attack the landfill liners, so that sooner or later, toxins will escape into the groundwater, then into the river system. S083_7
- It will jeopardise the "Blue Hole", swimming and recreation area three kilometers downstream from the proposed landfill site is. Undoubtedly pollution contaminations in the form of litter or leachate chemicals have the potential to permanently affect this recreation area. S083_11

We firmly believe the Armidale Dumaresq Council has not properly explored alternative technologies or better locations. In 2008 even their own councillor, Cr Beyersdorf (former Chair of the Council's Waste Committee) learned about the EPBC ruling he told the Armidale Independent "that Council should halt all further expenditure on this project, return to the site selection process and find a site that does NOT drain into the Gondwana Rainforests of Australia World Heritage Area water catchment". S083_12

We cannot help but think the whole process has been floored and ill conceived. The site itself, the selection process, crucial selection criteria ignored, vested interest by multiple members of the community selection committee and more importantly, the grade and physical close proximity to a major water course and then, where it flows to. S083_12

The Environment Assessment document is testimony itself, sixteen hundred pages of "conditions" to meet the standards. Council feels that if they continue to "throw" money at this project it will comply and therefore reduce the risks. Council won't say, but estimates suggest it will cost at least thirty five million dollars to build this landfill and then over the life of the landfill, an expected forty to fifty years, it will cost in the vicinity of one hundred and sixty million dollars to maintain and operate. S083_13

Would it not be a better option to put this money into "greener technologies" as seen "Stateline" NSW ABC 4th April 2010 SYNGAS waste gasification plants.

Council has even stated that it is considering flaring the landfill gas. Great! Not only do we risk our water being contaminated, the air that we breathe will also be affected as these gases will contain highly toxic and carcinogenic compounds, such as dioxin and mercury. S083_14

We have attached our previous submission, you will note the "Land entitlement deed" mentioned, and we reiterate.

"A grant of \$110,174.00 from the Department of Infrastructure, Planning and Natural Resources enabled this work to be planned and carried out."

Ask why in one direction our Government and various Rural departments are encouraging and paying huge amounts of money for the improvement by way of such works for the Water quality to be repaired and improved and then risking locating a facility like this Landfill within one kilometre up stream in the catchment of this major water course is beyond comprehension".

We have never seen a Landfill in existence, that litter is wholly contained within its boundaries. Litter spread by wind is a major problem with livestock and native animals quite often causing deaths, plastic bags being the main culprit. S083_15

The current Armidale Landfill is a prime example, the litter in the immediate area and the "leachate/garbage juices" that oozes out of the ground in wet times in Roseneath Lane making it impassable by vehicle, is clearly evident for all to see. What will be different with this new landfill?

Our overall operation as primary producers relies on our water supply. We use it not only for livestock supply but also for domestic purposes. Can anyone imagine if the quality of this water is compromised how this will affect not only us, but the entire downstream population both human and native of the Macleay Valley. S083_16

Above all, the most important fact is that NO guarantee can be given by any Council or any Consultant, that leaching will not occur. This is a worldwide fact.

Any risk of contamination below this site is too great; the only way to ensure that no problems ever arise is to not have this structure anywhere near the Gara River, the Oxley Wild Rivers and our World Heritage areas.

Yours sincerely,

[Redacted Signature]

[Redacted Name]

[Redacted Address]

[Redacted Contact Information]

in flood around 1980's



in flood 2007



5th September 2007

Referrals Section (EPBC Act)
Approvals and Wildlife Division
Department of the Environment and Water Resources
GPO Box 787
Canberra ACT 2601

Dear Sirs/Mesdames,

Armidale Dumaresq Council Landfill Waterfall Way Armidale

This might sound like the proverbial “NIMBY” statement or submission (ie Not In My Back Yard), but please look at our “frontyard” first, the proposed Landfill, and then look at our backyard, our property [REDACTED] and then everyone else’s “backyard” in Northern NSW, the Oxley Wild Rivers National Park and what we stand to lose both personally and as custodians of our rural lands and Heritage areas.

As we are the “first neighbours” downstream on the Gara River from the intended Landfill, we feel we are the ones most likely at risk and with the most to lose, both financially and lifestyle if affected by any water contamination mentioned in this submission and seek intervention by the Australian Government to prevent the construction of this landfill.

We are even more concerned that this is not only within the catchment area of the northern portions of our property and the Gara River, but more importantly in the expansive Oxley Wild Rivers National Park, which is part of the Central Eastern Rainforests Reserves of Australia World Heritage Property and just as importantly, the Kempsey and district water supply of which we all know they are hoping to increase because of population increase on our eastern seaboard.

We run a six hundred head beef cattle and one thousand head sheep operation at “Gara Station” 914 Gara Road Armidale. We also run two further properties “Stockton” Armidale & “Ferndale” Wollomombi with another eight hundred head of beef cattle.

The land to be developed for this Landfill was originally part of “Gara Station” and suffered the same fate as the remaining sixteen hundred acres. It was over cleared to the point that there is hardly any regrowth on our property and where the Landfill is proposed.

Water quality and availability are paramount to our operation. The water we pump from this river is used not only for animal watering, but also for human consumption and household use.

Can you imagine if the water that runs through our property was not available to continue to run our rural enterprise?

Not only International evidence indicates that no landfill can be assumed not to leak sometime within its lifespan. Ask the Armidale Dumaresq Council of their existing Landfill, it leaks now. How can they assure us that they can get it right?

A NSW Department of Public Works Peer Review report in 2001, reported that the likelihood was high that leakage of leachate into the groundwater/river system would occur (Criterion 15). As would be expected, it rated this as having a CRITICAL impact upon the environment.

There is insufficient data available about both the flood threat and especially about the nature and extent of the aquifer at the site for the landfill to be built with surety that either of these factors could jeopardize its integrity.

"Gara Station" has a Land entitlement agreement (Native Vegetation Property Agreement Number AR0106RP) in place where the Gara River has been fenced on both sides (dual frontage) for some 7.5 kilometres.

- To repair eroded banks
- To improve the water quality
- To recreate habitat and bio diversity destroyed by previous owners
- To protect and enhance the native vegetation existent
- To enable further tree planting and protect plantings
- To manage stock so as not to continue damage to the environs of the river
- To protect and enhance the natural environment for the existing Platypus, Black Swans, many varieties of ducks and so many other creatures great and small

A grant of \$110,174.00 from the Department of Infrastructure, Planning and Natural Resources enabled this work to be planned and carried out.

Ask why in one direction our Government and various Rural departments are encouraging and paying huge amounts of money for the improvement by way of such works for the Water quality to be repaired and improved and then risking locating a facility like this Landfill within one kilometre up stream in the catchment of this major water course is beyond comprehension.

Within our forward plans, we aim to continue to improve our Rural Property

1. Making provision for continued tree planting by way of tree lane provision when any fencing is done (An estimated fourteen kilometres of tree planting has been completed in the past five years)
2. To plant a minimum of three thousand trees per year

3. To install a full water reticulation system to drought proof the property, that has by true definition been disadvantaged by fencing off the water in the river to service stock in paddocks that the dams that have been built do not adequately service

Part of the development application for this Landfill it is noted that quite a substantial amount of timbered habitat will be removed. It is sad that for many years, previous owners were eradicating timbered areas in the 1950's and 1960's. The timbered areas that are going to be removed are the "natural" repair by nature for the human short sightedness for the last fifty years, only to be cut down yet again. Is that why the immediate district is now in a rain shadow?

In this development application it is well documented by Council's own Consultants, EA Systems and Maunsell, that there is

1. Uncertainty about the suitability of the soils available on the site
2. Potential geotechnical constraints to the proposed works that are identified include: Potential dispersive soil and high erosion hazard.
3. Potential for flooding and there is previous evidence of flooding at the site
4. A number of potential impacts that may affect native flora and fauna have been identified. These impacts include vegetation clearing, habitat loss, fire, fragmentation and reduced connectivity, weed invasion, pest animals, and consequences arising from traffic, dust, noise, pollution, litter and illegal dumping. Such disturbances reduce the habitat quality of the affected land and may threaten viable populations of threatened species found in the subject site.

We could continue to quote various issues from many and varied reports and sources.

It is quite clear that there are too many "ifs and buts".

The selection criteria has been flooded, even the notification as to when any submissions could be forwarded having been received from EA Systems in today's mail this 5th September 2007. How fair is that to receive notice on the day that something closes?

We put our trust in the current Government and the Department of the Environment and Water Resources to protect not only our near environs for our continued use of our rural land, but for the whole community world wide of an absolutely incredible World Heritage area.

What a backyard we have, please protect it!

[REDACTED]

(A signed hard copy of this email correspondence will be forwarded in the mail and also faxed to ensure you have received it)