estimates. A 20% contingency has been included as this is a preliminary estimating process. For this analysis, only the costs of the AWT have been included.

Capital expenditures plus repayment and operating costs are shown on the spreadsheet on the following page. A broad breakdown of the major capital costs is shown below:

Primary Process

Project Management	$156,000
Consultants	$160,000
Investigations and Analysis	$55,000
AWT Building and Infrastructure	$1,000,000
AWT Equipment	$1,100,000
Stabilisation System	$660,000
Contingency 20%	$629,000
Total Capital Expenditure Primary	**$3,760,000**

Secondary Process – Composting

Shredder	$ 350,000
Composting System	$ 500,000
Contingency 20%	$ 190,000
Total Capital Expenditure Secondary	**$1,140,000**

Operational costs relating to the primary and secondary processes of the AWT is estimated to cost about $30,000/annum.

Summary Table of Cost Impacts (Present Value)

ITEM	Total Cost	30 yr Loan Capital and Interest Repayment @ 7%/annum	Future Annual Charge	Future Gate Fees (increase)
Closure of Existing Landfill (Armidale residents only)	$2,500,000	$200,000	$15.00	6.67%
Provision of First New Landfill Cell and Ancillaries	$10,000,000	$800,000	$82.90	N/A
Provision of each subsequent Landfill Cell	$4,100,000	$330,000	$34.20	N/A
Annual Transportation Cost Long Swamp Road to the New Landfill	$350,000	N/A	$21.76	11.67%
Provision of an AWT - Stabilisation Mixed Putrescible Waste	$3,760,000	$300,000	$18.65	10.00%
Provision of an AWT - Composting of Organic Waste	$1,140,000	$91,000	$5.66	3.03%
Annual Operation of the primary and secondary AWT processes	$30,000	N/A	$1.87	1.00%
Provision of Organics Collection Service	Minimal	No significant change. Will be a re-arrangement of existing garden waste and municipal waste services	$0.00	0.00%

Charging has already commenced for the New Landfill and AWT projects so the impact of the above increases over present fees and charges are not as severe as first may appear from the table above.

A New Landfill Levy has already commenced to cover the cost of the planning approval and pre-construction activities. It is currently set at $61 / assessment or occupied dwelling and the annual income covers the annual costs. On completion of the pre-construction activities, a loan will have to be obtained to meet the construction costs. The servicing of this loan amounts to $83 / assessment or occupied dwelling for 30 years. The $83 / annum levy will replace the $61 / annum Levy. An increase of $34 / annum will have to be added as each additional cell is added at approximately 10 year intervals. The maximum New Landfill Levy will amount to $151 / annum in the period 20 year to 30 year after construction commenced and will reduce to $108 and $133 per annum for the last two 10 year periods as loans are taken out for 20 year and 10 year periods so that all loans are paid off by the end of the 50 year landfill life. All these costs are based on present value.

To cover expected costs relating to the AWT project, waste rates and charges were increased in 2009/2010 to accommodate development costs and the servicing of a $4,500,000 loan over 30 years. So, only a small increase in rates and charges will accommodate the current estimated cost of almost $5,000,000.

The only new additional charge relates to the closure costs of the old landfill. This will not be required for a few years yet until after the new landfill is operational.

Financial Implications:
No funding applications were considered.

Environmental Implications:
Not applicable.

Policy Issues:
No Policies were presented in this report.

Management Plan Issues:
Not applicable.

Social Implications:
Not applicable.

Risk Management Issues:
Not applicable.

Legal Issues:
Unknown.

RECOMMENDATION:

a) **That the Waste Management Committee notes the estimated capital and operational costs for the proposed projects leading to enhanced waste management services.**

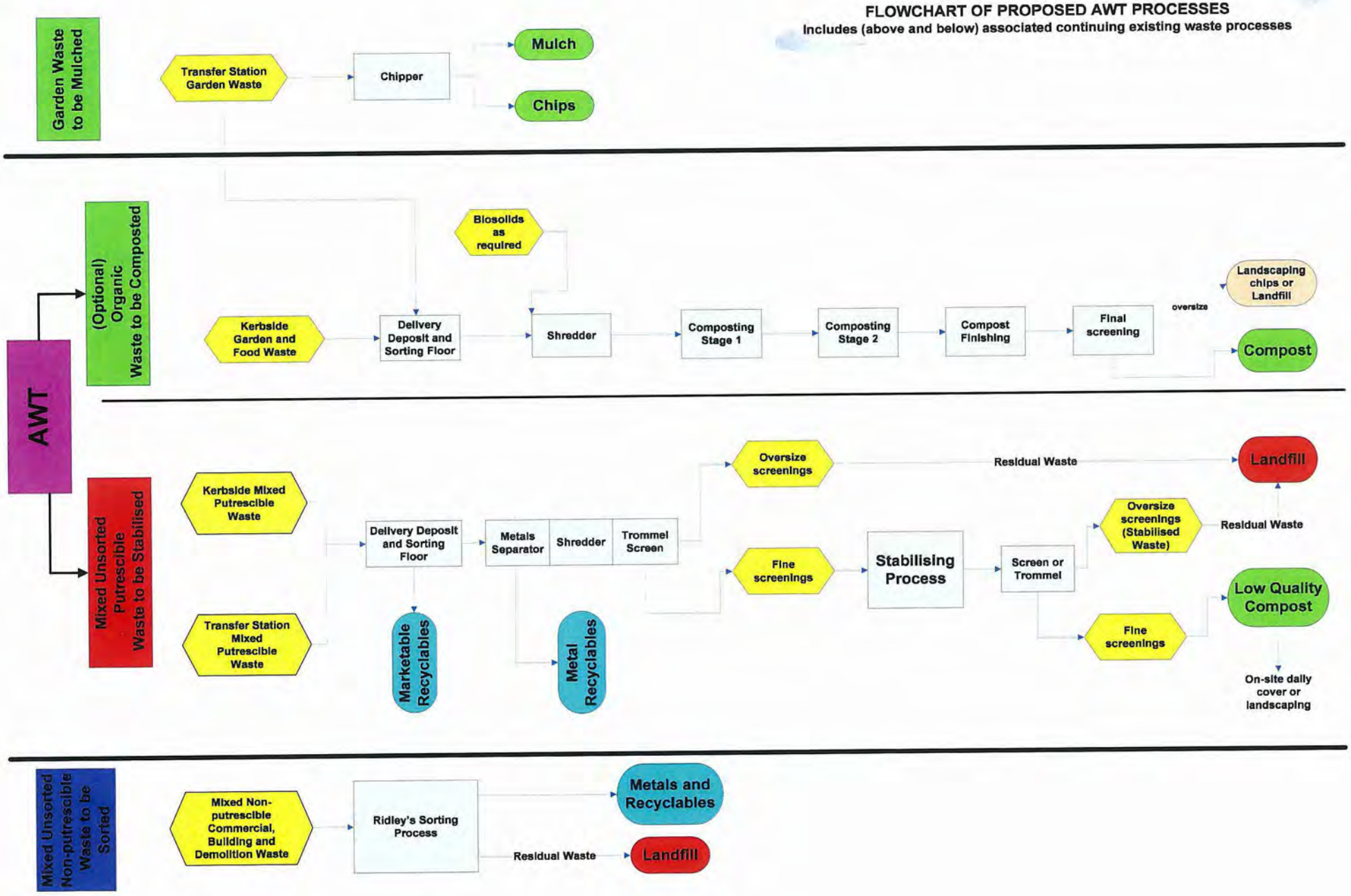
b) **That the Waste Management Committee endorses the proposed projects and estimated costs as the strategic direction to be followed to meet this Council's obligations and needs for enhanced waste management services for the foreseeable future.**

c) **That on the basis of the consequent impacts of the costs on the Charges and Gate Fees, the Waste Management Committee endorses these impacts as acceptable increases in order to meet our strategic objectives and that Council proceeds promptly with the implementation of the projects.**

d) **That the Waste Management Committee and staff provide a number of public information forums, including local area committees, on this Waste Management Strategy.**

FLOWCHART OF PROPOSED AWT PROCESSES

Includes (above and below) associated continuing existing waste processes



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5.5 Report on Major Operational Costs and Proposals for Enhanced Waste Management Services for Armidale and the Impact of these on Fees and Charges

Ref: INT/2009/11531

Council's existing landfill at Long Swamp Road has reached the end of its service life. Extended use has been negotiated with DECCW but there is a relatively urgent need to replace the facility. Closure processes have to be implemented on cessation of use.

RECOMMENDATION:

a) **That the Waste Management Committee notes the estimated capital and operational costs for the proposed projects leading to enhanced waste management services.**

b) **That the Waste Management Committee supports the proposed projects and estimated costs as the strategic direction to be followed to meet this Council's obligations and needs for enhanced waste management services for the foreseeable future.**

c) **That on the basis of the staged or sequential impacts of the costs on the Charges and Gate Fees, the Waste Management Committee endorses these impacts as necessary increases in order to meet Councils strategic objectives and that Council proceeds promptly with the implementation of the projects.**

d) **That Council and staff provide a number of public information forums, including local area committee meetings, on Council's Waste Management Strategy.**

9.4 MINUTES OF THE WASTE MANAGEMENT COMMITTEE MEETING HELD 30 SEPTEMBER 2009

Ref: INT/2009/12205

Moved Cr Whan **Seconded Cr Beyersdorf**

That the Minutes of the Waste Management Committee meeting held on 30 September 2009 be noted and the following recommendations endorsed:

(a) That Armidale Dumaresq Council provides the waste profile data to Bekon to assist them in determining the feasibility of the waste-to-energy facility.

(b) That Council delay a decision on the implementation of a Commercial & Industrial recycling service pending further investigation and preparation of a new contract to capitalise on economies of scale.

(c) (i) That the Waste Management Committee notes the estimated capital and operational costs for the proposed projects leading to enhanced waste management services.

(ii) That the Waste Management Committee supports the proposed projects and estimated costs as the strategic direction to be followed to meet Council's obligations and needs for enhanced waste management services for the foreseeable future.

(iii) That on the basis of the staged or sequential impacts of the costs on the Charges and Gate Fees, the Waste Management Committee endorses these impacts as necessary increases in order to meet Councils strategic objectives and that Council proceeds promptly with the implementation of the projects.

(iv) That Council and staff provide a number of public information forums, including local area committee meetings, on Council's Waste Management Strategy.

The Motion on being put to the vote was CARRIED UNANIMOUSLY.

Appendix B(v)

ARMIDALE WASTE STRATEGY FORUM

17 & 18 April 2010

James Turnell
Senior Engineer Sewerage & Solid Waste

Armidale Dumaresq Council

WASTE SERVICES

- Waste services were originally provided to improve public health, and now include environmental reasons
- Historically all waste was disposed of to landfill
- Council's strategy is to maximise reuse of materials and minimise waste to landfill
  - Take better care of the environment and to preserve scarce natural resources
  - Driven by Waste Avoidance and Resource Recovery Act 2001 and Waste Avoidance and Resource Recovery Strategy 2007

WHAT WASTE SERVICES DOES COUNCIL PROVIDE?

- Waste collection services
- Waste transfer stations
- Waste sorting and recovery facilities
- Landfill for residual waste

Let's look at these in turn….

CURRENT WASTE COLLECTION SERVICES

- Domestic waste collection:
  - Garbage
  - Recyclables
  - Garden waste
- Other waste collection:
  - Garbage only on request for commercial sector
- Recycling muster points around CBD
  - Fluorescent lighting and sharps

PROPOSED ADDITIONAL WASTE COLLECTION SERVICES

- Change garden waste collection to organics waste collection:
  - Combine garden waste & food waste
  - Linked to operational commitment for new landfill (discussed later)
- Expand Council recycling collection service into the commercial & industrial sector
  - Next recycling contract

WASTE TRANSFER STATIONS

- Armidale Waste Transfer Station
  - Considered by Northern Inland Regional Waste (NIRW) as leading the way in resource recovery for our region
- Rural transfer stations good but not well spread
  - Limited by the communities ability to pay
- No current proposals to expand

WASTE SORTING AND RECOVERY FACILITIES

- Encourage sorting at source to minimise contamination
  - Existing domestic collection operating very well
  - Crates minimise contamination
  - Excellent community participation.
- Sorting commercial & industrial waste
  - Current trial and possible introduction of an additional process
- Removal of putrescible material from mixed waste before land filling
  - Commitment to new landfill
  - Composting of organics (organics collection)
  - Stabilisation of remaining putrescible material in mixed waste

PROPOSED MIXED WASTE PROCESSING

- Alternative Waste Technology (AWT):
  - Crude ground sort
  - Shredding
  - Magnets (optional)
  - Screen
  - Composting system
  - Deposit composted residual waste to landfill

Existing Landfill

- Landfill at Long Swamp Rd since 1960s
  - Full within next few years
- Options
  - Do nothing – not an option for health and environmental reasons
  - Transport waste to another landfill
  - Establish a new landfill
- Closure of Long Swamp Rd Landfill

New landfill

- Site selected off Waterfall Way
- Environmental assessment about to go on public exhibition (planning approval process)
- New landfill levy introduced to meet establishment costs
- Preliminary estimate for the construction of the new landfill is $12,000,000 for the first operational cell (life of 10 years)
- Additional cells will cost approximately $4,000,000 each on a ten year cycle.

COST IMPACTS OF ADDITIONAL WASTE SERVICES

- Organics collection
  - Additional cost due to 'green bin' being collected weekly
  - Cost off-set if 'red-top bin' moves to a fortnightly collection
- Commercial & industrial waste collection
  - User pays
- Sorting of commercial and industrial waste
  - Funded from revenue generated from penalty charges

COST IMPACTS OF ADDITIONAL WASTE SERVICES (cont.)

- Putrescible waste stabilisation (AWT)
  - Funded from rates & charges
    - Already being phased in
- Closure of Lang Swamp Rd Landfill
  - Already accounted for in annual waste charges
- New Landfill
  - New landfill levy to fund loan repayments
    - Adjusted as necessary to fund progressive costs

PROPOSED ANNUAL CHARGES 2010-11

Waste component	Urban	Rural
Domestic collection	$59.22	N/A
Greenwaste collection	$45.90	N/A
Recycling collection	$25.91	N/A
Recycling processing	$23.29	$23.29
Resource Recovery Centre	$7.40	N/A
Other recycling activities	$3.71	N/A
Armidale Waste Transfer Station	$24.67	N/A
Rural Waste Transfer Stations	N/A	$82.55
Armidale landfill	$37.13	$37.13
Closure of existing landfill and minor capital works	$23.69	N/A
Waste overheads	$33.75	$33.75
Credit for historical rural allocation	N/A	-$40.01
Credit for rural waste transfer station fees	N/A	-$6.70
Credit for recycling sales	-$33.19	-$33.19
TOTAL	**$251.50**	**$96.50**

Thank You

Appendix B(vi)

5.1 NEW LANDFILL

Ref: INT/2010/08236

Mr Maciver provided an overview of the report and an update to confirm that the EA is now on public exhibition, running from 3 June to 6 August inclusive.

Mr Lax expressed his concern that the EA does not adequately advise on Council's intent to operate the new landfill as a non-putrescible landfill even although it will be licenced as a putrescible landfill.

Mr Maciver advised that the planning application and the EA is for a new landfill and must focus on that. Other waste projects such as the AWT waste composting and stabilising are separate projects even although they do relate to how we will mange waste in the future and the type of waste that will be deposited in the new landfill.

To complement what is in the EA regarding Council's intent to process putrescible material and not dispose of this material in the new landfill, it was suggested that we prepare and issue for public information, the "Waste Strategy" that has been presented at recent public information meetings regarding Council's Management Plan.

Moved: Cr Whan **Seconded: Cr Ducat**

a) **That members of the committee note the progress report on the preparation of the Environmental Assessment for the New Landfill and the arrangements made for public exhibition.**
b) **That Council prepare a two page summary sheet describing Council's Waste Management Strategy for public information.**
c) **That an answer to the question of how we plan to process our waste be formulated for the "Good Question" feature in Council's newspaper page.**

ARMIDALE DUMARESQ COUNCIL

WASTE STRATEGY 2010

Background

Waste services were originally provided to protect and improve public health and all waste was disposed of to landfill.

In more recent times, environmental concerns have added services to address recycling and minimisation of waste to landfill objectives.

The latter are currently driven by the requirements of the Protection of the Environment Operations Act, the Waste Avoidance and Resource Recovery Act 2001 and Waste Avoidance and Resource Recovery Strategy 2007.

Council's overriding current strategy is to provide waste collection and disposal services to maximise reuse of materials and to minimise waste to landfill in order to:

- Protect public health;
- Conserve scarce natural resources;
- Take better care of the environment.

COUNCIL'S CURRENT WASTE SERVICES AND FACILITIES

These are listed in sequence from disposer through collection and processing to re-use or disposal to landfill:

1. **Waste collection services;**
2. **Waste transfer stations;**
3. **Waste sorting and recovery facilities;**
4. **Landfill for residual waste.**

1. Waste Collection Services.

Services by which waste is collected from premises or locations and taken to the Armidale waste management facility on Long Swamp Road for processing and disposal.

- Domestic waste collection:
  - Garbage.
  - Recyclables; paper, cardboard, plastics and glass.
  - Garden waste.
- Other waste collection:
  - Garbage from public areas.
  - Garbage only on request for commercial sector.
- Recycling muster points around CBD.
  - Fluorescent lighting and sharps.

2. Waste Transfer Stations.

Receival facilities to which the community can take their waste for sorting and disposal.

- Armidale Waste Transfer Station.
- Rural Transfer Stations. Not well spread. Generally at sites of old landfills and limited by the community's ability to fund on a user pays basis.
- No current proposals to expand.

WASTE STRATEGY 2010 (Continued)

3. Waste Sorting and Recovery Facilities.

These processing activities have grown and continue to grow to meet the objectives of waste minimisation and materials re-use (recycling). Generally, recycling is not profit making and to be worthy, the processes we operate must have a healthy market for disposal and economic processing and transport costs as well as demonstrated environmental benefit before they can be considered practical and economic options for Armidale.

- Sorting at Source is Council's preferred process for waste separation.
  - Council encourages sorting at source at all residential, commercial and industrial premises to minimise contamination of material.
  - Existing domestic sorting and collection operates very well. Crates system minimises contamination. Excellent community participation.
  - Commercial and industrial sector has some good pockets of sorting activity but overall there is significant room for improvement.
- At the Armidale Waste Transfer Station (WTS), a materials recycling facility (MRF) is operated to sort collected recyclables consisting of paper, cardboard, plastics, metal cans and plastic and glass containers.
- Also at the Armidale WTS, facilities are provided for receival and recycling of second hand goods, all metals, garden waste, builders waste, timber, chemicals, waste motor and cooking oil, paint, wet and dry cell batteries, fluorescent tubes and bulbs, tyres, electrical goods, computers and heavy plastics. Additional items are added as markets and costs dictate.

Note that there is currently a commercial MRF operating on Council's Long Swamp Road site that undertakes the sorting of mixed commercial & industrial waste on behalf of clients before the sorted waste is then disposed of through Council's WTS.

4. Landfill for Residual Waste.

- Facility for disposal of residual waste left after recyclable material has been removed from waste.
- Landfill has operated at the current Long Swamp Road site since the 1960s.
- It will be full in next few years and a new landfill is required to take its place.
- Closure works will be required for the Long Swamp Road landfill on cessation of use.

WASTE STRATEGY 2010 (Continued)

PROPOSED REPLACEMENTS AND AUGMENTATION OF COUNCIL'S WASTE SERVICES AND FACILITIES

The major project that Council must undertake is the construction of the new landfill. During the process for the selection of the site for the new landfill, for environmental protection reasons, Council made the commitment to routinely operate the new landfill as a non-putrescible landfill as much as is practicable. The landfill would be licenced as a putrescible landfill to accommodate the essential intermittent need for disposal of putrescible material for which stabilisation or composting is not a practical option.

Emanating from the above commitment is the need to augment our current processing facilities to deal with putrescible waste by way of composting or stabilisation.

The following replacements, changes and augmentations are proposed to deal with putrescible waste and to improve waste recovery from commercial and industrial waste. Further facilities and processes to recover materials for re-use will be added in future as markets and recovery costs dictate

1. **New Landfill.**
2. **Organics (garden and food) waste collection service.**
3. **Processing facilities to deal with putrescible material - compost organic waste and stabilise residual waste containing putrescible material before landfilling. Commonly referred to in the industry as alternative waste treatment (AWT).**
4. **MRF for sorting of mixed commercial and industrial waste. Another AWT process.**

1. New Landfill.

- Site has been selected off Waterfall Way about 12 kms from Armidale and the planning approval process is in progress.
- Environmental Assessment on public exhibition 3 June to 6 August 2010.
- Assuming no delays, commissioning of landfill expected by early 2012.
- All waste is to be routed through the Armidale Waste Transfer Station and its processes for waste recovery and stabilisation of putrescible material with only residual waste taken to the new landfill facility.
- 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.

2. Organics (garden and food) Waste Collection Service.

- To enable foodwaste to be collected, it is proposed to change the existing fortnightly garden waste collection service to a weekly organics (garden waste and food waste) collection service.
- A public education program will be run to inform residents of the practicalities and benefits of the organics collection service.
- An organics (mainly food waste) collection service is proposed for the non-residential sectors.

May require to be funded by small increases in annual charges and transfer station charges depending on logistics and contract pricing.

WASTE STRATEGY 2010 (Continued)

3. **Processing Facilities to deal with Putrescible Material:**
   a) Compost Organic Waste and b) Stabilise Residual Waste that contains putrescible material before landfilling.

   - Two new processes are to be established before the new landfill is operational:
     - Composting of well sorted organic waste – garden waste and food waste.
     - Stabilising of residual waste before it is placed into landfill.
     - These processes are currently being trialled and evaluated at the Long Swamp Road Waste Transfer Facility before full scale adoption and implementation.
   - To be funded by increased annual charges and transfer station charges for disposal of this material.

4. **MRF for Sorting of Mixed Commercial and Industrial Waste.**

   - Maintain penalty charges for the disposal of unsorted waste at transfer stations.
   - Install a MRF for the sorting of non-putrescible mixed waste similar to the commercial facility currently operating on Council's waste management facility.
   - This facility will be funded from the penalty charges.

Waste Strategy "Good Question" July 2010 placed in Council's weekly Newspaper Page

GOOD QUESTION!

What are the changes to current waste services that Council plans to introduce in association with the new landfill?

- Armidale's new landfill is proposed to be essentially run as a non-putrescible landfill.
- Details of the proposed changes to our current services and processes that will facilitate this and also to further improve waste recovery, re-use and minimisation of waste to landfill are outlined in "Waste Strategy 2010".
- The Strategy is available on Council's website at: www.armidale.nsw.gov.au/environment/95838/234626.html
- It is also available at our Customer Service counter or you can have a copy sent to you by contacting Belinda Ackling on 67 703 852.

thrive in Armidale

Armidale Dumaresq News

www.armidale.nsw.gov.au

14 July 2010 The Armidale Express Extra

Mayor's diary

CR PETER DUCAT

Employer of the Year

Armidale Dumaresq Council was awarded the 2010 Employer of the Year in the NSW Training Awards for the New England North West Region at Tamworth. Council's staff member, Grayden Scott was the 2010 winner of the Primary Industries Award in his category for his Certificate III in Horticulture studies and Patricia Anne Huddy was the 2010 regional winner of the Vocational Student of the Year award for her Certificate IV in Training and Assessment. Ms Huddy will go on to represent the region at the State Final in Sydney later this year.

Congratulations to all the staff for their contribution and hard work in achieving this recognition and awards for excellence.

Regional Achievement Awards

Volunteers, environmentalists, business leaders and community organisations are being encouraged to participate in this year's NSW/ACT Regional Achievement and Community Awards.

The Awards have been running for many years and provide recognition to the many hardworking individuals and organisations in our community.

The six categories are the Land and Property Management Authority Community of the Year Award, the Land and Property Management Authority Crown Reserve Trust Award, the Industry and Investment NSW Business Enterprise Award, the Industry and Investment NSW Events and Tourism Award, the Salvation Army Employment Plus Employment and Training Award and the Peabody Environment and Landcare Award. For more information or nomination forms contact the Awards Office on 1300 735 445 or visit the website at www.awardsaustralia.com. Nominations close on August 13, 2010.

PUBLIC EXHIBITION

At its Ordinary Meeting on 28 June 2010, Council approved the following Fees and Charges for 2010/2011 in the Waste Service Section for public exhibition:

VENM (virgin excavated natural material)

(a) Clean Topsoil All vehicles	No Fee
(b) Other VENM/ENM Car/Sedan per load	$3.60
Utility/Trailer/Wagon per load	$5.15
Large Trailer or Utility per Tonne	$8.80
Trucks > 2 tonne per Tonne	$8.80

The sale of clean top soil will be at the rate of $30.00 inclusive of GST per tonne and the sale of VENM be at the rate of $10.00 per tonne.

The fee for residual waste to landfill will be fixed at $90.00 per tonne.

The fee for unsorted waste to landfill will be fixed at $180.00 per tonne.

Public exhibition starts on Wednesday, 30 June 2010 and ends on 28 July 2010. Written submissions addressed to the General Manager, PO Box 75A Armidale will be accepted up to 5pm 28 July 2010.

The above recommended fees and charges will be considered by Council following the public exhibition. In the meantime, the current advertised and adopted Fees and Charges will be applied from 1 July 2010.

For further enquiries please contact Colin Maciver on 6770 3849.

ENVIRONMENTAL ASSESSMENT FOR NEW LANDFILL SITE ON PUBLIC DISPLAY

Armidale residents have an opportunity to comment on the proposed new landfill site, especially the Environmental Assessment (EA) which is on public exhibition until Friday 6 August 2010 at the Civic Administration Building. During this time submissions are invited from stakeholders including members of the public. The EA document may be downloaded from the Department of Planning's Major Project website: http://majorprojects, planning.nsw.gov.au/page/on-exhibition. A copy of the EA is available for viewing in the Armidale Dumaresq Memorial Library and a free CD-Rom can be requested from the DoP by phoning 1300 305 695.

Are you looking for land in town for your kid's horse or looking for land to graze your larger animals?

Council is seeking Expressions of Interest from individuals wishing to lease Council land for the purposes of grazing.

Currently the following 4 areas are available for lease for the 12 month period ending 30 June 2011:

- Cnr Bona vista Road and Burgess Streets
- Area bounded by Lynches Road, Cemetery and railway line
- 75-77 Canambe Street
- 66-70 Tancredi St (paddock behind Alahna Drive)

Expressions of Interest will be received up to 2.30 pm on Friday 30 July 2010. Further details may be obtained from the Civic Administration Building or by calling the Customer Service Centre on 6770 3600.

GOOD QUESTION!

What are the changes to current waste services that Council plans to introduce in association with the new landfill?

- Armidale's new landfill is proposed to be essentially run as a non-putrescible landfill.
- Details of the proposed changes to our current services and processes that will facilitate this and also to further improve waste recovery, re-use and minimisation of waste to landfill are outlined in "Waste Strategy 2010".
- The Strategy is available on Council's website at: www.armidale.nsw.gov.au/environment/95838/234626.html
- It is also available at our Customer Service counter or you can have a copy sent to you by contacting Belinda Ackling on 67 703 852.

Public Notice

Authorised by Shane Burns, General Manager, Armidale Dumaresq Council PO Box 75A Armidale NSW 2350 Ph: 6770 3600 Fax: 6772 9275 Email: council@armidale.nsw.gov.au

FILLING AND COMPACTING AT LANDFILLREQUEST FOR TENDER A10/4844

Tenders are invited for the provision of Filling and Compaction Operations at Council's Landfill in Armidale NSW for an initial period of two years (with options to extend) commencing September 2010. Details are provided in the tender document which is available through Council's website www.armidale.nsw.gov.au or the website www.tenderlink.com/nesac. Documents are also available from Council's Customer Service Centre, 135 Rusden Street Armidale.

Enquiries regarding this tender may be directed to the Project Officer, Mr Mike Brooks, on (02) 6770 3894.

A mandatory, pre-tender briefing meeting will be held at the Landfill Facility, Long Swamp Road, Armidale on Wednesday 14 July 2010 commencing 10.00am.

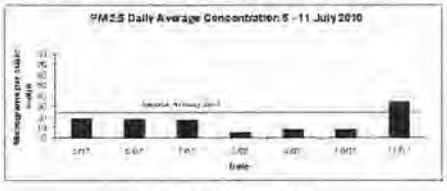
Tenders citing the reference tender number and addressed to the General Manager, PO Box 75A Armidale 2350 will be received up until closing time 2.30pm Tuesday 27 July 2010.

The lowest or any tender will not necessarily be accepted.

PARTICULATE LEVELS (5-11 July 2010)

Air quality monitoring from 5-11 July 2010 using a Dustrak Aerosol Particle Monitor to measure the level of PM2.5 (very small) particulates in the ambient air. Graph shows daily averages in accordance with the National Environment (Ambient Air Quality) Measure.

Note: Warmer temperatures, with winds and cloudy days reduced particulate levels for the week. *"Look at the glass on your fire and your flue, it should be clean, if not you are wasting fuel and polluting the air."*



PUBLIC DISPLAY

At the June Ordinary Council Meeting the following documents were approved for public display from 14 July 2010 until 12 August 2010 at the Civic Administration Building, 135 Rusden Street Armidale, and may be downloaded from Council's web site, www.armidale.nsw.gov.au.

- Draft Youth Action Plan
- Draft Public Art Policy

Written submissions regarding the above documents, addressed to the General Manager, PO Box 75A Armidale will be accepted up to 5pm 12 August 2010.

For further information contact Jane Guilfoyle on 6770 3688.

DEVELOPMENT APPLICATION 135-2010 ARMIDALE EX-SERVICES CLUB AND GROUNDS 137 DUMARESQ STREET AND 86-88 DANGAR STREET, ARMIDALE, BEING LOTS 1 AND 2 DP 770624, LOT 22 DP 869146, LOT B DP 157581, LOT 1 DP 1136216 AND LOT 3 DP 1131420

Armidale Dumaresq Council has received this Development Application from the Armidale Ex-Services Memorial Club for a staged development on the above site for a new motel, modifications to the existing Club building, new carpark and modifications to the existing carpark and site.

While Armidale Dumaresq Council will be the Consent Authority for the Development Application under the Environmental Planning and Assessment Act 1979, the Northern Regional Joint Planning Panel, established under s.23G of the Act, will have the function of determining this Application, given its capital investment value.

This is also an application for "Integrated Development", as the proposal involves a 'controlled activity' for the purposes of s.91 of the Water Management Act 2000, namely work to be carried out within 40 metres of Dumaresq Creek. The NSW Office of Water (part of the NSW Department of Environment, Climate Change and Water) is the approval body for that activity.

The Application and supporting documentation may be inspected at Council's Civic Administration Building, 135 Rusden Street Armidale between 8.30am and 5.00pm Monday to Friday from 16 June 2010 until 16 July 2010.

Within this period, any person may make written submissions on the Application to Council at the above address. Any objection to the proposal should state the grounds of objection. Submissions made on the application will be provided to the Joint Regional Planning Panel and may be viewed by other persons with an interest in the application.

Should you have any further enquiries in relation to the Application, please contact Mr Stephen Gow, Council's Director Planning and Environmental Services on (02) 6770 3853 or email council@armidale.nsw.gov.au .

Please note that under State legislation, any person making a submission on a Development Application must also disclose whether they or any "associate" have made a "reportable political donation" or gift to a local Councillor or Council employee within the period commencing two years before any submission is made and ending when that Application is determined. Further details including disclosure forms are available on request from Council.

ARMIDALE DUMARESQ COUNCIL MANAGEMENT PLAN 2010-2013 PUBLIC EXHIBITION OF PROPOSED STRATA SUBDIVISION COMPLYING DEVELOPMENT APPLICATION FEE

Pursuant to provisions of the Local Government Act 1993, Council gives notice of the exhibition of a proposal to introduce a new fee into its Management Plan 2010-2013 for Complying Development Applications for strata subdivision.

Due to recent amendments to State legislation, applications for strata subdivision must now be made as a Complying Development Application or as a Development Application. Council previously allowed certain strata subdivision proposals as Exempt Development.

It is proposed to introduce a fee of $250 plus $50 per additional lot for strata subdivision Complying Development Applications. The current fee for strata subdivision Development Applications will remain unchanged. Council also wishes to clarify that the current fee of $225 for Subdivision Certificate/Title Plan Processing also applies to an application for a Strata Certificate.

The proposed strata subdivision Complying Development Application fee will be on exhibition at Council's Civic Administration Building, 135 Rusden Street, Armidale and the Armidale Dumaresq Memorial Library, Faulkner Street, Armidale until the close of business on Friday, 6 August 2010. You can also access the exhibited material through Council's website at www.armidale.nsw.gov.au.

Submissions on the proposed fee are welcomed and should be lodged no later than 5.00pm on Friday, 6 August 2010. Please address submissions to:

The General Manager, Armidale Dumaresq Council PO Box 75A, ARMIDALE NSW 2350 or via email to: council@armidale.nsw.gov.au. For enquiries please call (02) 6770 3823. Please note that if you make a submission, other people may have access to your comments. This may be as a result of a report to a Council meeting, or as part of an application under the Freedom of Information Act.

ARMIDALE WATER SUPPLY (11 July 2010)

Dam Level % Puddledock 95 % Malpas 87 %

Treated WaterUsage/ML 38 ML

Blue Green Algae (BGA) Alert

- Recreational Users (Malpas Dam) Nil
- Raw Water Users (Malpas Pipeline) No BGA Alert
- Raw Water Users (Puddledock Pipeline) No BGA Alert

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Recycling Collection Crates "Good Question" Feb 2010 placed in Council's weekly Newspaper Page

GOOD QUESTION

Why does Council use a crate system for the recycling collection service and not a mechanized system such as the wheelie-bin that is used by many other Councils?

Council has deliberately used the crate system for the following reasons.

- Crate system achieves a very low contamination rate. A rate of less than 3% contamination is consistently achieved in Armidale which is a credit to our residents and to the collection contractor.
- Wheelie-bin system achieves contamination rates of 15% on average and over 25% in some areas.
- A low contamination rate maximises material re-use potential and minimises waste to landfill which achieves the intended environmental objective.
- Collection operator sees the contents of the crates before loading and can reject contaminated recyclables.
- Amount of recyclables put out by residents is not limited by the size of the crates used. Residents can put out as many crates as needed without extra charge for collection.
- Council operates two streams for recyclables collection; one for clean paper and cardboard with a lid and the second for other recyclables - cans, glass and plastic bottles, plastic bags and other recyclable containers all rinsed and with lids removed.
- Heavy duty crates can be purchased at cost from Council's Customer Service Centre (currently $14 each without lid and $18 each with lid).
- Untidiness and littering can be addressed by residents placing lids on crates as required.
- OH&S concerns regarding lifting of crates have been addressed by the collection contractor in his operating procedures.

Any resident who has trouble lifting the crates from house to roadside or has any other enquiries should contact Mike Porter from Council on 0427 004 377, 67 703 862 or mporter@armidale.nsw.gov.au

Food Waste "Good Question" May 2010 placed in Council's weekly Newspaper Page

GOOD QUESTION

I hear from recent Community Forum Meetings that Council is considering the introduction of a food waste collection service. What is that all about?

- Armidale's new landfill is proposed to be essentially run as a non-putrescible landfill.
- To do this, putrescible material, which includes foodwaste, will require to be removed from general waste before it is placed into the landfill.
- It is proposed to introduce a combined collection of garden waste and foodwaste as they are the main constituents of putrescible waste.
- This organic material will be composted to produce a quality compost to compliment the current production of mulch for community use.
- In addition, mixed waste which contains small amounts of putrescible material will be stabilised (composting process) and the resultant low quality compost will be used on-site.
- Food waste is a valuable input for the generation of high quality compost.
- By removing food waste from landfills Council can reduce the generation of greenhouse gas emissions and potentially environmentally unfriendly leachate.
- Instead of in the red-top waste bin, it is proposed that residents will dispose of food waste in the current garden waste bin which will become a weekly organics collection service.
- Adding compost to soils is an excellent way of improving the chemical and physical properties of soils, including water holding capacity.
- The facilities required to compost and stabilise putrescible material are currently being identified.
- Community consultation and education processes will be undertaken before the composting/stabilising processes and the organics collection service are adopted by Council.

Chemical Collection "Good Question" Nov 2010 placed in Council's weekly Newspaper Page

GOOD QUESTION

Q: I have concerns about the disposal of toxic chemicals at the proposed new landfill site, what does Council intend to do about this issue?

- Over the past 5 years Armidale Dumaresq Council (ADC) has actively sought to remove chemical waste from our existing landfill by encouraging residents to bring their unwanted chemicals to the Waste Transfer Station (WTS) throughout the year, free of charge.
- Larger commercial quantities of chemical are also accepted throughout the year at a minimal cost, which helps subsidies the cost of disposing of these chemicals in an environmentally responsible manner.
- ADC is the only council in the region and one of only a few nationwide that has a purpose built chemical receiving area that allows residents to safely dispose of chemicals all year round.
- Once a year ADC's chemical collection contractor (Transpacific Industries) collects these chemicals along with any other unwanted chemicals that are brought to the WTS on the advertised chemical clean up day.
- Providing this year long chemical collection service costs the Armidale community a significant amount however the environmental benefits are considered very worthwhile.
- The success of this service can be measured by the quantities of chemicals collected by Transpacific Industries on ADC's behalf compared to other similar sized regional cities.
- ADC collected 7.2T of chemicals, paint and wet & dry cell batteries last financial year compared to 2.4T collected by a larger nearby regional city Council.

If you have any questions regarding the disposal of chemicals please contact either Mike Porter on 0427 004377 or James Turnell on 0428 115337.

Appendix B(vii)

Item: 5.2 **Ref:** INT/2010/19378
Title: PROGRESS REPORT ON AWT PROJECT **Container:** A02/0394-2
Author: Senior Engineer Sewer & Solid Waste
Attachments: 1. AWT trial pics

Introduction:

1. A recent full scale test at the Long Swamp Road landfill of the use a shredder and a trommel demonstrated their capability for separating putrescible fines from municipal solid waste (MSW).
2. The fines produced are currently being stabilised using the Groundswell composting process.
3. Based on the success of the above test, engineering staff are proceeding with the preparation of specifications for the mechanical equipment for the front end of an Alternative Waste Treatment process for the stabilisation of MSW.

Report:

At their meeting of the 24th November 2009 the Waste Management Committee passed the following motion: "That Council proceeds with the construction of an AWT as soon as is practicable". Engineering staff have continued to investigate various components of the two part process – a) composting of organic waste including the collection of organics and b) stabilisation of MSW.

Regarding part b) above, stabilization of MSW, a trial is currently being conducted at the Armidale Waste Transfer Station (WTS) to look at how well shredding and screening worked at separating organics from solid waste. Staff took the opportunity to use a Hammel shredder, owned by the Tomato Exchange, while it was on-site. It was used in conjunction with Jeff Ridley's trommel screen to replicate a fully fledged AWT. The aim was to see how efficiently it would produce putrescible/organic fines for stabilisation. The organic fines generated were then treated with the Groundswell composting process and are currently being stabilised at the waste transfer station, see attachment 6.

MSW from a Monday kerb side collection (red bin) was stockpiled and processed the following morning, see attachment 1. It should be noted that neither the shredder, which was set up for shredding tomato vines, nor the trommel screen were in the ideal configuration for the shredding of MSW.

In total 24.2 tonnes was put through the shredder and trommel, producing 9.34 tonnes of oversized waste, 13.42 tonnes of fines and 1.44 tonnes in the metal pile. This represents an organic separation of approximately 40%. See attachments 2, 3, 4 and 5 for illustrations of this process.

The amount of metals collected was inaccurate as there was a problem with the magnet on the shredder resulting in the metal pile containing significant amounts

of plastics and other rubbish. It is estimated that the actual quantity of metals extracted should have been closer to 500kg.

Taking into account the issues identified above, the trial showed that an AWT comprised of a suitably designed shredder, magnetic separator and screen can successfully remove the majority of putrescible materials from MSW and as a bonus provide a useful amount of metal for recycling.

Engineering staff are currently preparing specifications for the front end of the AWT, including shredder, screen/trommel, magnetic separator, excavator with grab attachment, a building, and the equipment required for composting and the associated infrastructure. It is engineering staff's opinion that irrespective of which stabilising process is adopted to treat putrescible/organic fines, the front end of the AWT will remain the same. Therefore, it is justifiable to move ahead with the preparation of technical specifications for acquisition of the above equipment for the AWT while trials investigating the feasibility of stabilising organic fines using the Groundswell process are ongoing.

Financial Implications:
Initial design and construction costs for the AWT are estimated to be around $3,500,000, to be funded from the waste budget. This estimate of costs excludes a compactor and bins that potentially would be used to transfer waste to the new landfill.

Environmental Implications:
The AWT will provide Waste Management staff with the ability to separate and stabilise as much putrescible material as is practicable from MSW and fulfill our commitment to essentially run the new landfill as a non-putrescible landfill.

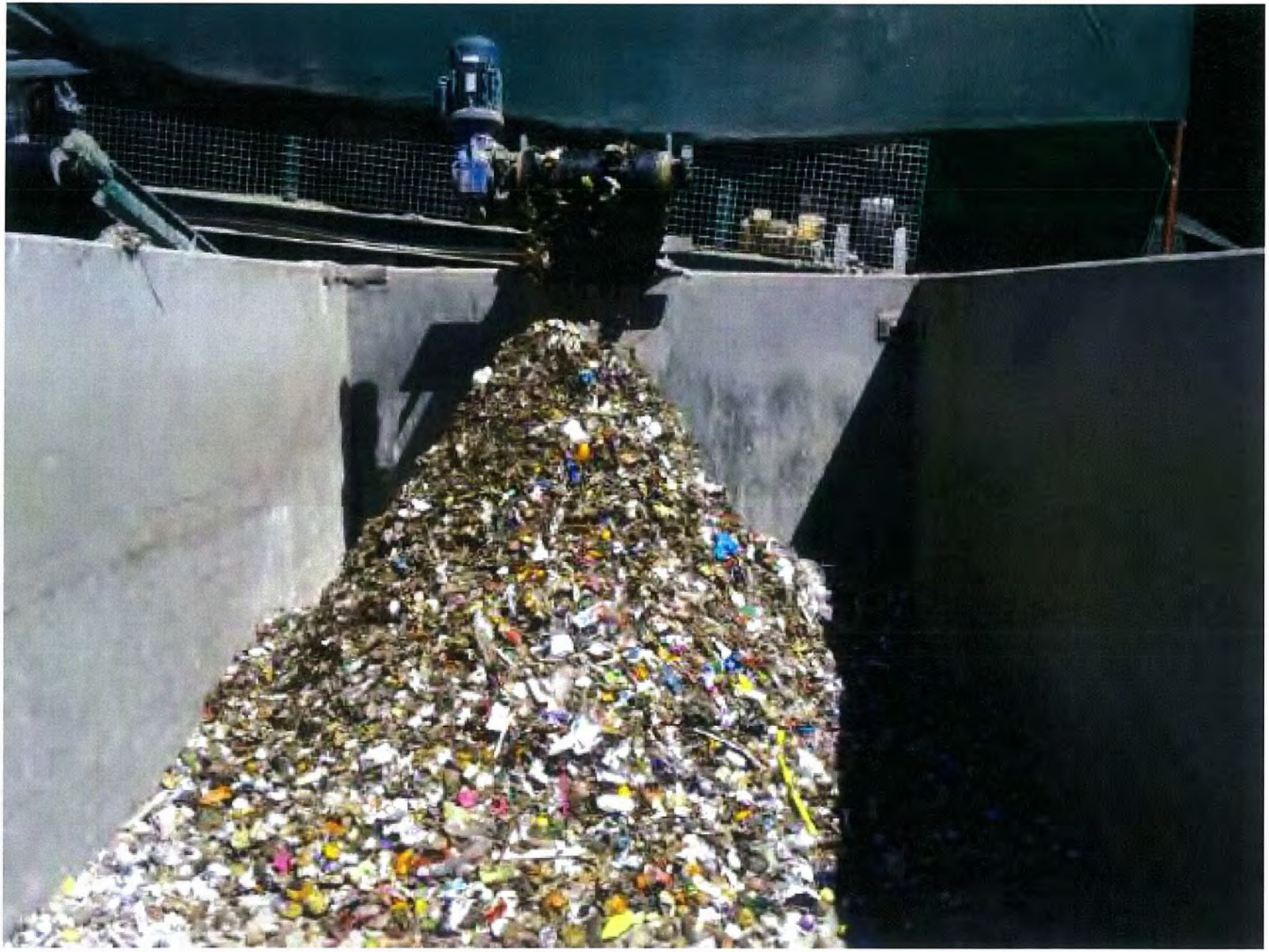
Social Implications:
The AWT will provide the Armidale community with an environmentally responsible MSW waste treatment, and will bring the city inline with larger metropolitan Councils.

Legal Issues:
Unknown.

RECOMMENDATION:

- That the progress report on the establishment of an AWT be noted.
- That the Waste Management Committee endorses the action being taken to prepare the technical specifications for the acquisition of the necessary plant required to separate putrescible waste from MSW to permit stabilisation of this waste so that the residual waste to landfill is essentially non-putrescible waste.
- That staff continue to pursue the option to use Groundswell process as the

process of choice for the composting of clean organic waste and the stabilisation of the organic waste fraction in MSW and report to the next meeting of the WMC with a view to the Committee recommending the process to Council for adoption.

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5.2 PROGRESS REPORT ON AWT PROJECT

Ref: INT/2010/19378

Mr Turnell addressed his report copied below and also tabled some indicative capital establishment costs for the possible AWT facilities totalling $3.5M. He emphasised that these costs were indicative only and approached worst case scenario set-ups. Staff did not expect the costs for the final set-up to reach these levels of cost.

At their meeting of the 24th November 2009 the Waste Management Committee passed the following motion: "That Council proceeds with the construction of an AWT as soon as is practicable". Engineering staff have continued to investigate various components of the two part process – a) composting of organic waste including the collection of organics and b) stabilisation of MSW.

Regarding part b) above, stabilization of MSW, a trial is currently being conducted at the Armidale Waste Transfer Station (WTS) to look at how well shredding and screening worked at separating organics from solid waste. Staff took the opportunity to use a Hammel shredder, owned by the Tomato Exchange, while it was on-site. It was used in conjunction with Jeff Ridley's trommel screen to replicate a fully fledged AWT. The aim was to see how efficiently it would produce putrescible/organic fines for stabilisation. The organic fines generated were then treated with the Groundswell composting process and are currently being stabilised at the waste transfer station, see attachment 6.

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Taking into account the issues identified above, the trial showed that an AWT comprised of a suitably designed shredder, magnetic separator and screen can successfully remove the majority of putrescible materials from MSW and as a bonus provide a useful amount of metal for recycling.

Engineering staff are currently preparing specifications for the front end of the AWT, including shredder, screen/trommel, magnetic separator, excavator with grab attachment, a building, and the equipment required for composting and the associated infrastructure. It is engineering staff's opinion that irrespective of which stabilising process is adopted to treat putrescible/organic fines, the front end of the AWT will remain the same. Therefore, it is justifiable to move ahead with the preparation of technical specifications for acquisition of the above equipment for the AWT while trials investigating the feasibility of stabilising organic fines using the Groundswell process are ongoing.

Financial Implications:
Initial design and construction costs for the AWT are estimated to be around $3,500,000, to be

funded from the waste budget. This estimate of costs excludes a compactor and bins that potentially would be used to transfer waste to the new landfill.

Environmental Implications:
The AWT will provide Waste Management staff with the ability to separate and stabilise as much putrescible material as is practicable from MSW and fulfil our commitment to essentially run the new landfill as a non-putrescible landfill.

In considering the indicative establishment costs, the committee considered that Council staff would be able to undertake a lot of the design and particularly the project management work to reduce these costs.

RECOMMENDATION TO COUNCIL
Moved Cr Beyersdorf Seconded Mr T Masters

(i) **That the progress report on the establishment of an AWT be noted.**
(ii) **That the Waste Management Committee endorses the action being taken to prepare the technical specifications for the acquisition of the necessary plant required to split in two and concentrate in one stream the putrescible material in MSW to facilitate stabilisation of this waste so that the residual waste to landfill is essentially non-putrescible waste.**
(iii) **That staff continue to pursue the option to use Groundswell process as the process of choice for the composting of clean organic waste and the stabilisation of the organic waste fraction in MSW and report to the next meeting of the WMC with a view to the Committee recommending the process to Council for adoption.**
(iv) **That staff be complemented on the work done on the trials of stabilisation of organic waste and mixed residual putrescible waste.**

The Motion on being put to the vote was CARRIED.

Mr Glen Cross-Grant wished it to be recorded in the Minutes that he abstained from voting on the recommendation.

12.7 MINUTES OF THE WASTE MANAGEMENT COMMITTEE MEETING HELD 24 NOVEMBER 2010

Ref: INT/2010/20273

1/10 **Moved Cr Whan** **Seconded Cr Beyersdorf**

(a) That the Minutes of the Waste Management Committee meeting held on Wednesday 24 November 2010 be noted.

(b) (i) That the progress report on the establishment of an AWT be noted.

(ii) That the Waste Management Committee endorses the action being taken to prepare the technical specifications for the acquisition of the necessary plant required to split in two and concentrate in one stream the putrescible material in mixed MSW to facilitate stabilisation of this waste so that the residual waste to landfill is essentially non-putrescible waste.

(iii) That staff continue to pursue the option to use Groundswell process as the process of choice for the composting of clean organic waste and the stabilisation of the organic waste fraction in MSW and report to the next meeting of the WMC with a view to the Committee recommending the process to Council for adoption.

(iv) That staff be complemented on the work done on the trials of stabilisation of organic waste and mixed residual putrescible waste.

(c) That the dates for the 2011 Waste Management Committee meetings are to be: January 19, March 23, May 25, July 27, September 28, November 23.

(d) That the Recycling Collection facility located in Barney Street behind the hospital be closed and appropriate signage be installed advising the public of the closure.

The Motion on being put to the vote was CARRIED UNANIMOUSLY.

Appendix B(viii)

5. NOTICE OF MOTION

5.1 NOTICE OF MOTION - ALTERNATIVE WASTE TREATMENT FACILITY *Ref: INT/2010/20501*

Moved Cr Robinson Seconded Cr Halligan

That Council commit to commissioning the Alternative Waste Treatment (AWT) facility before the new landfill becomes operational, and also sets targets for increased recycling and waste minimisation, and that Council also commits to reserving use of the new landfill for non-putrescible material and arranges alternative means, wherever possible, to dispose of any small amounts of putrescible material that cannot satisfactorily be stabilised by the use of AWT.

SUSPENSION OF STANDING ORDERS

330/10 **Moved Cr Halligan Seconded Cr Beyersdorf**

That Standing Orders be suspended to allow consideration and discussion of recent information provided on the Alternative Waste Treatment Facility.

The Motion on being put to the vote was CARRIED.

RESUMPTION OF STANDING ORDERS

331/10 **Moved Cr Beyersdorf Seconded Cr Gadd**

That Standing Orders be resumed.

The Motion on being put to the vote was CARRIED.

COUNCIL RESOLUTION

332/10 **Moved Cr Robinson Seconded Cr Halligan**

That Motion 5.1 Notice of Motion be withdrawn and therefore lapsed.

The Motion on being put to the vote was CARRIED.

5.1 MOTION ARISING

333/10 **Moved Cr Robinson Seconded Cr Halligan**

That the Matter of the Alternative Waste Treatment Facility is to be further discussed with Council's Waste Management Committee, in order to seek confirmation that wherever possible, the Facility is to be used to minimise the amount of putrescible material which needs to go to landfill.

The Motion on being put to the vote was CARRIED.

Colin Maciver

From: Colin Maciver
Sent: Thursday, 16 December 2010 11:21 AM
To: Nathalie Heaton
Subject: TRIM: 5.1 Notice of Motion - Alternative Waste Treatment Facility
Attachments: AWT and Waste Collection Strategies adopted by Council.pdf; Extracts from Waste Avoidance abd Resource Recovery Strategy 2007.pdf; Waste Strategy 2010.doc

Nathalie,
Cr Whan as chairperson of the WMC has asked for information on this issue. Can you send out this message to Cr Whan and copy to all Councillors, GM & Dir Eng. Thanks.

Cr Whan,

in response to your request for background information in relation to the Notice of Motion, the following information is provided.

Attached are some docs that clarify Council's current position on most of the issues in the Notice of Motion from Councillors Robinson and Halligan.

The AWT and Waste Collection Strategies / Position and Discussion Paper dated Jan 2008 was primarily prepared to bring new members of the Waste Management Committee and Councillors up to speed with major waste issues but it also served to summarise Council's current position and was adopted by the WMC and Council as the action plan and basis for future strategies.

Regarding the specifics of the Notice of Motion, I would like to comment as follows.

Commissioning the Alternative Waste Treatment Facility before the New Landfill becomes operational.
That has always been Council's intent given that Council made the commitment when the site was selected to routinely operate the new landfill as a non-putrescible landfill as much as is practicable. Obviously, in order to do that , the proposed AWT has to be operational well in advance of the new landfill becoming operational.

Targets for Increased Recycling and Waste Minimisation.
The targets for waste avoidance and resource recovery that all NSW Councils are supposed to be working towards are set in the NSW Gov Waste Avoidance and Resource Recovery Strategy 2007. The relevant targets are as per the Extract attached - Sect 4.3 Key Result Areas page 32 of the Strategy.

In terms of meeting these targets, this Council is well down that track (see table below) and efforts to increase our performance further will come at an increasing unit cost and of course is only possible when there are markets available to take the material, including at reasonable purchase prices. Recycling costs; the more we recycle, the more the disposer and the community has to pay.

The logistics of our receival processes does not allow us to clearly separate municipal waste from commercial and industrial waste. However, the information that we do have is advised in the table below. It is a fair assessment of ADC's Recycling performance against the NSW Strategy benchmarks.

As stated above, the logistics of Council's waste collection and disposal processes do not facilitate the acquisition of good data for the individual NSW Benchmark waste streams. However, we do have good reliable data for item 4 below, the total waste stream and for item 3 below, the construction and demolition waste stream. By simple subtraction we can determine a combined total for items 1 & 2 below, the municipal waste stream and the commercial and industrial waste stream.

Note that woodwaste and soils (VENM and ENM) are currently being stockpiled for re-use and are not being disposed of to landfill so they have been accounted for accordingly in the assessment below.

ADC Recycling Benchmark Performance

Waste Stream	ADC Performance	NSW Strategy Target
1. The municipal waste stream	1 & 2 combined	66%
2. The commercial and industrial stream	= 60.6%	63%
3. The construction and demolition stream	90%	76%
4. All waste streams combined	79.4%	Not applicable

New Landfill to be for non-putrescible material only and retain space in Existing Landfill for long-term disposal of Putrescible Material

It is not likely that DECCW would support the continued use of the old landfill once approval for the new landfill has been granted. In the interim DECCW has given approval at the existing landfill to rework areas that had been temporarily covered to add another layer approximately 1.5m thick to provide additional landfill volume at the existing landfill. This is a Stage 1 approval but DECCW didn't approve the Stage 2 approval that would have added another layer approximately 1m thick and allowed even longer use of the existing landfill. Continued use of the exiting landfill in this way is inefficient and expensive.

It does not make sense financially to continue to operate two landfills as suggested when one will do. There will be increased operational nuisance and costs and increased requirements for monitoring (post-closure monitoring is less onerous and costly than operational monitoring).

Construction and operational specifications and monitoring requirements are the same for putrescible and non-putrescible landfills, .

A fundamental strategy in pursuing an AWT for Armidale has been to keep it simple and practical at minimum cost so that it will be affordable to the community yet achieve the objective adopted by Council when the site was selected that "the new landfill can be routinely operated as a Solid Waste Class 2 (now called Non-putrescible) Landfill. To reserve the new landfill for non-putrescible material will probably mean that the current AWT proposal will have to be upgraded at added cost and affordability and ability of the community to pay are already of concern.

Regarding the question as to what would be required to verify that processed putrescible material is then classified as non-putrescible material, this is covered by the NSW Waste Classification Guidelines. A number of tests that would have to be routinely undertaken to confirm that the material was no longer classed as putrescible material. These are detailed in the Waste Classification Guidelines, Part 1 Step 6 and I copy this part below.

Step 6: Is the waste putrescible?
Where chemical assessment of a waste finds it to be general solid waste, a final test may be needed to determine whether it is putrescible or non-putrescible as the contaminant thresholds are the same for these two classes.
General solid waste (non-putrescible) must not contain any wastes that are capable of significant biological transformation. This means that the organics component of the waste:
• has a specific oxygen uptake of less than 1.5 milligrams O2/hour/g total organic solids at 20 degrees Celsius, or
• is such that, during composting (for the purpose of stabilisation), the mass of volatile solids in the organic waste has been reduced by at least 38%, or
• has been treated by composting for at least 14 days, during which time the temperature of the organic waste must have been greater than 40 degrees Celsius and the average temperature greater than 45 degrees Celsius, or
• in the case of biologically treated putrescible wastes, the organics fraction exceeds a self- heating temperature of 40 degrees Celsius, when tested in accordance with the test method in Appendix K of Australian Standards AS 4454–2003: Composts, Soils, Conditioners and Mulches (Australian Standard 2003a), or
• has been subjected to and has met the requirements of alternative tests approved by the EPA from time to time by notice published in the NSW Government Gazette and published on DECC's website.
Where a waste producer does not wish to undertake this test, the waste must be treated as general solid waste (putrescible).

If Council were to operate or licence the landfill as non-putrescible, we will have to undertake the above tests regularly at added cost to operations and still have the problem and cost as to what to do with the material if the requirements of the tests are not met or we have putrescible material to dispose of that is not suited to our AWT processes. For this community, which is relatively isolated from another landfill that would be willing to receive our putrescible material, this seems to be an unnecessary operational hurdle and expense when the only real benefit would be a small reduction in methane production in the landfill. Methane production levels

are certainly not a problem in our existing putrescible waste landfill.

Operating the landfill as a non-putrescible landfill will have very little effect, if any, on the composition of leachate.

The Notice of Motion does not propose a change to the planning application from a putrescible landfill to a non-putrescible landfill, however this could be inferred so we should be mindful that a last minute change of this significant nature could significantly affect the confidence that the Department of Planning and other Government Departments have in Council's Waste Management Strategy.

Colin Maciver
Utilities Manager, Armidale Dumaresq Council
Tel 02 67 703 849 Fax 02 6772 9275
Mob 0427 410 723
e-mail cmaciver@armidale.nsw.gov.au

ARMIDALE ALTERNATIVE WASTE TECHNOLOGY (AWT)
IN ASSOCIATION WITH PROPOSED NEW LANDFILL
POSITION AND DISCUSSION PAPER JANUARY 2008

INTRODUCTION

The purpose of this discussion paper is to summarise how we have progressed to our current position with the proposal to introduce additional processing equipment (Alternative Waste Technology - AWT) at the Armidale Long Swamp Road waste management facility and to stimulate discussion on where we go to from here.

Council adopted at the Council Meeting held 22 March 2004 the following recommendation by the Armidale Dumaresq Landfill Community Consultative Committee (ADLCCC), the committee that had been formed to provide community input to the site selection process for the new landfill.

"As part of the design considerations for the new landfill, consideration be given to incorporation of additional processing and separation facilities to separate putrescible material and additional mixed waste in order to minimize material going to new landfill and with the ultimate aim of achieving a Class 2 Landfill."

In response to this Council Resolution, a major project has been initiated to investigate options for and subsequently establish expanded waste processing facilities at the Long Swamp Road Waste Management Facility. This major project is being undertaken in conjunction with the establishment of the new landfill.

The original recommendation/resolution has been refined a bit since 2004 through the various activities that have taken place since then including project tendering, consultation processes and consideration by Council staff, the Waste Management Committee and Council. I would suggest that the project briefing now reads something like this (please feel free to refine a bit more);

"As part of the design considerations for the new landfill, consideration be given to incorporation of additional processing and separation facilities to compost and stabilise putrescible material, increase the removal of recyclable materials and minimise the amount of residual waste going to the new landfill such that the new landfill can be routinely operated as a Solid Waste Class 2 Landfill. The new landfill will be licenced as a Solid Waste Class 1 landfill so that Solid Waste Class 1 material can be deposited in the landfill when necessary.

Also, at the Council Meeting held December 2007, Council resolved;

(a) *That the Minutes of the Waste Management Committee Meeting held on 27 November 2007 be noted.*

(b) *That Council Officers proceed to investigate the best process to progress the establishment of a Gore Cover or other AWT option and to report back to the meeting.*

(c) That Council Officers develop an overarching strategy plan that integrates the use of biodegradable plastic bags available from local retail outlets and a putrescible waste collection service into Council's operations to reduce overall waste to landfill.

SUBSEQUENT ACTION

Following the above Resolution of Council at the Dec 2007 meeting, the following action has been taken.

1) Cleanaway, the Australian agents and suppliers of the Gore Cover process have been requested to follow up on the presentation given to the Waste Management Committee in Oct 2007 by Paul MacBride from Cleanaway. They have been asked to provide concept designs and costings (capital, operation and maintenance) for the Gore Cover process specific to our needs in Armidale. In particular, they have been asked to address the two main AWT issues that are addressed in more detail later in this document viz.
   - Composting of separated organics (greenwaste and foodwaste) to create a high quality compost.
   - Stabilisation of residual waste before placement in the landfill. In association with this there is the opportunity to remove more recyclable material from the mixed waste stream and we wish to take advantage of that opportunity.
2) Maunsell have been similarly requested to provide concept designs and costings on "other AWT options".
3) Discussions have been held with Sita Environmental Solutions and we expect to receive a proposal outlining their capabilities in providing an AWT solution for Armidale.
4) Research and enquiries continue to be conducted regarding the options for foodwaste collection and in particular regarding the use of compostable plastic bags.

Some information obtained to date is attached and referenced to the meeting Agenda.

ENVIRONMENTAL REQUIREMENTS AND DEFINITIONS RELATING TO SOLID WASTE AND LANDFILLS

To assist with consideration of the issues, some of the important environmental requirements and definitions are provided in an Appendix at the end of this document.

SO WHAT DO WE HAVE TO DO TO MINIMISE WASTE TO LANDFILL AND TO ROUTINELY OPERATE THE NEW LANDFILL AS A SOLID WASTE CLASS 2 LANDFILL?

1. TO MINIMISE WASTE TO LANDFILL

Council and the Community (we) need to;

a) increase the recovery of **recyclable material** from the total waste stream and particularly from mixed waste; and

b) remove more **organic material** which primarily consists of foodwaste from mixed waste destined for landfill. This is a sub-set of a) above but is more importantly relevant to the operation of the new landfill as a Solid Waste Class 2 landfill and is therefore addressed in the next section.

Recyclable material. We are already doing a really good job of sorting recyclable material at source and at the Waste Transfer Stations so that this material is recovered for re-use and does not end up in the landfill. However, in terms of sorting at source, there is still room for improvement; particularly in the commercial and industrial sectors.

Although the community is doing really well in terms of sorting at source, there is still a significant amount of recyclable material ending up in the garbage or mixed waste stream and there is opportunity here to recover more recyclables from the waste destined for landfill.

How do we remove recyclable material from the mixed waste stream?

We need to install additional processing equipment at the Waste Management Facility on Long Swamp Road to sort and recover recyclables from mixed waste. After removal of recyclables, it is proposed that the resultant remnant material or residual waste goes through a stabilising process (composting) followed by a screening process to remove the composted material before the residual waste is deposited in the landfill. The stabilising process is detailed in Section 2 following.

How do we remove organic/putrescible waste from mixed waste?

This is addressed in the next section.

2. TO ROUTINELY OPERATE THE NEW LANDFILL AS A SOLID WASTE CLASS 2 LANDFILL

In order to routinely operate the new landfill as a Solid Waste Class 2 landfill, putrescible waste needs to be routinely removed from the mixed waste stream that is to be deposited in the landfill. Putrescible waste means food or animal matter (including dead animals or animal parts), or unstable or untreated biosolids. It is one of the two principal forms of organic waste that we have to deal with at our waste management facilities. The other principal form is greenwaste or garden waste.

Minimisation of deposition of foodwaste and animal waste in landfill is important not only in terms of minimising waste to landfill but more significantly, it is important in terms of the reduction of leachate and anaerobic gas production inside the landfill.

Greenwaste

We are already doing a really good job of recycling greenwaste by separate collection and chipping processes to form mulch which is readily purchased by the community and is also used in Council's own operations. Very little greenwaste ends up in landfill – usually only when it has been contaminated with other material or placed in mixed waste. Any greenwaste present in the mixed waste stream will be composted similar to foodwaste as described in the following sections. So greenwaste removal from landfill is already well catered for and will continue to be so.

Putrescible Waste

Putrescible waste however, in the form of foodwaste from domestic and commercial premises together with animal waste, is all currently disposed of to landfill and we need to address this so that we can routinely operate the new landfill as a Solid Waste Class 2 landfill.

Other forms of putrescible waste such as grease trap waste, septic tank waste and sewage treatment plant bio-solids are processed at the sewage treatment plant and the end products are utilised at the re-use farm. We do not have to deal with these putrescible wastes at our landfill.

Our putrescible waste primarily consists of foodwaste with a minor requirement for the disposal of animal carcasses. The requirement to be able to dispose of animal carcasses as and when needed is one of the reasons for the proposal to licence the new landfill as a Solid Waste Class 1 landfill. Small animal carcasses should be able to be composted but the larger animals will have to be buried in the landfill as per current practice.

So foodwaste is the main form of putrescible waste that we have to deal with. It is currently disposed of as garbage or mixed waste for landfill in the red-lid wheelie bins or larger skip bins or other containers from commercial premises and it all goes directly to landfill as mixed waste.

How do we remove foodwaste from mixed waste and how do we process it?

It is anticipated that the foodwaste that is currently present in mixed waste will in future be presented at the Long Swamp Road facility in two forms;

a) in an organics collection stream (greenwaste and foodwaste) and

b) in the unsorted waste/mixed waste/garbage stream.

The reality is that not all residents will participate fully in the sorting of recyclables at source or in the proposed foodwaste collection service so we have to be able to accommodate this in our processes. There will continue to be significant quantities of recyclable material and putrescible material in mixed waste/garbage.

a) It is proposed that we provide an organics collection service consisting of a combined greenwaste and foodwaste bin to residential, commercial and industrial areas. This mixed organics material can then be combined with other quality greenwaste material and composted to form a quality compost for public sale and for Council's own operational needs. To provide the composting process, we are particularly interested in the Gore Cover process but we are still open to consideration of other practical options for the Armidale situation.

b) For the putrescible waste (and other organic material) that is in mixed waste, it is proposed that in addition to the processes for removal of recyclables from the mixed waste stream, processes are provided for stabilisation or composting of these organics followed by removal of the composted material from the residual waste before it is deposited in the landfill. We are investigating the possibility of using the Gore Cover process or other suitable process to carry out the stabilisation process.

For collection of domestic organics as outlined in a) above, I suggest that we use the current 240L greenwaste wheelie bin as the receptacle for collection and that collection is undertaken weekly mainly because it would not be acceptable to have foodwaste sitting in household bins for extended periods. Bin liners for the 240L bins should not be necessary if the foodwaste is securely contained in compostable plastic bags or well wrapped in newspaper.

Foodwaste is messy stuff and to facilitate a clean and secure means of collection in the kitchen, I suggest that kitchen bins are lined with compostable (not just biodegradable) bags with tiers to facilitate tidy and secure containment of the foodwaste in the organics bin. Foodwaste can also be wrapped in newspaper which is compostable before being placed in the organics bin.

To ensure that appropriate compostable kitchen bin liners are used, Council could opt to be the supplier of the bags and by virtue of large bulk purchase offer them at minimum cost. Residents could be periodically supplied with bags with the cost being met by an appropriate increase in the annual waste management charge.

The red lid wheelie bin for domestic mixed waste (garbage) will in future undoubtedly sometimes contain putrescible waste that we will have to stabilise through a composting process. To cater for this, we should make compostable bin liners for 140L bins available to those residents who wish to use bin liners in their red lid garbage bins. For those who no longer dispose of foodwaste in their red lid garbage bin, liners for these bins may not be required. Using compostable bin liners for red lid garbage bins will assist in the stabilisation of mixed waste and the reduction of plastic in the residual waste to landfill.

Enquiries have been made about the availability and costs of suitable compostable bags and some information obtained to date is attached to this Paper.

3. IN SUMMARY WE ARE CONSIDERING TO UNDERTAKE THE FOLLOWING

a) Improve community performance generally in sorting of recyclables at source through an education and awareness programme. We will be working with Armidale Recycling Services on this.

b) Investigate the needs of the commercial and industrial sectors for disposal of recyclable material by conducting a survey of these sectors.

c) Introduce services as required following the assessment of the results of the survey in b) above.

d) Continue to encourage sorting at source through penalty fees at waste transfer stations for disposal of unsorted waste.

e) Investigate the needs of the commercial and industrial sectors for disposal of foodwaste material including how it may best be collected by conducting a survey of these sectors.

f) Transpose the existing fortnightly greenwaste collection service to residential premises to a weekly organics collection service to include foodwaste and retain same 240L wheelie bin.

g) Introduce an organics or foodwaste collection service to other premises that have a need to dispose of these materials. Council contract or private enterprise? Benefit of Council contract is control of overall activity across whole community.

h) Conduct a Community Education Programme to explain and encourage participation in the proposed foodwaste/organics collection services and the organics composting processes.

i) Change the weekly mixed waste or garbage collection service using the same size 140L red lid wheelie bin to a fortnightly service.

j) Provide residents with periodic supplies of compostable bin liners for kitchen bins for the disposal of foodwaste and cover the cost of these liners by increasing the annual waste management charge appropriately (estimated to be of the order of $20 per service for 2 bags per week for 8000 services). Also make available for sale at Council offices, compostable bin liners for 140 L and 240 L wheelie bins.

k) Establish a composting process using the Gore Cover or other AWT option at the Long Swamp Road Waste Management facility to facilitate the composting of the collected foodwaste and some of the greenwaste to produce a quality compost – best quality compost.

l) Continue to mulch a proportion of the greenwaste.

m) Install processing equipment at the Long Swamp Road Waste Management facility to process mixed waste and in particular to:

- sort material and remove bulky items and obvious recyclable material to reduce the quantity of material to be processed and stabilised (use a sorting floor?);

- shred compostable/plastic bags so that contents are accessible;
- process the mixed waste to remove recyclable material;
- stabilise (compost) the residual waste to facilitate removal of the putrescible content using the Gore Cover or other AWT option;
- remove the resultant compost by screening before the residual waste is deposited in the landfill – second best quality compost. Could be well utilised at landfill and other Council sites for landscaping and capping purposes.
- Deposit residual waste to landfill.

Important Note

In the above proposals it is important to note that there are two separate composting processes;

- one process composts quality organics in the form of foodwaste and greenwaste (and other organic material as necessary) to create a quality compost; and
- the other process stabilises (composts the putrescibles in and removes the resultant compost from) residual mixed waste before this material is placed in the landfill.

4. CONCLUSION

Members of the Waste Management Committee are invited to consider and debate these issues and proposals with a view to formulating future waste management strategy for Armidale Dumaresq Council and to make appropriate recommendations to Council.

Colin Maciver
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New England Strategic Alliance of Councils
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APPENDIX

SOME IMPORTANT ENVIRONMENTAL REQUIREMENTS AND WASTE MANAGEMENT DEFINITIONS

From the Department of Environment and Conservation / Environment Protection Authority "**ENVIRONMENTAL GUIDELINES: SOLID WASTE LANDFILLS**"

2. ENVIRONMENTAL ISSUES AND GOALS IN LANDFILLING

The environmental issues of primary concern to the community and the EPA in relation to landfilling operations are:

1. Water pollution - i.e. discharges of pollutants to ground and surface waters.
2. Air pollution - i.e. emissions of pollutants to the atmosphere.
3. Land management and conservation.
4. Hazards and loss of amenity.

2.1 WATER POLLUTION

Ground and surface waters can be contaminated by untreated leachate from landfill sites. Leachate is the liquid that percolates through landfills as a result of infiltration and/or decomposition of the wastes. It may cause serious water pollution if it is not properly managed.
Surface water run-off from a landfill site can cause unacceptable sediment loads in receiving waters, while uncontrolled surface water run-on can lead to excessive generation of leachate.

Environmental Goals

Landfill design, monitoring, management and remediation must comply with the following Environmental Goals:

2.1.1 Preventing pollution of water by leachate

Leachate must be controlled within the landfill site, ensuring that neither groundwater nor surface water is polluted.

3.2.3 Proposed landfill categories

For the purposes of regulation, three categories of landfill have been established.

***Inert waste landfill** means any landfill that accepts only inert wastes.*
Inert waste landfills are subdivided into two classes:
• Class 1 - all inert wastes including stabilised asbestos cement and physically, chemically or biologically fixed, treated or processed waste in accordance with any special requirements that may be set by the EPA.
• Class 2 - all inert wastes except stabilised asbestos cement or physically, chemically or biologically fixed, treated or processed waste.

***Solid waste landfill** means any landfill that accepts solid waste. A solid waste landfill may also receive inert waste.*
Solid waste landfills are subdivided into two classes:

• Class 1 - all solid waste including putrescible waste and other wastes approved by the EPA.
• Class 2 - all solid waste with the exception of putrescible waste and other wastes approved by the EPA.
Putrescible waste means food or animal matter (including dead animals or animal parts), or unstable or untreated biosolids.
It should be noted that the Government envisages banning garden wastes from landfills in the near future.

***Hazardous waste landfill** means any landfill that accepts any wastes formally defined as 'hazardous wastes' in statutory instruments (see Appendix B for current definition) or as specifically determined through any special requirements that may be set by the EPA.*

GLOSSARY

Leachate
Liquid released by, or water that has percolated through, waste and which contains dissolved and/or suspended liquids and/or solids and/or gases.

Putrescible waste
Waste being food or animal matter (including dead animals or animal parts), or unstable or untreated biosolids.

Organic waste
One or more of the following types of waste: garden, untreated wood, fibrous, vegetables, fruits, cereals, biosolids, manures, fatty foods, meat, fish and fatty sludges.

From the "**PROTECTION OF THE ENVIRONMENT OPERATIONS ACT 1997**":

Part 3 - Interpretative provisions
Division 2 - Special interpretative provisions relating to waste

***"putrescible waste"** means:*
(a) food waste, or
(b) waste consisting of animal matter (including dead animals or animal parts), or
(b1) grease trap waste, or
(c) biosolids categorised as Stabilisation Grade C in accordance with the criteria set out in the Biosolids Guidelines.

Part 4 Types of solid waste

(1) Municipal waste, being waste consisting of:
(a) household domestic waste that is set aside for kerb side collection or delivered by the householder directly to a waste facility, or
(b) other types of domestic waste (eg domestic clean-up and residential garden waste), or
(c) local council generated waste (eg waste from street sweeping, litter bins and parks).
(2) Biosolids categorised as Restricted Use 2 or 3 in accordance with the criteria set out in the Biosolids Guidelines, manure and night soil.
(3) Waste contaminated with lead from residential premises or educational or child care institutions.
(4) Cleaned pesticide, biocide, herbicide or fungicide containers.
(5) Drained and mechanically crushed oil filters, and rags and oil absorbent materials (not containing free liquids) from automotive workshops.
(6) Disposable nappies, incontinence pads and sanitary napkins.
(7) Food waste.
(8) Vegetative waste generated from agriculture or horticulture.
(9) Non-chemical waste generated from manufacturing and services (including metal, timber, paper, ceramics, plastics, thermosets and composites).

ARMIDALE DUMARESQ COUNCIL
WASTE MANAGEMENT COMMITTEE MEETING – 6 FEBRUARY 2008
(A02/0394)

PRESENT: Cr H Beyersdorf (chair), Cr B Whan, Clr K Brown (USC), Mr D Scott, Mr M Porter, Mr J Lax, Mr D Steller, Mr M Maxwell and Mr C Maciver.

Guest: Ms S Mitchell was welcomed by Cr Beyersdorf. Ms Mitchell will be working in the Utilities Department for the next four months on a project to investigate improvement to services and waste sorting and recovery in the commercial and industrial sectors of Armidale.

ITEM 1
APOLOGIES: Dr R Patterson, Ms K Ganza, Cr P Ducat, Mr R Glencross-Grant, Cr Burey

ITEM 2
CONFIRMATION OF PREVIOUS MINUTES
MOVED CR BROWN SECONDED MR LAX

That the Minutes of the Waste Management Committee Meeting held on 27 November 2007 be confirmed.

ITEM 3
DECLARATION OF INTEREST
Nil

ITEM 4
MATTERS ARISING

4.1 Community Representative for the Waste Management Committee - Expressions of Interest.

Two expressions of interest have been received Ms Sara Schmude and Mr Trevor Masters.

Committee discussed the merits of the two applicants and considered the input provided by Mr Glencross-Grant via his E-mail circulated prior to the meeting. Although there was one vacancy, it was concluded that both applicants would make worthy committee members and that both should be accepted on the Committee.

RECOMMENDATION TO COUNCIL
MOVED M PORTER SECONDED J LAX

That Ms Sara Schmude and Mr Trevor Masters be invited to become Community Representatives on the Waste Management Committee.

ITEM 5
REPORTS

5.1 New Landfill Project Update.

Mr Maciver addressed the Report (copy attached) provided to the Committee prior to the meeting with particular emphasis on the ramifications of the Determination by the Commonwealth Department of Environment Water Heritage and the Arts that the Landfill Proposal is a "Controlled Action" under the Commonwealth Environment Protection and Biodiversity Act.

5.2 Northern Inland Regional Waste Group

Mr Porter advised that the next meeting of the NIRW Group will be held on 13 February 2008.

5.3 Fluorescent Tubes

Mr Porter reported that the facility for the disposal of Fluorescent Tubes was in operation at the Waste Transfer Station and was working well. The question was raised regarding safety with respect to broken tubes – mercury vapour.

Action:
Mr Porter to check on safety issues with respect to broken fluorescent tubes.

5.4 E Waste Building

Mr Porter reported that the E Waste Building was still being fitted out and progress has been slow. The work is being undertaken by work for the dole workers.

5.5 AWT options for Long Swamp Road Waste Management Facility and
5.6 Putrescible Waste Collection Service

The Position and Discussion Paper prepared by Mr Maciver and provided with the Agenda addressed both these items and the committee discussed both issues together.

Cr Beyersdorf commented that the report was pretty self explanatory and called for comments and input from the committee.

Cr H Beyersdorf commented that he has concerns that there could be complaints and difficulties with Item 3 i) regarding the suggestion that we consider changing the collection of the red-lid mixed waste bin from a weekly service to a fortnightly service.

Cr Whan commented that item 3 i) has to be considered along with item 3 f) in which it is suggested that we consider changing the greenwaste collection service to an organics collection service (greenwaste and foodwaste together) and we consider changing this service from a fortnightly service to a weekly service.

5.5 AWT options for Long Swamp Road Waste Management Facility and
5.6 Putrescible Waste Collection Service (cont)

Regarding the concern about the suggested red-lid fortnightly mixed waste collection, Cr Beyersdorf suggested that we could offer a larger bin to those that needed one, at an appropriate additional cost. Mr Maciver added to this and suggested that we consider also offering a "small service" to cater for residents such as old age pensioners that have small waste disposal needs. Other Councils like Port Macquarie Hastings do this. Mr Porter expressed concerns that this could introduce complications for the collection contractors.

Mr Scott referenced the paper presented at the Oct 2007 Coffs Harbour Waste Management Conference by Peter Watson from the Region of Durham, Ontario, Canada. This paper emphasised the importance of education and the need to involve the community in the change process including conducting trials.

Mr J Lax advised that the Canada Bay area in Sydney has been conducting trials and we should try to get information on the results of these trials.
Action: Mr Maciver.

Cr Beyersdorf raised the question as to how the community is provided with compostable bags. Options to be considered include:

- Council provides them and funds by an increase in the annual waste charge;
- Council sell them at Council premises;
- Get shops to sell them.

J Lax made the comment that we need to get plastic bags out of the waste stream.

Item 3 of Mr Maciver's Discussion Paper – the Summary of Suggested Strategy for the Introduction of AWT and the Management of Putrescible Waste was discussed. It was agreed that item i) should be extended so that it now reads "Change the weekly mixed waste or garbage collection service using the same size 140L red lid wheelie bin to a fortnightly service *and consider other options on an as needs basis*"

RECOMMENDATION TO COUNCIL
MOVED CR BEYERSDORF SECONDED CR WHAN

(a) That Ms Sara Schmude and Mr Trevor Masters be invited to become Community Representatives on the Waste Management Committee.

(b) (i) That the Position and Discussion Paper on Alternative Waste Technology in association with the new landfill prepared by the Utilities Manager Mr Maciver for the Waste Management Committee be noted.

(ii)That Council endorses the actions listed as follows (Item 3 of the Paper, "Basis for Future Strategy for the introduction of AWT" INT/2008/01505).

- **Improve community performance generally in sorting of recyclables at source through an education and awareness programme. We will be working with Armidale Recycling Services on this.**

ITEM 5 (Cont)

- **Investigate the needs of the commercial and industrial sectors for disposal of recyclable material by conducting a survey of these sectors.**
- **Introduce services as required following the assessment of the results of the survey in b) above.**
- **Continue to encourage sorting at source through penalty fees at waste transfer stations for disposal of unsorted waste.**
- **Investigate the needs of the commercial and industrial sectors for disposal of foodwaste material including how it may best be collected by conducting a survey of these sectors.**
- **Transpose the existing fortnightly greenwaste collection service to residential premises to a weekly organics collection service to include foodwaste and retain same 240L wheelie bin.**

Introduce an organics or foodwaste collection service to other premises that have a need to dispose of these materials. Council contract or private enterprise? Benefit of Council contract is control of overall activity across whole community.

- **Conduct a Community Education Programme to explain and encourage participation in the proposed foodwaste/organics collection services and the organics composting processes.**
- **Change the weekly mixed waste or garbage collection service using the same size 140L red lid wheelie bin to a fortnightly service *and consider other options on an as needs basis.***
- **Provide residents with periodic supplies of compostable bin liners for kitchen bins for the disposal of foodwaste and cover the cost of these liners by increasing the annual waste management charge appropriately (estimated to be of the order of $20 per service for 2 bags per week for 8000 services). Also make available for sale at Council offices, compostable bin liners for 140 L and 240 L wheelie bins.**
- **Establish a composting process using the Gore Cover or other AWT option at the Long Swamp Road Waste Management facility to facilitate the composting of the collected foodwaste and some of the greenwaste to produce a quality compost – best quality compost.**
- **Continue to mulch a proportion of the greenwaste.**
- **Install processing equipment at the Long Swamp Road Waste Management facility to process mixed waste and in particular to:**

- **sort material and remove bulky items and obvious recyclable material to reduce the quantity of material to be processed and stabilised (use a sorting floor?);**
- **shred compostable/plastic bags so that contents are accessible;**
- **process the mixed waste to remove recyclable material;**
- **stabilise (compost) the residual waste to facilitate removal of the putrescible content using the Gore Cover or other AWT option;**

ITEM 5 (Cont)

- **remove the resultant compost by screening before the residual waste is deposited in the landfill – second best quality compost. Could be well utilised at landfill and other Council sites for landscaping and capping purposes.**
- **Deposit residual waste to landfill.**

ITEM 6
GENERAL BUSINESS

Nil

ITEM 7
GENERAL BUSINESS

Nil

ITEM 8
WHAT'S ON YOUR MIND?

Mr Porter advised the Committee of the Waste Management Service provided to the Lower Creek area by the Macleay River in which about 15 roadside bins are serviced by a Council contractor and taken to the Bellbrook Waste Transfer Station operated by Kempsey Shire Council. This is the continuation of a service provided by Dumaresq Shire Council in agreement with Kempsey Shire Council.

Mr D Scott advised that he was interested in the comments regarding different sized bins.

Cr K Brown informed the Committee that supermarkets now have available compostable bags.

Mr J Lax would like the Committee to thank Armidale Recycling Services for the tour of the Materials Recycling Facility just before Christmas.

Mr Lax advised that he has been asked to give a talk to the local Probus Group about waste management. Committee endorsed this on the understanding that John would be presenting the Committee's views and strategies.

Cr H Beyersdorf commented that he would like to see more commercial and industrial participation in recycling and collection and disposal of putrescible waste

Next meeting is scheduled for Wednesday, 2 April 2008 at 5.30pm in the Council Chambers.
Meeting closed at 7.00 pm

Cr H Beyersdorf
Chairperson

Councillor Waters left Council Chambers at 8.19PM.

ITEM: 11.005/08*	File No. A07/3443
TITLE: MINUTES OF THE WASTE MANAGEMENT COMMITTEE SPECIAL MEETING HELD ON 6 FEBRUARY 2008	
RESPONSIBLE OFFICER: Utilities Manager	

EXECUTIVE SUMMARY:

- Minutes of the Waste Management Committee Special Meeting held 6 February 2008 with recommendations for endorsement.

REPORT:

Within the attachments are the Minutes from the Waste Management Committee Meeting held 6 February 2008. The Minutes contain recommendations that require endorsement by Council.

11.005/08*
MOVED CR BEYERSDORF SECONDED CR WHAN

That the Minutes of the Waste Management Committee Meeting held 6 February 2008 and the following recommendations endorsed:

(a) That Ms Sara Schmude and Mr Trevor Masters be invited to become Community Representatives on the Waste Management Committee.

(b) (i) That the Position and Discussion Paper on Alternative Waste Technology in association with the new landfill prepared by the Utilities Manager Mr Maciver for the Waste Management Committee be noted.

(ii) That Council endorses the actions listed as follows (Item 3 of the Paper, "Basis for Future Strategy for the introduction of AWT" INT/2008/01505).

- **Improve community performance generally in sorting of recyclables at source through an education and awareness programme. We will be working with Armidale Recycling Services on this.**
- **Investigate the needs of the commercial and industrial sectors for disposal of recyclable material by conducting a survey of these sectors.**
- **Introduce services as required following the assessment of the results of the survey in b) above.**
- **Continue to encourage sorting at source through penalty fees at waste transfer stations for disposal of unsorted waste.**
- **Investigate the needs of the commercial and industrial sectors for disposal of foodwaste material including how it may best be collected by conducting a survey of these sectors.**

ITEM: 11.005/08* (Cont)	File No. A07/3443
TITLE: MINUTES OF THE WASTE MANAGEMENT COMMITTEE SPECIAL MEETING HELD ON 6 FEBRUARY 2008	
RESPONSIBLE OFFICER: Utilities Manager	

11.005/08*
MOVED CR BEYERSDORF SECONDED CR WHAN

- **Transpose the existing fortnightly greenwaste collection service to residential premises to a weekly organics collection service to include foodwaste and retain same 240L wheelie bin.**

- **Introduce an organics or foodwaste collection service to other premises that have a need to dispose of these materials. Council contract or private enterprise? Benefit of Council contract is control of overall activity across whole community.**

- **Conduct a Community Education Programme to explain and encourage participation in the proposed foodwaste/organics collection services and the organics composting processes.**

- **Change the weekly mixed waste or garbage collection service using the same size 140L red lid wheelie bin to a fortnightly service *and consider other options on an as needs basis.***

- **Provide residents with periodic supplies of compostable bin liners for kitchen bins for the disposal of foodwaste and cover the cost of these liners by increasing the annual waste management charge appropriately (estimated to be of the order of $20 per service for 2 bags per week for 8000 services). Also make available for sale at Council offices, compostable bin liners for 140 L and 240 L wheelie bins.**

- **Establish a composting process using the Gore Cover or other AWT option at the Long Swamp Road Waste Management facility to facilitate the composting of the collected foodwaste and some of the greenwaste to produce a quality compost – best quality compost.**

- **Continue to mulch a proportion of the greenwaste.**

ITEM: 11.005/08* (Cont)	File No. A07/3443
TITLE: MINUTES OF THE WASTE MANAGEMENT COMMITTEE SPECIAL MEETING HELD ON 6 FEBRUARY 2008	
RESPONSIBLE OFFICER: Utilities Manager	

11.005/08*
MOVED CR BEYERSDORF **SECONDED CR WHAN**

- **Install processing equipment at the Long Swamp Road Waste Management facility to process mixed waste and in particular to:**
  - **sort material and remove bulky items and obvious recyclable material to reduce the quantity of material to be processed and stabilised (use a sorting floor);**
  - **shred compostable/plastic bags so that contents are accessible;**
  - **process the mixed waste to remove recyclable material;**
  - **stabilise (compost) the residual waste to facilitate removal of the putrescible content using the Gore Cover or other AWT option;**
  - **remove the resultant compost by screening before the residual waste is deposited in the landfill – second best quality compost. Could be well utilised at landfill and other Council sites for landscaping and capping purposes.**
  - **Deposit residual waste to landfill.**

The Motion on being put to the vote was CARRIED UNANIMOUSLY.

Attachments: O/2008/1106 and O/2008/1107

It should be noted that the tonnage data provided in this Strategy is different from the data outlined for 2002-03 that was provided in the 2004 Progress Report. This is due to the recasting of the disposal data using the new waste data reporting system and correction of a number of errors in the recycling data (see also section 1.1).

Table 1 also shows that Sydney generated 390,000 tonnes more waste in 2004–05 (8.9 million tonnes (mt) compared with 8.51mt in 2002–03) and the Hunter, Central Coast and Illawarra regions generated 300,000 tonnes more waste in 2004–05 (2.27mt compared with 1.97mt in 2002–03).

In rural and regional NSW data remains quite limited. Reported tonnages have increased substantially between 2002–03 and 2004–05 (626,000 tonnes). This may be attributable to improvements in disposal data since 2002-03 when data was limited to only some licensed rural landfills. Better reporting is identifying larger quantities of waste being disposed of and it is anticipated that this figure will continue to grow as the quality of reporting improves.

Table 1: Tonnes of reported waste generated for the whole of NSW, Sydney, Hunter, Central Coast and Illawarra, and rural and regional NSW – 2002-03 compared with 2004-05

	Total Generation[5] (tonnes)	% Recycled (all waste streams)	
2004-05			
NSW	13,118,000	46%	
Sydney	8,901,500	49%	
Hunter, Central Coast and Illawarra	2,268,000	50%	
Regional and rural NSW	*1,948,500	*22%	*
2002-03			
NSW	11,804,000	45%	
Sydney	8,513,500	48%	
Hunter, Central Coast and Illawarra	1,968,500	47%	
Regional and rural NSW	*1,322,000	*28%	*

* rural and regional data is limited; indicative figures only

Waste generation per capita

The amount of waste we create can also be looked at on a per person (per capita) basis. This measure enables a more direct comparison to be made between different years by taking into account changes in the number of people living in NSW. Table 2 below, shows the amount of reported waste generated in 2002–03 and 2004–05 on a per capita basis. As shown, the total reported waste generated in NSW has increased by around 171 kilograms per person during this period. In Sydney it was 70kg/capita more and in the Hunter, Central Coast and Illawarra it was 213 kg/capita more (across all waste streams).

A greater proportion of the total waste generated by each person is being recycled instead of being thrown away. This is a good trend; however, every single person in NSW still needs to look for opportunities in all aspects of their life to further reduce the amount of waste they create in the first place.

[5] Note that figures are rounded