

New Paper Mill

OPERATIONAL WASTE MANAGEMENT PLAN

- October 2012



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1. Introduction

1.1. Overview

AMCOR Packaging (Australia) Pty Ltd ("AMCOR") has approval to construct and operate a New Paper Mill at its site in Matraville, NSW. Project approval for the New Paper Mill (the "B9 Project") was granted by the Minister for Planning on 20 July 2007 (Application No. 05_120). This approval covered the construction and operation of a new paper making facility, including the replacement of two existing paper machines. The New Paper Mill has been designed to minimise environmental impacts such as noise, odour, water discharges and waste production.

The Minister's Conditions of Approval (MCoA) for the project require AMCOR to prepare and implement a Waste Management Plan for the operation of the New Paper Mill. This document has been prepared to meet this requirement.

1.2. Minister's Conditions of Approval

The relevant MCoA for the Operational Waste Management Plan is presented below (See **Table 1-1**). It should be noted that guidelines relating to waste classification have been updated since the project received approval in 2007 (See MCoA 25). The new guidelines that apply in NSW are the *Waste Classification Guidelines* (DECCW 2009) and these have been used as the basis for classifying waste for this plan. Other relevant legislation applying to waste management is presented in **Table 1-2**.

■ **Table 1-1: Relevant MCoA for waste**

| MCoA No. | Condition Requirements | Sub-Plan Reference |
|----------|--|---|
| (3)25 | The Proponent shall ensure that all waste generated on the site during demolition, construction and operation of the project is classified in accordance with the DECC's <i>Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes</i> and disposed of to a facility that may lawfully accept the waste. | Section 4 & 5 |
| (3)26 | The Proponent shall prepare and submit to the Director-General prior to commencement of demolition and construction, a Waste Management Plan including: <ul style="list-style-type: none"> a) Details of the type and quantity of waste to be generated by demolition, construction, transition and operational phases of the project; b) Detail materials to be reused or recycled, either on or off site; and c) Procedures for handling, storage, collection of recycling and disposal of waste. | Section 4 Section 5 Section 4 & 5 |
| (3)27 | For the life of the project, the Proponent shall: <ul style="list-style-type: none"> a) Monitor the amount of waste generated by the project; | Section 6 |



| MCoA No. | Condition Requirements | Sub-Plan Reference |
|----------|---|--------------------|
| | b) Investigate ways to minimise waste generated by the project; and | Section 5 |
| | c) Implement reasonable and feasible measures to minimise waste generated by the project. | Section 5 |
| | to the satisfaction of the Director-General. | |

■ **Table 1-2 Environmental Legislation Specific to Waste**

| Legislation | Details | Approvals/Permits required |
|--|--|---|
| <i>Waste Avoidance and Resource Recovery Act 2001</i> | Repeals the Waste Minimisation and Management Act and replaces a target of 60% reduction in waste to landfill with a process for the preparation of waste strategies which identify more specific targets and objectives for waste reduction. | Compliance must be achieved in relation to waste management during operation. Permits may be required for offsite disposal of hazardous or contaminated material. |
| <i>Contaminated Land Management Act 1997</i> | Provides for the investigation and remediation of contaminated land. | None for operation. |
| <i>Environmentally Hazardous Chemicals Act 1985</i> | Provides for the control of the effect on the environment of chemicals and chemical wastes. | |
| <i>Protection of the Environment Operations Act 1997</i> Clause 42 of the <i>Protection of the Environment Operations (Waste) Regulation 2005</i> | This Act is the primary NSW environment protection legislation that covers air, noise, water, land and waste management. It provides a framework to regulate and enforce pollution control in NSW. The Act identifies mechanisms for preventing environmental degradation including, pollution prevention, cleaner production, reduction in discharge levels likely to cause harm to the environment, recycling and progressive environmental improvement. | |

1.3. Guidelines and Standards

Other relevant standards and guidelines are detailed below.



1.3.1. Classification of Waste Streams

a) Overview

The classification of waste is based on the DECCW document *Waste Classification Guidelines (2008)*. The guideline outlines how to assess waste, specifies pre-classified waste types and sets out management options for the disposal of waste. Many types of waste are now pre-classified and therefore there are limited requirements for sampling and chemical characterisation of waste materials. A summary of pre-classified waste types is presented in the table below.

| Class | Definition |
|--|--|
| Special | Waste that is clinical and related waste; asbestos waste or waste tyres. |
| Liquid | any waste that: <ul style="list-style-type: none"> ■ has an angle of repose of less than 5 degrees; or ■ becomes free-flowing at or below 60 degrees Celsius or when it is transported; or ■ is not generally capable of being picked up by a spade or shovel. |
| Hazardous Waste | <ul style="list-style-type: none"> ■ waste with a pH less than or equal to 2.0 or greater than or equal to 12.5; ■ containers that have not been cleaned and that contained dangerous goods within the meaning of the Australian Code for the Transport of Dangerous Goods by Road and Rail; ■ coal tar or coal tar pitch waste, which is the tarry residue from the heating, processing or burning of coal or coke, being materials comprising of more than 1% (by weight) of coal tar or coal tar pitch waste; ■ lead-acid or nickel-cadmium batteries, being waste generated or separately collected by activities carried out for business, other commercial or community services purposes; ■ lead paint waste other than solely from residential premises or educational or child care institutions; and ■ any waste that meets the Dangerous Goods Criteria for Class 1, Class 2, Division 4.1, Division 4.2, Division 4.3, Division 5.1, Division 5.2, Division 6.1 and Class 8. |
| Restricted | Restricted solid waste would only include wastes assessed and classified as restricted solid waste in accordance with the procedures set out in the Waste Classification Guidelines. |
| General Solid Waste (Putrescible) | <ul style="list-style-type: none"> ■ household waste that contains putrescible organics; ■ waste from litter bins collected by local councils; ■ manure and night soil; ■ disposable nappies, incontinence pads or sanitary napkins; ■ food waste; ■ animal waste; ■ grit or screenings from sewage treatment systems that have been dewatered so that the; and ■ grit or screenings do not contain free liquids; |
| General Solid Waste (Non-Putrescible) | <ul style="list-style-type: none"> ■ glass, plastic, rubber, plasterboard, ceramics, bricks, concrete or metal; ■ paper or cardboard; ■ household waste from municipal clean-up that does not contain food waste; ■ waste collected by, or on behalf of, local councils from street sweeping; ■ grit, sediment, litter and gross pollutants collected in, and removed from, stormwater treatment devices and/or stormwater management systems that has been dewatered so that it does not contain free liquids; ■ grit and screenings from potable water and water reticulation plants that has been dewatered so that it does not contain free liquids; |

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| Class | Definition |
|-------|--|
| | <ul style="list-style-type: none"> ■ garden waste; ■ wood waste; ■ waste contaminated with lead (including lead paint waste) from residential premises or educational or child care institutions; ■ containers previously containing dangerous goods, as defined under the Australian Code for the Transport of Dangerous Goods by Road and Rail, from which residues have been removed by washing or vacuuming; ■ drained oil filters (mechanically crushed) and rags and oil-absorbent materials that only contain non-volatile petroleum hydrocarbons and do not contain free liquids; ■ drained motor oil containers that do not contain free liquids; ■ non-putrescible vegetative waste from agriculture, silviculture or horticulture; ■ building cavity dust waste removed from residential premises or educational or child care; ■ institutions, being waste that is packaged securely to prevent dust emissions and direct contact; ■ synthetic fibre waste from materials such as fibreglass, polyesters and other plastics, being waste that is packaged securely to prevent dust emissions, but excluding asbestos waste which is a special waste; ■ virgin excavated natural material; ■ building and demolition waste; ■ asphalt waste, including asphalt resulting from road construction and waterproofing works; ■ biosolids categorised as unrestricted use or as restricted use 1, 2, or 3, in accordance with the criteria set out in the Biosolids Guidelines (EPA 2000); ■ cured concrete waste from a batch plant; and ■ fully cured and set thermosetting polymers and fibre-reinforcing resins, glues, paints, coatings and inks. |

b) Receival Facilities

The classification of wastes would determine whether licensed transporters are required and also where disposal to appropriately licensed landfills is required. Licensed landfills that will be used during the project include:

- Liquid Waste Facilities that would accept waste oils, fuels and other relevant liquid wastes; and
- Solid Waste (Non-Putrescible) Landfills that would accept all other waste generated.

The Mill Manager Production or their nominated delegate will ensure that all receival facilities are appropriately licensed to receive the type of waste transported off-site. A record of this will be kept in the Waste Management Register. When using landfills for the first time, a copy of the landfills' licence will be requested and reviewed. This is to ensure that the landfill is legally able to accept the classification of waste being taken there. Landfill licences are valid for one year and so copies of new licences should be sought as appropriate.

When selecting an appropriate receival facility the proximity of the site to the project would be considered, to minimise energy consumption associated with transport.

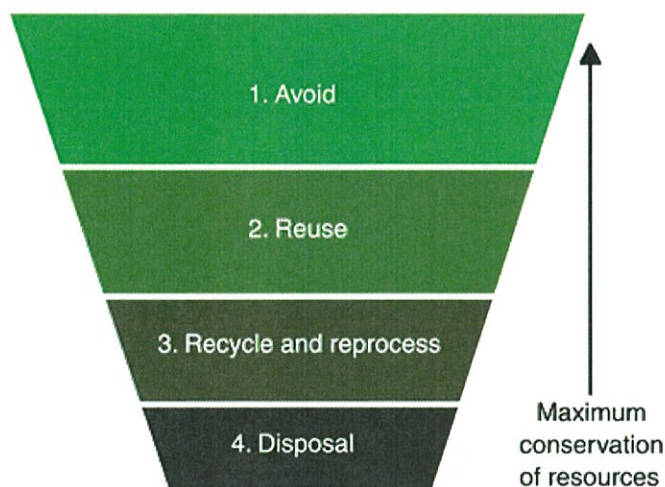


1.3.2. Environmental Planning & Assessment Regulation - Waste Hierarchy

The Waste Hierarchy describes the approach to waste management to ensure the most efficient use of resources, to reduce environmental harm, and to provide for the continual reduction in waste generation in line with the principles of environmentally sustainable development (ESD).

The following hierarchy (**Figure 1**) for managing waste, from most desirable to least desirable includes:

- **Reduce:** Waste avoidance by reducing the quantity of waste being generated. This is the simplest and most cost-effective way to minimise waste. It is the most preferred option in the Waste Management Hierarchy and is therefore ranked first;
- **Reuse:** Reuse occurs when a product is used again for the same or similar use with no reprocessing. Reusing a product more than once in its original form reduces the waste generated and the energy consumed, which would have been required to recycle;
- **Recycle:** Recycling involves the processing of waste into a similar non-waste product consuming less energy than production from raw materials. Recycling spares the environment from further degradation, saves landfill space and saves resources; and
- **Dispose:** Removing waste from worksites, compounds and offices and dumping in a licensed landfill site, or other appropriately licensed facility.



■ **Figure 1 Waste Minimisation Hierarchy**



2. Waste generation

The New Paper Mill uses 100% waste paper as a feedstock to produce paper suitable for cardboard box manufacturing. It also produces waste material from the processing of the waste paper and from other activities on site. The type, quantity and management of wastes are described in **Table 2-1**. The majority of waste produced on site will be able to be reused or recycled. The main exception is coarse waste material removed from the waste paper during the pulping process which is too variable in its day to day composition to allow recycling or reuse. AMCOR has investigated opportunities to reuse or recycle this waste in the past with no success.

■ **Table 2.1: Type, quantity and management of operational waste.**

| Waste material | Description | Waste Classification | Amount generated annually | Management |
|-------------------|---|---------------------------------------|---------------------------|--|
| Coarse Waste | A non homogenous mixture of contaminants including bottles, cans, plastics, metal, wood, stones, wire , rope, staples etc – which is contained in the waste paper delivered to site. | General Solid Waste (Non-Putrescible) | About 28,000 tonnes | Disposal at an appropriately licensed landfill |
| Fine Rejects | A mixture of cellulosic paper fibre and fibre debris, clay and calcium carbonate. The paper fibre cannot be used to make paper because the fibres are too short – which would produce sub-strength paper. | General Solid Waste (Non-Putrescible) | About 11,000 tonnes | Supplied to processors for reuse (eg. cat litter, soil conditioners) under an EPA Exemption (See Appendix A) |
| Waste oil | Significant quantities of lubricating oils are used in the paper machine and ancillary plant. | Liquid waste | About 10,000L | Sent to oil recyclers |
| Batteries | From fork lifts, payloaders and other site vehicles | Hazardous | About 5 | Sent to battery recyclers |
| Scrap metal | Generated from maintenance activities on the paper machine and buildings | General Solid Waste (Non-Putrescible) | About 10 tonnes | Sent to metal recyclers |
| Paper / Cardboard | Office waste | Solid Waste (Non-Putrescible) | <10m ³ | On-site recycling |
| Plastic | Office and maintenance waste | Solid Waste | <10m ³ | Off-site |



| Waste material | Description | Waste Classification | Amount generated annually | Management |
|------------------------|--|-------------------------------|---------------------------|--|
| | | (Non-Putrescible) | | recycling |
| Glass / bottles / cans | Office waste | Solid Waste (Non-Putrescible) | <10m ³ | Off-site recycling |
| General waste | Food scraps and material that cannot be recycled | Solid Waste (Non-Putrescible) | <100m ³ | Disposal at an appropriately licensed landfill |



3. Environmental management measures

Presented below are the objectives and environmental management measures for waste.

| Objectives | Targets |
|---|--|
| To minimise waste resulting from the Project's operation. | 100% of material which is recyclable or re-usable is sent for recycling or re-used onsite. |
| Legislation, Guidelines, References | Minister's Conditions of Approval (MCoA) Waste Classification Guidelines, DECC 2008; <i>Waste Avoidance and Recovery Act 2001</i> (WARR Act); and <i>Protection of the Operations Environment Act 1997</i> (POEO Act). |
| Relevant Procedures and Forms | Waste Management Register. |
| Monitoring | Regular site inspections of waste storage facilities and storage compounds. Testing of waste material to be disposed of off-site. Volumes and type of waste material reused, recycled or disposed. |

| Control Measures and Safeguards | Responsibility |
|--|--|
| Where possible, procurement processes will include consideration of waste minimisation including: <ol style="list-style-type: none"> 1) Specifying minimal packaging and/or packaging that can be recycled 2) Only as much product as is required is ordered 3) Pre-fabricated products are cut to size 4) Reusing as much spoil and other waste material as is practical on-site 5) Specifying recycled products where appropriate | Commercial Manager |
| Segregated waste disposal containers or areas for the collection and recycling/disposal of all waste streams generated during operation will be provided onsite. Waste disposal containers will have clear signage and instructions for use to avoid cross-contamination. No rubbish shall be disposed of onsite. | Mill Manager Operations |
| Waste storage areas would be located away from waterways and the stormwater system. | Mill Manager Operations |
| A Waste Management Register of all waste collected for disposal and / recycling, including amounts, data and time and details and location of disposal will be maintained at all times. | Commercial Manager |
| Prior to disposal of non-recyclable waste, it will be classified based on the DECCW document "Waste Classification Guidelines". | Shift Manager / Environmental Officer |



| Control Measures and Safeguards | Responsibility |
|---|--|
| All waste being transported off-site must be covered. | Shift Manager |
| Storage of all hazardous substances and dangerous goods will be in accordance with MSDS requirements in a bunded area. Special and hazardous wastes will be contained and separated from General solid waste (non-putrescibles). | Shift Manager / Environmental Officer |
| Any material contaminated by spills i.e. fuel, oil, lubricants etc will be stored in a sealed secure container within a bunded area and will be transported to a waste disposal site approved by the DECCW to accept such material. | Shift Manager / Environmental Officer |
| Incompatible wastes will not be mixed. | Shift Manager |



Appendix A – EPA Exemption Waste

Our reference : DOC09/32356
Contact : Henry Moore (02) 9995 5734

Mr Daniel Saunders
Environmental Consultant
Sydney Environmental & Soil Laboratory
PO Box 357
PENNANT HILLS NSW 1715

STANDARD POST

Dear Mr Saunders

I am writing in response to your application dated 11 November 2008 in support of a Resource Recovery Exemption (Land Application) for paper mill sludge from the AMCOR Botany Paper Mill.

The Department of Environment and Climate Change (DECC) has considered the suggested amendments regarding the draft exemption for AMCOR Botany Mill Solids in your letter dated 1 July 2009 and has made changes to paragraph 7.2.

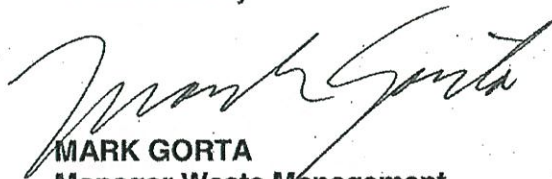
I am pleased to enclose a copy of the Specific Exemption for AMCOR Botany Mill Solids.

The conditions set out in this exemption are designed to minimise the risk of potential harm to the environment, human health and agriculture, however, neither the exemption nor the conditions of the exemption guarantee that the environment will not be harmed. The liability for any harm rests with the person who causes or permits the application of the substance to land.

The exemption will commence on the 10 July 2009 and is valid until revoked by the Environment Protection Authority in writing.

If you have additional questions or queries, please contact Henry Moore on (02) 9995 5734.

Yours sincerely



MARK GORTA
Manager Waste Management
Environment Protection and Regulation Group

10/7/09

Enclosure

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

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Department of **Environment and Climate Change** NSW



Protection of the Environment Operations (Waste) Regulation 2005 – Specific Exemption Under Part 6, Clause 51 and 51A

The AMCOR Botany Mill solids exemption 2009

Name

1. This exemption is to be known as 'The AMCOR Botany Mill solids exemption 2009'.

Commencement

2. This exemption commences on 10 July 2009.

Duration

3. This exemption is valid until revoked by the Environment Protection Authority (EPA) in writing.

Legislation

4. Under the *Protection of the Environment Operations (Waste) Regulation 2005* (the Regulation):
 - 4.1. Clause 51 (2) authorises the EPA to grant an exemption in relation to any matter or thing including an activity or class of activities, and
 - 4.2. Clause 51A authorises the EPA to exempt a person from any of the following provisions in relation to an activity or class of activities relating to certain waste that is to be land applied or used as a fuel:
 - the provisions of sections 47 to 49 and 88 of the *Protection of the Environment Operations Act 1997* (the Act),
 - the provisions of Schedule 1 to the Act, either in total or as they apply to a particular activity, and
 - the provisions of Part 3 and clauses 45 and 47 of the Regulation.

Exemption

5. In this Notice of Exemption:
 - 5.1. The responsible person listed in Column 1 of Table 1 is exempt from the provision/s listed in Column 2 of that table but only in relation to activities involving the relevant waste and only where the responsible person complies with the conditions referred to in Column 3 of the table.

However, this Notice of Exemption does not exempt the responsible person from the provisions specified in Column 2 where the relevant waste is received at premises that are, despite this exemption, required to be licensed for waste disposal (application to land) activities under the provisions of the Act.
 - 5.2. Where a responsible person complies with the conditions of this Notice of Exemption, the activity referred to in Schedule 1 from which that person is exempt is taken to be a non-scheduled activity for the purposes of the Act.

Table 1

| Column 1 | Column 2 | Column 3 |
|--------------------|---|--|
| Responsible person | Provisions from which the responsible person is exempt | Conditions to be met by the responsible person |
| Generator | section 48 of the Act in respect of clause 39 of Schedule 1 to the Act | all requirements specified in section 7 and 8 |
| Consumer | section 48 of the Act in respect of clauses 34, 39, 41 and 42 of Schedule 1 to the Act section 88 of the Act clauses 47 of the Regulation | all requirements specified in section 7 and 9 |

This Notice of Exemption is a specific exemption for the purposes of clause 51(3) of the Regulation.

Definitions

6. In this Notice of Exemption:

AMCOR Botany Mill solids means solid waste with a particle size less than 4 mm, comprising of long cellulose fibres, fibre bundles and minor quantities of sand, mud and fine grit from the wastepaper pulping and screening process at AMCOR Fibre Packaging (Australasia) Botany Mill, 1891 Botany Road, Matraville.

Characterisation means sampling and testing that must be conducted on the AMCOR Botany Mill solids for the range of chemicals and other attributes listed in Column 1 of Table 2.

Composite sample means a sample that combines 5 discrete sub-samples into a single sample for the purpose of analysis.

Consumer means a person who applies, causes, or permits the application to land of AMCOR Botany Mill solids within the definitions of "application to land" in accordance with the Act. The consumer may be the landholder responsible for the land to which AMCOR Botany Mill solids are applied. Where a person responsible for transporting the AMCOR Botany Mill solids to the land application site is also the party applying the AMCOR Botany Mill solids, this person must also meet the responsibilities of the consumer.

Food waste compost means material that meets 'The food waste compost exemption 2008'.

Generator means a person who generates, supplies, causes, or permits the supply of AMCOR Botany Mill solids to a processor or consumer. The generator in this exemption is AMCOR Fibre Packaging (Australasia) Pty Ltd.

NA means not applicable.

Processor means a person who processes, mixes, blends, or otherwise incorporates AMCOR Botany Mill solids into a material for supply to a consumer.

Raw mulch means material that meets 'The raw mulch exemption 2008'.

Relevant waste means AMCOR Botany Mill solids that meet the requirements of Section 7.

Routine sampling means sampling and testing that must be conducted on the AMCOR Botany Mill solids on an ongoing and regular basis.

General conditions

7. This Notice of Exemption is subject to the following conditions:

7.1. The chemical concentration or other attribute of the AMCOR Botany Mill solids listed in Column 1 of Table 2 must not exceed any of the following:

7.1.1. the absolute maximum concentration or other value listed in Column 4 of Table 2.

- 7.1.2. for characterisation tests, the maximum average (based on the arithmetic mean) concentration or other value listed in Column 2 of Table 2, and
- 7.1.3. for routine tests, the maximum average (based on the arithmetic mean) concentration or other value listed in Column 3 of Table 2.
- 7.2. The AMCOR Botany Mill solids can be directly land applied or blended with food waste compost and/or raw mulch and can only be applied to land as a soil amendment material.

Generator responsibilities

8. The following conditions must be met by the generator for this exemption to apply:

- 8.1. Sampling and information on sample storage and preparation must be detailed in a written sampling plan.
- 8.2. The AMCOR Botany Mill solids must be characterised according to the requirements listed in Column 1 of Table 3. Where there is a change in inputs that is likely to affect the properties in the AMCOR Botany Mill solids, characterisation must be repeated. Characterisation samples can be used for routine testing and subsequent calculations.
- 8.3. The AMCOR Botany Mill solids must be sampled routinely according to the requirements listed in Column 2 of Table 3.
- 8.4. Generators must keep a written record of all characterisation and routine test results for a period of three years.
- 8.5. Records of the quantity of AMCOR Botany Mill solids supplied to the processor and/or consumer and the processor and/or consumer's name and address must be kept for a period of three years.
- 8.6. The generator of AMCOR Botany Mill solids must provide a written statement of compliance to the processor and/or consumer with each transaction, certifying that the AMCOR Botany Mill solids comply with the relevant conditions of this exemption.
- 8.7. The generator of AMCOR Botany Mill solids must make information on the latest characterisation and routine test results available to the processor and/or consumer.

Processor responsibilities

9. The following conditions must be met by the processor for this exemption to apply:

- 9.1. The AMCOR Botany Mill solids can be or blended with, or otherwise incorporated into food waste compost and/or raw mulch.
- 9.2. Records of the quantity of AMCOR Botany Mill solids supplied to the consumer and the consumer's name and address must be kept for a period of three years.
- 9.3. The processor of AMCOR Botany Mill solids must provide a written statement of compliance to the consumer with each transaction, certifying that the AMCOR Botany Mill solids comply with the relevant conditions of this exemption.
- 9.4. The processor of AMCOR Botany Mill solids must make information on the latest characterisation and routine test results available to the consumer.

Consumer responsibilities

10. The following conditions must be met by the consumer for this exemption to apply:

- 10.1. Records of the quantity of the AMCOR Botany Mill solids received by the consumer and the suppliers' name and address must be kept for a period of three years.
- 10.2. The consumer must ensure that they do not cause or permit the emission of any offensive odour from the premises when applying AMCOR Botany Mill solids to land.
- 10.3. The consumer must land apply the relevant waste within a reasonable period of time.

Chemical and other material property requirements

11. This Notice of Exemption only applies to AMCOR Botany Mill solids where the chemical and other attributes listed in Column 1 of Table 2 comply with the chemical concentrations and other values listed in Column 2, Column 3 and Column 4 of Table 2, when analysed according to test methods specified in Column 5 of Table 2. Note that while limits are not included for total organic carbon, this must be tested in each routine sample and records kept of results.

Table 2

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|---|---|--|---|---|
| Chemicals and other attributes | Maximum average concentration for characterisation (mg/kg 'dry weight' unless otherwise specified) | Maximum average concentration for routine testing (mg/kg 'dry weight' unless otherwise specified) | Absolute maximum concentration (mg/kg 'dry weight' unless otherwise specified) | Test method specified within Section |
| 1. Mercury | 0.5 | Not required | 1 | 13.1 |
| 2. Cadmium | 1.5 | 1.5 | 3 | 13.2 |
| 3. Lead | 40 | 40 | 50 | 13.2 |
| 4. Arsenic | 10 | Not required | 20 | 13.2 |
| 5. Boron | 50 | Not required | 100 | 13.2 |
| 6. Chromium (total) | 50 | 50 | 100 | 13.2 |
| 7. Copper | 150 | 150 | 300 | 13.2 |
| 8. Nickel | 30 | 30 | 60 | 13.2 |
| 9. Sodium | 1875 | 1875 | 2500 | 13.2 |
| 10. Zinc | 150 | 150 | 200 | 13.2 |
| 11. Electrical Conductivity | 1 dS/m | Not required | 2 dS/m | 13.3 |
| 12. pH * | 6 to 11 | Not required | 6 to 12 | 13.3 |
| 13. C10 - C36 petroleum hydrocarbons | Not required | Not required | 10,000 | 13.4 |
| 14. Total Organic Carbon | NA | NA | NA | 13.5 |
| 15. Glass, metal and rigid plastics >2mm | Not required | Not required | 0.05 % | 13.6 |
| 16. Plastics - light, flexible or film >2mm | Not required | Not required | 0.05 % | 13.6 |

*Note: The ranges given for pH are for the minimum and maximum acceptable pH values.

Sampling and testing requirements

12. This Notice of Exemption only applies to AMCOR Botany Mill solids sampled separately according to the requirements in Table 3.

Table 3

| Column 1 | Column 2 |
|---|-----------------------------------|
| Characterisation frequency | Routine sampling frequency |
| 20 composite samples, by taking 1 composite sample from a different batch. This must be repeated every 2 years. | 5 composite samples per 6 months. |

Test Methods

13. All testing must be undertaken by analytical laboratories accredited by the National Association of Testing Authorities, or equivalent. All chemicals and other attributes listed in Column 1 of Table 2 must be measured in accordance with the test methods specified below:

- 13.1. Test methods for measuring the mercury concentration in AMCOR Botany Mill solids:
 - 13.1.1. Analysis using USEPA SW-846 Method 7471B Mercury in solid or semisolid waste (manual cold vapour technique), or an equivalent analytical method with a detection limit < 20% of the stated absolute maximum concentration in Table 2, Column 4 (i.e. 0.2 mg/kg dry weight).
 - 13.1.2. Report as mg/kg dry weight.
- 13.2. Test methods for measuring chemicals 2 - 10 in AMCOR Botany Mill solids:
 - 13.2.1. Sample preparation by digesting using USEPA SW-846 Method 3051A Microwave assisted acid digestion of sediments, sludges, soils, and oils (or an equivalent analytical method).
 - 13.2.2. Analysis using USEPA SW-846 Method 6010C Inductively coupled plasma - atomic emission spectrometry, or an equivalent analytical method with a detection limit < 10% of stated absolute maximum concentration in Table 2, Column 4 (i.e. 5 mg/kg dry weight for lead).
 - 13.2.3. Report as mg/kg dry weight.
- 13.3. Test methods for measuring the electrical conductivity and pH in AMCOR Botany Mill solids:
 - 13.3.1. Sample preparation by mixing 1 part AMCOR Botany Mill solids with 5 parts distilled water.
 - 13.3.2. Analysis using Method 103 (pH) and 104 (Electrical Conductivity). *In* Schedule 'B' (3): Guideline on Laboratory Analysis of Potentially Contaminated Soils, National Environment Protection (Assessment of Site Contamination) Measure 1999 (or an equivalent analytical method).
 - 13.3.3. Report electrical conductivity in deciSiemens per metre (dS/m).
- 13.4. Test methods for measuring C10 - C36 petroleum hydrocarbons in AMCOR Botany Mill solids:
 - 13.4.1. Sample preparation using an n-hexane extraction method followed by silica gel clean-up.
 - 13.4.2. Analysis using USEPA SW-846 Method 8015C Nonhalogenated organics by gas chromatography (or an equivalent analytical method with a detection limit of 100 mg/kg).

- 13.4.3. Report as total C10 - C36 in mg/kg.
- 13.5. Test methods for measuring the total organic carbon content in AMCOR Botany Mill solids:
- 13.5.1. Method 105 (Organic Carbon) and using a 2 gram sample. *In* Schedule B (3): Guideline on Laboratory Analysis of Potentially Contaminated Soils, National Environment Protection (Assessment of Site Contamination) Measure 1999 (or an equivalent analytical method).
- 13.5.2. Report as % total organic carbon.
- 13.6. Test methods for measuring 15 and 16 in AMCOR Botany Mill solids:
- 13.6.1. Appendix H of AS 4454: Composts, soil conditioners and mulches (or an equivalent analytical method), using a 2 mm sieve for the materials listed in 15 and 16 of Column 1, Table 2.
- 13.6.2. Report as %.

Exemption Granted



Mark Gorta
Manager, Waste Management Section
Environment Protection Authority
by delegation

10/7/09

Notes

The EPA may amend or revoke this exemption at any time. It is the responsibility of the generator, processor and consumer to ensure that they comply with all relevant requirements of the most current exemption. The current version of an exemption will be available on the EPA website: www.environment.nsw.gov.au

In granting this specific exemption, the EPA is exempting the relevant waste from the specific requirements of the Act and Regulations as stated in this exemption. The EPA is not in any way endorsing the use of this substance or guaranteeing that the substance will confer benefit.

The use of exempted material remains subject to other relevant environmental regulations within the Act and Regulations. For example, a person who pollutes land (s142A) or water (s120), or does not meet the special requirements for asbestos waste (clause 42), regardless of having an exemption, is guilty of an offence and subject to prosecution.

For the purposes of arrangements between a generator, a processor and a consumer, a 'transaction' is taken to mean the contractual agreement between the two parties which specifies the exchange of waste material from one party to another. A 'statement of compliance' must be in writing and be provided with each transaction.

The conditions set out in this exemption are designed to minimise the risk of potential harm to the environment, human health or agriculture, however, neither this exemption nor these conditions guarantee that the environment, human health or agriculture will not be harmed.

It should be noted that other contaminants may be present in the relevant waste that can potentially cause harm. Application rates may need to be lower than those listed in the exemption depending on local circumstances and should be determined as appropriate to those circumstances prior to application. Plants may display symptoms of toxicity, and/or reductions in yield may occur at values below the maximum concentration limits specified in this exemption.

The consumer should assess whether or not the exempted material is fit for the purpose the material is proposed to be used and whether this use will cause harm. The consumer may need to seek expert engineering or technical advice.

This exemption does not apply to any material received at a premises that is required to be licensed for waste disposal (application to land) activities under the provisions of the Act. This exemption does not remove the need for a site at which processing occurs to be licensed, if required under Schedule 1 of the Act.

This exemption does not alter the requirements of any other relevant legislation that must be met in utilising this material, including for example, the need to prepare a Material Safety Data Sheet (MSDS).

Regardless of any exemption provided by the EPA, the person who causes or permits the application of the substance to land must ensure that the action is lawful and consistent with the development consent requirements of the land.

All records required to be kept under this exemption must be made available to authorised officers of the EPA upon request.

Failure to comply with the conditions of this Notice of Exemption may constitute an offence under clause 51 of the Regulation and the responsible person will be required to comply with the normal regulatory provisions.