

ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

**DETERMINATION OF A DEVELOPMENT APPLICATION UNDER SECTION 80(1) OF
THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979**

I, the Minister for Urban Affairs and Planning, under Section 80(1) of *the Environmental Planning and Assessment Act, 1979* ("the Act") determine the Development Application ("the Application") referred to in Schedule 1 by granting consent to the Application subject to the conditions set out in Schedule 2.

The reason for the imposition of conditions is to minimise any adverse environmental effects of the development, consistent with the objectives of the Act.

Andrew Refshauge MP

Minister for Urban Affairs and Planning

Sydney

30 November 2000

File No. Q91/00233

SCHEDULE 1

Application made by: Collex Waste Management Pty Ltd ("the Applicant").

To: The Minister for Urban Affairs and Planning ("the Minister").

In respect of: Lots 5-6 in DP830765, Lots 8-9 in DP534616, Lot 19 in DP827588, Lots 14, 25, 30, 70, 86, 88, 91, and 92 in DP754919, part of the land comprising Lot 10 in DP703260 and part of the land comprising Lot 3 in DP754894.

For the following: The Woodlawn Waste Management Facility.

Development Application: DA No. 31-02-99 lodged with the Department of Urban Affairs and Planning on 16 February 1999, accompanied by a Environmental Impact Statement prepared by Woodward-Clyde and dated March 1999; EIS supplementary Report prepared by Woodward-Clyde Pty Ltd, dated March 1999; and amended DA and accompanying information prepared by Woodward-Clyde, dated 12 November 1999.

Determination:

- 1) To ascertain the date upon which the consent becomes effective, refer to Section 83 of the Act.
- 2) To ascertain the date upon which the consent is liable to lapse, refer to Section 95 of the Act.
- 3) Under section 89A of the Act, the Minister's determination is final and appeal rights under sections 97 and 98 of the Act do not apply.

SCHEDULE 2

CONDITIONS OF DEVELOPMENT CONSENT

ABBREVIATIONS AND INTERPRETATION

The Act	Environmental Planning and Assessment Act 1979, as amended
The Applicant	Collex Waste Management Pty Ltd
AEMR	Annual Environmental Management Report
BCA	Building Code of Australia
CLC	Community Liaison Committee
Council	Mulwara Shire Council
DA	Development Application
The Department	The Department of Urban Affairs and Planning
The Director-General	The Director-General of the Department of Urban Affairs and Planning
DLWC	Department of Land and Water Conservation
EIS	Environmental Impact Statement
EMP	Environmental Management Representative
EPA	Environment Protection Authority
EPA Licence	means a licence under the <i>Protection of the Environment Operations Act 1997</i>
EPL	Environment Protection Licence
GTA	General Term of Approval
Leachate	means any liquid released by, or water that has percolated through waste, and that contains dissolved and/or suspended liquids and/or solids and/or gases and includes old fill leachate and new fill infiltrate
L _{A10(15 minute)}	is the sound pressure level that is exceeded for 10% of the time when measured over a 15 minute period.
LEMP	an environmental waste management plan prepared in accordance with Section 75 of the <i>Protection of the Environment Operations Act 1997</i>
NPWS.	National Parks and Wildlife Service
PCA	Principal Certifying Authority
Subject Land	The land to which the DA and this consent apply.

INTEGRATED DEVELOPMENT

Integrated development is development (not being complying development) that, in order for it to be carried out, requires Development Consent and one or more of the approvals

set out in the Act. The proposal is integrated development, as it requires several other approvals, including: the consent of the National Parks and Wildlife Service under section 90 of the National Parks and Wildlife Act 1974; licensing by the Environment Protection Authority under sections 47 and 48 of the Protection of the Environment Operations Act 1997¹; the approval of the Department of Land and Water Conservation under Part 3A of the Rivers and Foreshores Improvement Act 1948 and section 10 of the Water Act 1912; and the consent of Mulwaree Shire Council with the concurrence of the Roads and Traffic Authority under section 138 of the Roads Act 1993. The general terms of approval of the relevant approval bodies therefore form part of this consent.

GENERAL CONDITIONS

Adherence to Terms of DA and EIS

1. Development shall be carried out in accordance with:
 - (a) DA No. 31-02-99;
 - (b) the EIS prepared by Woodward-Clyde Pty Ltd, dated February 1999;
 - (c) the EIS Supplementary Report prepared by Woodward-Clyde Pty Ltd, dated March 1999; and
 - (d) the Amended DA and accompanying information prepared by Woodward-Clyde, dated 12 November 1999,

except as modified by the following conditions.

In the event of an inconsistency between this consent and DA No. 31.02.99 (and accompanying EIS and other supporting documents), this consent shall prevail.

Note: The Department of Mineral Resources (DMR) has advised that, upon granting of Development Consent, it will recommend that the mining lease for the Woodlawn site be amended to require compliance with the conditions of consent.

Deferred Commencement

2. In accordance with section 80(3) of the EP&A Act, this consent shall not operate until the Applicant satisfies the Minister that it has been awarded a valid contract for the long-term supply of waste, sourced from Sydney, at a rate of at least 150,000 tonnes per annum.

Duration of The Consent

3. Approval is granted for 20 years from the date of commencement of landfilling operations, subject to the input rate variations as specified in Condition 4.

Note: Extension of further landfilling activities beyond 20 years would be subject to further approvals applicable at the time.

Input Rate Variations

4. The proposed landfill shall not exceed the annual input rates in Table 1, unless otherwise approved by the Minister. The Minister shall give such approval if the need for additional capacity is demonstrated by an independent public assessment of landfill capacity and demand in the Sydney Region. The assessment shall:

¹ At the time of DA lodgement, the proposal required licensing by the Environment Protection Authority under the Pollution Control Act 1970 and the Waste Minimisation and Management Act 1995. These requirements have since been superseded by licensing requirements under the Protection of the Environment Operations Act 1997, which commenced on 1 July 1999.

- (a) take into account the status of alternative technologies for putrescible waste management and be undertaken at five-yearly intervals;
- (b) be completed one year before commencement of each five year period, as set out in Table 1, or at any other time at the request of the Applicant, with the first review due four years from the date of operational commencement; and
- (c) be undertaken by an independent person or organisation, to be appointed by the Minister, with the costs to be funded by the Applicant.

Table 1: Maximum Input Rates

Years from date of operational commencement	Maximum Input Rate
0-5	400,000 tpa
6-10	360,000 tpa
11-15	325,000 tpa
16-20	290,000 tpa

- 5. In any event, no more than 500,000 tonnes shall be landfilled at the site in any one year.

Compliance with Requirements of the Director-General and Prescribed Conditions

- 6. The Applicant shall comply with all reasonable requirements of the Director-General in respect of the implementation of any measures arising from reports submitted in accordance with the conditions of this consent, within such time as the Director-General may agree.
- 7. The Applicant shall comply with all relevant conditions prescribed in Part 7 of the Environmental Planning and Assessment Regulation 1994, as required by Section 80A (11) of the Act.

Obligation to Prevent and Minimise Harm to the Environment

- 8. The Applicant shall:
 - (a) take all practicable measures to prevent and minimise harm to the environment as a result of the construction, operation, post closure and, where relevant, the decommissioning of the development; and
 - (b) take all practicable measures to operate the landfill as a bioreactor, to ensure to the maximum extent practicable, the biological decomposition of all organic waste and productive capture of methane.

Structural Adequacy

- 9. Detailed plans and specifications relating to the design and construction of all structural elements associated with the proposed development shall be submitted to the Principal Certifying Authority (PCA) prior to the commencement of construction works. Such plans and specifications shall be accompanied by certification provided by a practicing professional structural engineer or an accredited certifier certifying the structural adequacy of the proposed building design and compliance with the Building Code of Australia (BCA).

Verification of Construction

10. Upon completion of building works and prior to the issue of an occupation certificate, a certificate prepared by a suitably qualified person or a compliance certificate issued by an accredited certifier, is to be submitted to the PCA certifying that the following building components, where relevant, have been completed in accordance with approved plans and specifications:
- (a) footings;
 - (b) concrete structures, including ground floor and any subsequent floors, and retaining walls and columns;
 - (c) framing and roof structure;
 - (d) fire protection coverings to building elements required to comply with the BCA; and
 - (e) mechanical ventilation.

The certificate/s shall demonstrate at what stage of construction inspections were undertaken.

Dispute Resolution

11. In the event that the Applicant, Council, a government authority other than the Department or the PCA cannot agree on the specification or requirements applicable under this consent, the matter shall be referred by either party to the Director-General or, if not resolved, to the Minister, whose determination of the disagreement shall be final and binding on the parties.

ENVIRONMENTAL MANAGEMENT

Environmental Services

12. The Applicant shall employ or contract suitably qualified environmental services throughout the duration of landfilling/construction and rehabilitation activities. The Applicant shall nominate an Environmental Management Representative/s (EMR/s) as the principle person responsible for overseeing environmental management of the project and supervision of environmental services. The EMR's/EMRs' qualifications, experience and appointment shall be to the satisfaction of the Director-General. The EMR/s shall have the authority to stop work if an adverse impact on the environment has occurred or is likely to occur.

The EMR/s shall:

- (a) be responsible for the preparation or certification of all environmental management plans and procedures;
- (b) be responsible for considering and advising on matters specified in the conditions of this consent and compliance with such matters;
- (c) oversee the receipt of, and response to, complaints about the environmental performance of the project;
- (d) facilitate an induction and training program in environmental awareness and responsibility required under the Environment Protection Licence (EPL), both generally and specific to the Applicant's activities for all persons involved with construction, operation, monitoring and rehabilitation activities at all sites. The training program must be implemented annually from the commencement of the development and evaluated every three years; and

- (e) be present on-site during any critical construction or operational activities as defined in the relevant Landfill Environmental Management Plan (LEMP).

Landfill Environmental Management Plan

- 13. Prior to the Applicant applying to the EPA for an EPL under the Protection of the Environment Operations Act 1997, the Applicant must prepare a comprehensive Landfill Environmental Management Plan (LEMP) in accordance with the EPA's *Environmental Guidelines: Solid Waste Landfills*. The LEMP shall incorporate all relevant plans and protocols as required by the conditions of this consent.

The LEMP shall accompany the application for an EPL. (EPA GTA)

Note: The EPA will review the LEMP and may, as a result, attach conditions to the EPL which are not inconsistent with the Development Consent.

Licence Applications

- 14. Prior to applying to the EPA for an EPL, the Applicant must be able to demonstrate that all works required to be addressed to ensure the geo-technical stability of the premises have been undertaken in accordance with:

- (a) the recommendations of the report prepared by BFP Consultants P/L, dated 17 December 1998, entitled Woodlawn Landfill – Geo-technical Study; and
- (b) the requirements of the NSW Department of Mineral Resources. (EPA GTA)

- 15. The Applicant must prepare a post closure landfill rehabilitation management plan (PCLRMP). The PCLRMP must be documented in the LEMP and must address the following:

- (a) closure strategies in the event that landfilling activities conclude prior to filling of the mine void;
- (b) site capping and revegetation in accordance with benchmark technique 28 of the *Environmental Guidelines: Solid Waste Landfills*;
- (c) post closure environmental monitoring;
- (d) post closure management of surface water in the event that the void is not filled with waste.

Note: The creation of a "crater lake" as proposed in the DA is not approved as a satisfactory strategy for post-closure management.

- (e) post closure management of Evaporation Dam No 3 (ED3);
- (f) post closure leachate management, including the management of the bioreactor processes;
- (g) post closure landfill gas management;
- (h) post closure maintenance; and
- (i) the estimated costing for these works must be provided and should be based on a nominal period of at least 50 years after the landfill ceases to accept waste. The actual duration of this period will be determined from actual monitoring data at the time. (EPA GTA)

Notes: An application under sections 53 and 87 of the Protection of the Environment Operations Act 1997 for a supervisory licence must be made at the same time as the application for an EPL.

The Applicant must charge for the disposal of putrescible waste at the premises in accordance with the directions of the public authority that holds the supervisory licence in respect of the waste facility.

The disposal of waste at the premises is subject to section 88 of the Protection of the Environment Operations Act 1997 and clause 18(1)(d) of the Protection of the Environment Operations (Waste) Regulation 1996.

Community Liaison Committee

16. Prior to the commencement of construction, the Applicant shall establish a Community Liaison Committee (CLC) comprising representatives of the Applicant, the local community, Council and Supervisory Licensee. Representatives of relevant government agencies may be invited to attend meetings of the Committee as required.

The Chairperson and procedures for the Committee including frequency of meetings shall be determined by the Committee.

Annual Environmental Management Report

17. In order to facilitate the integration of the environmental management of the subject land and the Woodlawn mine site, the Applicant shall liaise with the holder of the Woodlawn mining lease in relation to the formulation and review of the Annual Environmental Management Report (AEMR) for the mine. The AEMR shall comply with the requirements of the Director-General of the Department of Mineral Resources and be subject to review by all relevant government agencies.

Conditions Compliance Reports

18. The Applicant shall submit to the Director-General, the EPA, DLWC and Council Conditions Compliance Reports as follows:
- (a) at least one month prior to the commencement of construction works for the purposes of landfilling, or within such period as otherwise agreed to by the Director-General;
 - (b) at least one month prior to the commencement of construction works for the purposes of the intermodal transfer facility, or within such period as otherwise agreed to by the Director-General;
 - (c) every two years following the date of commencement of construction for the purposes of landfilling activity, or within such period as otherwise agreed to by the Director-General.

Note: the requirements of (a) and (b) above may be satisfied by the same report if appropriate.

Independent Environmental Audits

19. Every three years following the date of this consent, or at periods otherwise agreed to by the Director-General, and until such time as agreed to by the Director-General, the Applicant shall arrange for an independent audit of the environmental performance of the development. The audits shall:
- (a) be conducted pursuant to ISO 14010 – Guidelines and General Principles for Environmental Auditing, ISO 14011 – Procedures for Environmental Monitoring and any specifications of the Director-General;
 - (b) be conducted by a suitably qualified independent person approved by the Director-General;
 - (c) assess compliance with the requirements of this consent;
 - (d) assess the implementation of the LEMPs and review the effectiveness of the environmental management of the development; and

- (e) be carried out at the Applicants' expense.

The audits shall be submitted to the Director-General, the EPA, DLWC, Council and the Community Liaison Committee.

The Applicants shall comply with all reasonable requirements of the Director-General in respect of any measures arising from or recommended by the audits and within such time as agreed to be the Director-General.

SITE REHABILITATION

Whole of Site Rehabilitation

- 20. The filling of the Woodlawn mine void with waste and the final rehabilitation of the land subject to the DA shall be undertaken in a manner which is complementary with the rehabilitation of the Woodlawn mine site. Details of integrated rehabilitation shall be provided in the Rehabilitation Management Plan prepared in accordance with Condition 22.
- 21. Activities associated with landfilling must not impede or limit the rehabilitation works on any part of the Woodlawn Mine site.

Rehabilitation Management Plan

- 22. The Applicant shall prepare and implement a Rehabilitation Management Plan (RMP) which addresses areas designated for revegetation and rehabilitation as well as areas deemed not to require such treatment. The RMP shall address, but not necessarily be limited to the following matters:
 - (a) clear identification of proposed the new rehabilitation works to be undertaken by the Applicant, details of the Woodlawn Mine site rehabilitation works being undertaken by the mine leaseholder, and a clear definition of the respective obligations of the parties;
 - (b) an outline of financial arrangements for site rehabilitation works proposed in the plan;
 - (c) the rehabilitation standards to be adopted;
 - (d) a rehabilitation schedule (to be reviewed on a regular basis);
 - (e) a post-establishment maintenance and monitoring program for rehabilitated areas;
 - (f) procedures for the removal of all derelict buildings and infrastructure;
 - (g) closure strategies in the event that landfilling activities conclude prior to the capacity of the mine void being filled; and
 - (h) integration of rehabilitation works with the rehabilitation of the Woodlawn mine site.

The RMP shall be included in the LEMP.

- 23. The Applicant must obtain approval from the End of Mine Life Steering Committee and the EPA to disturb, obtain or use materials from the Woodlawn Mine site for the construction, operation and rehabilitation of the landfill, intermodal facility, haul roads and any other infrastructure at the premises.
- 24. The Applicant shall liaise with the holder of the Woodlawn mining lease in the preparation of a Mining Operations Plan (MOP) in accordance with the requirements of the Department of Mineral Resources

Financial Assurance for integration of whole of mine site rehabilitation

Notes: A financial assurance will be maintained by the mine lease holder and held by the Department of Mineral Resources for the duration of the consent. The financial security will relate to the Applicant's obligations under the conditions of this consent for the acquisition, compensation, remedial works and any requirements for the integration of landfilling activities with any existing mine rehabilitation obligations.

The amount and structure of the financial security will be agreed to the satisfaction of the Director-General of the Department of Mineral Resources. Evidence of the security deposit will be provided in each AEMR, whereby the value of the security deposit can be adjusted for rehabilitation works completed and the remaining rehabilitation liability.

EPA Financial Assurance

25. The Applicant shall provide to the EPA financial assurance commensurate with the ongoing environmental management and rehabilitation responsibilities for the landfill and associated activities. The financial assurance shall consist of:

- (a) an unconditional and irrevocable bank guarantee, or other form of financial assurance acceptable to the EPA. The financial assurance is to be adjusted annually so that it keeps pace with inflation for so long as the EPA requires it to remain in place. The amount of the assurance will be determined by an independent review of the costings applicable to activities identified in the LEMP and Conditions 55 and 159; and
- (b) an accumulating fund generated by monies set aside annually on deposit, or other form of financial assurance acceptable to the EPA which will have to be increased in a similar way, in respect of post closure works and responsibilities. The initial and ongoing annual deposit into this fund will be determined by an independent expert review of the costings applicable to activities identified in Condition 15.

The financial assurance shall be maintained during the operation of the facility and thereafter until such time as the EPA notifies the Applicant in writing that it is satisfied that the premises have been appropriately rehabilitated and are environmentally secure.

Written approval must be obtained from the EPA for any changes to the financial assurance detailed in this condition.

Note: The EPA will require the lodgment of a nominal financial assurance prior to the commencement of landfilling activities. This financial assurance can be amended in line with the environmental risk associated with the premises and independent expert review of costings.

WASTE SOURCES AND TYPES

26. All waste shall be sourced from the Sydney region. All waste received at the waste management facility shall be transported by rail to the intermodal facility.

27. The only wastes that can be disposed of at the premises are as follows:

- (a) inert waste and solid waste defined in Schedule 1 of the Protection of the Environment Operations Act 1997 or waste that is assessed and classified as inert or solid waste following the technical assessment procedure outlined in Technical Appendix 1 of the Waste Guidelines;
- (b) asbestos waste (including asbestos waste in bonded matrix and asbestos fibre and dust waste resulting from the removal of thermal or acoustic insulating materials or from processes involving asbestos material, and dust from

ventilation collection systems) disposed of in accordance with clause 29 (5) of the Protection of the Environment Operation (Waste) Regulation 1996;

- (c) tyres in accordance with the EPA's tyre disposal specification; and
- (d) other types of waste as expressly approved by the EPA. *(EPA GTA)*

WASTE MANAGEMENT PROCEDURES

28. There shall be no storage of sludges nor overnight storage of containerised waste, on the intermodal facility site. This condition may be varied with the written approval of the EPA if it is required by police; and /or because the operation, personnel or equipment are endangered. *(EPA GTA)*

Waste Transportation

29. All containers must be designed, constructed and maintained to prevent the emission of offensive odour and be water tight to prevent the leakage of leachate from waste containers during transport and handling activities. *(EPA GTA)*
30. All pressure relief valves on the containers must be designed to meet the environmental requirements of condition 29. *(EPA GTA)*
31. A Quality Assurance Program must be developed and implemented to ensure compliance with Condition 29. The program must include but need not necessarily be limited to the following:
- (a) Container integrity;
 - (b) Integrity and performance of rubber seals;
 - (c) Performance of mechanisms to filter and remove odour where required including cleaning and performance testing; and
 - (d) Container cleaning. *(EPA GTA)*

Spillage Response

32. A protocol must be developed and implemented to manage incidents involving spillage of waste. The protocol must include but should not necessarily be limited to procedures identifying immediate cleaning of the site, disinfection and reporting protocols. *(EPA GTA)*

Control of Incoming Wastes

33. The Applicant must develop procedures to screen deliveries of waste to ensure compliance with Condition 27. The procedure must be documented in the LEMP. *(EPA GTA)*
34. The Applicant shall use its best endeavours to ensure that all waste received at the intermodal facility is containerised.

OPERATIONAL STAGING AND LANDFILL MANAGEMENT

35. The Applicant shall prepare a landfilling schedule consistent with the concept detailed in figure 4.10 in the EIS. Details of the landfill schedule and shall be provided in the LEMP.

Cover Material

36. Cover material must be virgin excavated natural material, unless otherwise approved in writing by the EPA. *(EPA GTA)*

Note: The Applicant is encouraged to identify alternative daily cover materials and examine the feasibility of adopting such materials so as to minimise impacts of utilising virgin excavated natural material.

37. Cover material must be of a quality that will not inhibit the biological decomposition of the landfilled waste. (EPA GTA)
38. Cover material must be applied to a minimum depth of 15 centimetres over all exposed landfilled waste, prior to ceasing operations at the end of each day, unless otherwise approved in writing by the EPA. (EPA GTA)

Note: This condition does not exclude removal of daily cover at the beginning of each day to provide for the efficient operation of the bioreactor and to avoid perching of leachate within the landfilled waste mass.

39. Cover material must be applied to a depth of 30 centimetres over surfaces of the landfilled waste which are exposed for more than 90 days, unless otherwise approved in writing by the EPA. (EPA GTA)

Note: This condition does not exclude removal of cover prior to recommencement of active landfilling to provide for the efficient operation of the bioreactor and to avoid perching of leachate within the landfilled waste mass.

40. At least two weeks supply of cover material must be available at the premises under all weather conditions, unless otherwise approved in writing by the EPA. (EPA GTA)

Note: The environmental management objectives of cover material including limiting run-on and infiltration of water, controlling and minimising the risk of fire, minimising the emission of landfill gas, suppressing odour, reducing fly propagation and rodent attraction and decreasing litter generation.

Landfill Gas

41. The Applicant shall ensure to the maximum practical extent the quantity of landfill gas that is collected and treated.
42. The Applicant must ensure that any flare, power station or other proposed landfill gas treatment or beneficial re-use system is designed to provide a destruction efficiency of hydrocarbons, organic air toxics and odours of not less than 98%. (EPA GTA)

Note: Emissions of pollutants must comply with the standards of concentrations prescribed in the Clean Air (Plant and Equipment) Regulation 1997.

43. The flare system must be designed, installed and operated so that hydrocarbons, organic air toxics and odours are destroyed in accordance with Condition 42. The system must be provided with automatic ignition system and automatic shut-off gas valve. Scrubbers or other suitable treatment must be provided if it is required to remove hydrogen sulfide in order to comply with Condition 42.

The system must be installed progressively during the operation of the landfill. (EPA GTA)

44. Any landfill gas condensate must be collected and returned to the leachate recycling system. (EPA GTA)
45. The landfill gas extraction and utilisation system must be designed and installed to withstand forces created by the weight and settlement of waste in the landfill.
46. All pipe work carrying landfill gas adjacent to the haul road must be designed and installed so it is protected from damage as a result of haulage activities. (EPA GTA)

WATER QUALITY AND MANAGEMENT

Waste Management Facility Site

47. The premises and the activities carried out therein must not pollute surface water or groundwater. *(EPA GTA)*

Groundwater and Leachate Management

48. The mine void must be managed to ensure the groundwater gradient directs groundwater flows towards the mine void, unless otherwise approved in writing by the EPA. *(EPA GTA)*
49. Maintenance of the groundwater gradient post closure of active landfill operations (including a period of after-care) must ensure that impact of any degraded residue from the landfill on groundwater represents no threat to human health or the environment.

Note: The height of the water saturation level in the waste will be the primary means of ensuring that this condition is complied with.

50. A leachate collection/storage/recirculation/treatment system must be designed, installed and operated to:
- (a) accept other waste-waters and contaminated storm-waters generated as a result of the operation of the facility;
 - (b) efficiently operate, notwithstanding the settlement of the waste;
 - (c) ensure that all liquid (including rainwater, surface water, groundwater and leachate) introduced into the waste is monitored to determine its chemical composition and quantity;
 - (d) ensure that liquid is not deliberately stored in the landfilled waste, unless it is necessary for the efficient decomposition of the landfilled waste.
 - (e) ensure that leachate can be recirculated within the biologically active zones of the landfilled waste; and
 - (f) comply with Conditions 48 and 8(b).

Details of this system must be documented in the LEMP. *(EPA GTA)*

51. A barrier system must be designed and installed on the surfaces identified in condition 52 to limit the quantity of groundwater flowing into the mine void and to contain leachate over the period of time that the landfilled waste poses a potential environmental risk. The system must be documented in the LEMP. *(EPA GTA)*
52. The Applicant shall install the barrier system on the following surfaces of the mine void wherever these surfaces do not meet the performance requirements of Condition 53:
- (a) the base and the top elevation of the mine void; and
 - (b) the localised joints, fracture zones and adits/portals.
53. The barrier system must at least achieve the performance of a 900 mm thick re-compacted clay liner with an in-situ coefficient of permeability of less than 10^{-9} metres per second.
54. A Construction Quality Assurance Plan (CQAP) for the barrier system shall be prepared and included in the LEMP.
55. The Applicant shall prepare a Leachate Contingency Management Plan (LCMP) that addresses, but not necessarily be limited to the following matters:

- (a) the removal of leachate from the waste and its treatment to remove any metals or compounds at concentrations which may inhibit the biological processes of the bioreactor landfill, prior to discharging the leachate back into the landfilled waste;
 - (b) the storage of leachate external to the landfilled waste in the mine void;
 - (c) method/s for removing leachate from the waste and disposing of it to ensure effective operation of the bioreactor landfill and to ensure that the groundwater gradient directs groundwater flows into the mine void; and
 - (d) an estimate of the full costs for implementing each aspect of this plan. (EPA GTA)
56. The Applicant must not import water or other liquids into the mine void, unless otherwise approved by the EPA, except for first flush waters collected at the Intermodal Facility site and waters contained in ED3. (EPA GTA)
57. The Applicant shall develop a plan (known as bioreactor water management plan) which addresses the treatment of water, prior to any water being added (other than by direct rainfall) to the landfilled waste. This plan shall be included in the LEMP.

Note: The goals of this plan are to ensure that water which is of a low pH and contains heavy metals and other inorganic substances does not inhibit the biological degradation of the landfilled waste and that the groundwater gradient direction is maintained into the void.

Surface Water Management

58. There must be no discharge of waters from the area subject to the Development Application, unless more than 210mm of rain falls within a 72 hour time period (1 in 100 year ARI of 72 hours duration). (EPA GTA)
59. At the commencement of waste being received into the mine void the volume of water stored in ED3 shall be no greater than 40 ML.
60. The Applicant shall install drainage so that the West Ridge Catchment shall not drain into the mine void.
61. Contaminated water shall only be applied for dust suppression in the mine void, and in any areas around the perimeter of the void where any contaminated water will drain back into the void.
62. The evaporation of water by spraying shall not result in the drifting of the sprayed liquid from the area subject to the DA and also shall not cause any adverse impact to public health. The proposed method for the spray evaporation of water shall be documented in the LEMP.
63. ED3 shall not receive water stored in the Waste Rock Dam.
64. Stormwater in the mine void must only be discharged into ED3, or otherwise used for operational purposes within the landfill, as approved in writing by the EPA. (EPA GTA)
65. Stormwater collected in the mine void may only be transferred into ED3 provided that:
- (a) The Applicant can always comply with condition 58;
 - (b) the concentration of ammonia in the stormwater to be transferred does not exceed 0.03 mg/L and the concentration of total organic carbon in the stormwater does not exceed 1 mg/L; and
 - (c) the stormwater to be transferred contains no leachate, unless otherwise approved in writing by the EPA. (EPA GTA)

66. The Applicant must design and implement a Stormwater Management Scheme for the premises demonstrating compliance with Conditions 47, 48, 58, 63, 64, 65, and 8(b). This plan must be documented in the LEMP. (EPA GTA)

Note: The scheme will need to consider the method of the removal of excessive quantities of rainwater that falls in the mine void.

67. Vehicles leaving the area subject to the DA shall not track materials to external surfaces.

Details of the equipment or facilities must be specified in the LEMP (EPA GTA)

68. Containers used for transporting waste must only be washed at the container wash facility as frequently as is necessary to minimise environmental impacts from the containers. The container wash down facility must be designed, installed and operated with the aim to collect, treat and dispose of any wash down waters to the leachate collection system. Any collected solids must be returned to the active tipping face. The container wash down facility must be documented in the LEMP. (EPA GTA)

69. Impervious bunds must be constructed around all fuel, oil and chemical storage areas and the bund volume must be large enough to contain 110 per cent of the volume held in the largest container. The bund must be designed and installed in accordance with the requirements of the EPA Environment Protection Manual Technical Bulletin *Bunding and Spill Management*. (EPA GTA)

ED3 – Management

70. The Applicant must prepare a management plan for ED3 to ensure that:
- the dam is maintained to prevent the leakage of stored acid mine drainage waters in order to protect groundwater and surface water;
 - adequate capacity is retained in ED3 to meet the environmental performance requirements in condition 58
 - measures are identified to maintain adequate capacity within a suitable time period after receiving water from a rainfall event;
 - there is an emergency plan for the management of water in excess of the capacity of ED3;
 - the sources of water that are collected or received in ED3 are identified; and
 - the quantity of water (in cubic metres per hour) from each source that reports to ED3 is monitored and compared in graphical format with rainfall data.

The plan must be documented in the LEMP.

Waste-water Management

71. The sewage management system must be designed, installed and operated to meet the following criteria:
- Prevention of Public Health Risk.** Unacceptable public health risks must not occur resulting from human contact with the waste-water or flows discharged from the waste-water management system. Indicator faecal coliforms must be reduced to acceptable levels by an acceptable disinfection method determined in consultation with the EPA and NSW Department of Health. Consultation must be undertaken with NSW Health on the performance of the system.
 - Protection of Lands.** The application of waste-water to land must not result in the deterioration of the quality of the land through soil structure degradation, salinisation, waterlogging, chemical contamination or soil erosion.

- (c) **Protection of Surface Waters.** Surface waters must not become contaminated by any flows discharged from the waste-water management system including waste-water, rainfall runoff, contaminated subsurface runoff or contaminated groundwater.
 - (d) **Protection of Groundwaters.** Underground water resources must not become contaminated by either the waste-water, or any flows discharged from the waste-water management system.
 - (e) **Community Amenity.** Unreasonable interference and nuisance to the public, due to odour, dust, insects, and noise above existing background levels and arising from the operation of the waste-water management system must be avoided.
 - (f) **Resource Utilisation.** The useful resources of waste-water, including nutrients, organic matter and water must be identified and utilised to the maximum extent possible within the bounds posed by the other environmental and health performance criteria referred to in (a) to (e) above. *(EPA GTA)*
72. Waste-water must only be applied to utilisation areas in conformance with Condition 71. *(EPA GTA)*
73. Spray from waste-water application must not drift beyond the boundary of the waste-water utilisation area to which it is applied. *(EPA GTA)*
- Note: The EPA may include a buffer area for spray as part of a waste-water utilisation area.*
74. Waste-water utilisation areas must effectively utilise the waste-water applied to those areas. This includes the use for pasture or crop production, as well as ensuring the soil is able to absorb the nutrients, salts, hydraulic load and organic materials in the solids or liquids. Monitoring of land and receiving waters to determine the impact of waste-water application may be required by the EPA. *(EPA GTA)*

Intermodal Facility Site

75. The Applicant shall prepare and implement a Stormwater Management Scheme for the premises in accordance with the environment protection licence. The Scheme shall include measures to mitigate the impacts of stormwater run-off from and within the premises following the completion of construction activities and meet Condition 76 *(EPA GTA)*
76. Container handling, transfer and storage areas including any hardstand areas must be paved and sealed and be provided with a first flush stormwater management system designed to capture 15mm of stormwater for each square meter of catchment area. The paved and sealed areas including first flush system must also extend to include any rail unloading areas, stormwater detention pond, oil/water separator and container loading areas. *(EPA GTA)*
77. There must be no discharge of contaminated stormwater from the premises under dry weather conditions or storm event(s) of less than 1:100 year, 24 hour duration, average recurrence interval. *(EPA GTA)*
78. All areas that involve the handling of containerised waste including container transfer and handling areas, clean container storage areas and internal roadways must be sealed. *(EPA GTA)*

Waste Water Management

79. Contaminated stormwater and any sludges collected at the Crisps Creek intermodal facility must be disposed of at the landfill site. *(EPA GTA)*

80. There must be no vehicle or container wash down at the premises. (EPA GTA)
81. The on-site sewerage waste water management system must be designed installed and operated in a manner consistent with the guidelines Environment and Health Protection for On-site Sewage Management for Single Households. (EPA GTA)

Rivers and Foreshore Improvement Act 1948 – Part 3A Permit (DLWC GTAs)

Note: A permit under Part 3A of the Rivers and Foreshores Improvement Act 1948 is required to carry out bridge construction, stormwater discharge works and stream bank stabilisation within 40 m of the top of the bank of the Mulwaree River at Tarago, being works associated with the establishment of the intermodal facility. A Part 3A Permit is not required for works at the mine site.

General

82. If any work is being carried out in such a manner that it may damage or detrimentally affect the stream, or damage or interfere in any way with any work, the operation on that section of the stream shall cease immediately upon the oral or written direction of the officer.
83. The Applicant may request in writing any reasons for any direction to cease operations which must be provided within 24 hours of such a request.
84. If the permit conditions have been breached, the permit holder shall restore the site to the satisfaction of the Department. If the necessary works are not completed then the permit holder shall pay a fee prescribed by the Department for the initial breach inspection and all subsequent breach inspections.
85. Operations shall be conducted in such a manner as not to cause damage or increase the erosion of adjacent stream banks. The permit holder shall carry out any reasonable instructions given by DLWC with a view to preventing damage to the banks.
86. Any vegetation or other material removed from the area of operations shall be disposed of to an appropriate site where the debris cannot be swept back into the river during a flood.

Conditions Specific to the DA

87. Operations shall be conducted in such a manner that is in accordance with the permit as not to cause damage or increase the erosion of adjacent stream banks. The permit holder shall carry out any reasonable instructions given by DLWC with a view to preventing damage to the banks.
88. Prior to the commencement of construction, the Applicant shall submit for the approval of DLWC a Soil and Water Management Plan. The Plan shall be prepared by a suitably qualified person and shall cover all works in and near the stream, staging and maintenance requirements. The Plan shall meet the requirements outlined in the NSW Department of Housing's publications (1998) *Managing Urban Stormwater: Soils and Construction* and *Managing Urban Stormwater: Treatment Techniques*.
89. The Applicant shall establish, to the satisfaction of DLWC, a riparian zone on the intermodal facility side of the Mulwaree River for the length of the intermodal facility and any associated works. The riparian zone shall be at least 40 metre in width (measured horizontally from the top of the bank) and consist of local native plant species but shall exclude bridge approaches, bridge, access roads and associated infrastructure in accordance with the Intermodal Construction Works Plan, and Soil and Water Management Plan

90. No exotic trees are to be planted within the stream or within 40 metres from the top of the bank of the stream.
91. Prior to commencing construction works the Applicant shall prepare to the satisfaction of DLWC a "Works Plan" to include Stream Rehabilitation and Vegetation Management. The Plan shall describe the proposed rehabilitation of the stream wherever disturbed, methods to stabilise the bed and banks of the stream, vegetation to be retained, additional plantings of local native vegetation, vegetation maintenance and performance criteria
92. The Applicant shall ensure that the design of the bridge over the Mulwaree River is sensitive to the corridor functions (including current and future functions) of the river and piered approaches or equivalent are to be incorporated into the design.
93. Drainage lines to the Mulwaree River are to be in accordance with the requirements of DLWC and designs included in the Intermodal Facility Works Plan are to be approved by DLWC prior to the commencement of construction works

NOISE

Hours of Construction and Operation

Construction

94. All construction work at the waste management facility and intermodal facility site that creates audible noise at residential premises must only be conducted between 7:00 am to 6:00 pm on Mondays to Fridays and between the hours of 8:00 am to 1:00 pm on Saturdays. There shall be no construction activities on Sundays or public holidays. *(EPA GTA)*
95. The delivery of material outside the hours of operation permitted by Condition 94 may take place if that delivery is required by police or other authorities for safety reasons; and/or because the operation, personnel or equipment are endangered. In such circumstances, prior notification is to be provided to the EPA and affected residents as soon as possible, or within a reasonable period in the case of an emergency. *(EPA GTA)*
96. The hours of construction specified in Condition 94 may be varied with the written consent of the EPA if the EPA is satisfied that the amenity of the residents in the locality will not be adversely affected. *(EPA GTA)*

Operation

97. All operational activities at the waste management landfill site may only be conducted between the hours of 6:00am and 7:00pm on Mondays to Saturdays and at the intermodal facility site including road haulage, may only be conducted between the hours of 7:00am to 6:00pm on Mondays to Saturdays other than train operations which may be conducted from 6:00am to 6:00pm. There must be no activities on Sundays, Good Friday or Christmas Day (Commission of Inquiry Report, January 2000). *(EPA GTA)*
98. The hours of operation specified in Condition 97 may be varied with the written consent of the EPA if the EPA is satisfied that the amenity of the residents in the locality will not be adversely affected. *(EPA GTA)*

Noise Limits

Waste Management Facility Site

99. Noise from the premises must not exceed an $L_{A10 (15 \text{ minute})}$ noise emission criterion of 35 dB(A) $L_{A10 (15 \text{ minute})}$ at the most affected residential receiver. *(EPA GTA)*

Note: Noise measurement

For the purpose of noise measures required for this condition, the L_{A10} noise level must be measured or computed at the most affected residential receiver over a period of 15 minutes using "FAST" response on the sound level meter.

For the purpose of the noise criteria for this condition, 5dB(A) must be added to the measured level if the noise is substantially tonal or impulsive in character. Measurement locations are:

- 1 metre from the facade of the residence for night time (10 pm to 7 am) assessment;
- at the residential boundary or 30 metres from the residence (rural situations) where boundary is more than 30 metres from residence for day time (7 am to 10 pm) assessment.

For the purpose of noise measurements required for this condition the noise emission limits identified apply for prevailing meteorological conditions, winds up to 3m/s.

100. The noise emission limits identified in Condition 99 apply for prevailing meteorological conditions, except under conditions of temperature inversions. Noise impacts that may be enhanced by temperature inversions must be addressed by:
- (a) documenting noise complaints received to identify any patterns of temperature inversions or increased level of impacts from temperature inversions;
 - (b) where levels of noise complaints indicate a higher level of impact then actions to quantify and ameliorate any enhanced impacts under conditions of temperature inversions should be developed and implemented. (EPA GTA)

Intermodal Facility Site

101. Except as provided in Condition 102, noise from the premises must not exceed an L_{A10} (15 minute) noise emission criterion of 35 dB(A) at the most affected residential receiver. (EPA GTA)
102. Noise emissions from freight trains entering and leaving the premises must not exceed the noise limit of 45 dB(A) L_{A10} (15 minutes) prior to 7am and 50 dB(A) L_{A10} (15 minutes) after 7am. These limits apply only where there are no more than two freight trains entering and leaving the premises per day, otherwise the limit in condition 101 applies. (EPA GTA)
103. Noise from the premises is to be measured at the most affected residential receiver to determine compliance with Conditions 101 and 102. (EPA GTA)

Notes: Noise measurement

For the purpose of noise measures required for these conditions, the L_{A10} noise level must be measured or computed at the most affected residential receiver using "FAST" response on the sound level meter over a period of:

- 15 minutes for condition 101; or
- 15 minutes (duration of train entering and/or leaving site) for condition 102. (to comply with condition 102)

For the purpose of the noise criteria for conditions 101 and 102, 5dBA must be added to the measured level if the noise is substantially tonal or impulsive in character. Measurement locations are:

- one metre from the facade of the residence for night time (10 pm to 7 am) assessment;
- at the residential boundary or 30 metres from the residence (rural situations) where boundary is more than 30 metres from residence for day time (7 am to 10 pm) assessment.

For the purpose of noise measurements required for this condition the noise emission limit identified apply for prevailing meteorological conditions, winds up to 3m/s.

104. The noise emission limits identified in conditions 101 and 102 apply for prevailing meteorological conditions, except under conditions of temperature inversions. Noise impacts that may be enhanced by temperature inversions must be addressed by:
- (a) documenting noise complaints received to identify any higher level of impacts or patterns of temperature inversions; and
 - (b) where levels of noise complaints indicate a higher level of impact then actions to quantify and ameliorate any enhanced impacts under conditions of temperature inversions should be developed and implemented. (*EPA GTA*)

Noise Management

105. The Applicant shall prepare and implement a Road Traffic Noise Management Protocol. The Applicant shall aim to meet the noise criteria set out in the EPA's *Environmental Guidelines for Road Traffic Noise*. The Protocol shall include, but not necessarily be limited to details about:
- (a) scheduling movements outside critical time periods (for example, 6:00am to 7:00am);
 - (b) more stringent limits for noise emission from vehicles (eg. using specially designed "quiet" trucks and/or trucks required to use air bag suspension);
 - (c) driver education;
 - (d) limiting usage of exhaust brakes;
 - (e) type of road surface;
 - (f) in consultation with Mulwaree Shire Council exploring opportunities to reduce speed limits for trucks;
 - (g) regular maintenance of road surface;
 - (h) ongoing community liaison to monitoring complaints; and
 - (i) phasing in the increased road use; and
 - (j) options for overnight parking of haulage trucks.
106. The Applicant, with input from the rail service provider, shall prepare and implement an Operational Noise Management Protocol for the Intermodal facility. The Protocol shall include, but not necessarily be limited to details about:
- (a) the incorporation of all reasonable and feasible noise mitigation methods for trains entering the site from the main line, shunting, rail movements on site, container movements, and truck movements;
 - (b) scheduling of train movements outside critical time periods;
 - (c) using the quietest trains possible;
 - (d) employee education;
 - (e) using quiet couplings for trains
 - (f) using quiet forklifts;
 - (g) regular maintenance of rail track, roads, hard stand areas, equipment;
 - (h) ongoing community liaison to monitoring complaints (eg. complaints line); and
 - (i) negotiated agreements for noise complaints if noise issues become unresolvable.

107. A Construction Noise Management Protocol must be prepared and submitted with the LEMP and implemented by the Applicant. The Protocol must include but is not necessarily limited to details about:

- (a) compliance standards;
- (b) community consultation;
- (c) complaints handling monitoring/system;
- (d) site contact person to follow up complaints;
- (e) mitigation measures;
- (f) the design and operation of the proposed mitigation methods demonstrating best practice;
- (g) construction times;
- (h) contingency measures where noise complaints are received; and
- (i) monitoring methods and programs.

NOISE IMPACTS

Consultation with Pylara Pty Ltd

108. In the event that Pylara Pty Ltd considers that road traffic noise (relating to the subject development) at any dwelling on its property is in excess of relevant noise criteria set out in this consent, the Applicant shall, upon a written request from Pylara:

- (a) undertake direct consultation with Pylara Pty Ltd on the issues raised;
- (b) make arrangements for and fund an independent noise investigation to quantify noise levels and sources; and
- (c) if adverse impacts are identified, modify where practicable road transport operations in order to mitigate such impacts.

Land Acquisition

109. Within six months of receipt of a written request from Pylara Pty Ltd (ACN 000 077 672), the Applicant shall purchase the whole of the property known as "Pylara", via Tarago. The request may be made at any time after this approval, despite any other conditions. The purchase, including acquisition price, shall be on the terms agreed between the Applicant and Pylara Pty Ltd. The acquisition price shall be fair and reasonable, shall take into account all relevant matters, and shall, at least, include payment for :

- (a) a sum not less than the current market value of Pylara Pty Ltd's interest in Pylara at the date of this consent, having regard to:
 - (i) the existing use and permissible use of the land in accordance with the applicable planning instruments at the date of the written request; and
 - (ii) the presence of improvements at Pylara and/or any Council approved building or structure which although substantially commenced at the date of request is completed subsequent to that date; and
 - (iii) as if Pylara was unaffected by the Applicant's Development Proposal.

- (b) reasonable compensation to Pylara Pty Ltd for disturbance allowance and relocation costs within the Mulwaree Shire, or within such other location as may be determined by the Director-General in exceptional circumstances; and
 - (c) Pylara Pty Ltd's reasonable costs for obtaining legal advice and expert witnesses for the purposes of establishing the acquisition price of Pylara and the terms upon which Pylara Pty Ltd is seeking for it to be acquired.
110. In the event that the Applicant and Pylara Pty Ltd cannot agree within three months upon the acquisition price of Pylara and/or the terms upon which it is to be acquired under the terms of this consent, then:
- (a) either party may refer the matter to the Director-General, who shall request the President of the Australian Property Institute to appoint a qualified independent valuer or Fellow of the Institute, who shall determine, *after consideration of any submissions from the owner's and the Applicant, a fair and reasonable* acquisition, price for Pylara as described in sub-clause (a) and/or terms upon which it is to be acquired;
 - (b) in the event of a dispute regarding outstanding matters that cannot be resolved, the independent valuer shall refer the matter to the Director-General, recommending the appointment of a qualified panel. The Director-General, if satisfied that there is a need for a qualified panel, shall arrange for the constitution of the panel. The panel shall consist of:
 - (i) the appointed independent valuer,
 - (ii) the Director-General or nominee, and
 - (iii) the president of the Law Society of NSW or nominee.
 - (c) The qualified panel shall advise the independent valuer on the outstanding matters that the independent valuer refers for it's consideration, following which the independent valuer shall determine a fair and reasonable acquisition price as described in condition 109 and/or the terms upon which Pylara is to be acquired.
111. The Applicant shall bear the costs of any valuation or survey assessment requested by the independent valuer, panel or the Director-General.
112. The Applicant shall, within fourteen days of receipt of a determination by the independent valuer, offer in writing to Pylara Pty Ltd to acquire the relevant land at a price no less than the said acquisition price as determined, and upon any terms set out by the independent valuer.

AIR QUALITY

Odour

Waste Management Facility Site

113. There shall be no offensive odour emitted from the premises, in accordance with Section 129 of the Protection of the Environment Act 1997, nor emissions to the atmosphere from the landfill that may adversely affect the health or amenity of the community. (*EPA GTA*)
114. A meteorological station shall be installed and operated on the landfill site in accordance with the following Australian Standards:
- (a) AS 2922-1987 Ambient air – Guide for the siting of sampling units; and

- (b) AS 2923-1987 Ambient air – Guide for measurement of horizontal wind for air quality applications.

The meteorological station shall measure and electronically log wind speed, wind direction, ambient temperature, sigma theta (standard deviation of the horizontal wind direction fluctuation), solar radiation. All parameters must be logged at 15 minute intervals to provide 1-hour average values and the station must be able to provide instantaneous wind speed and direction to assist in investigation of complaints.

The meteorological station shall also measure rainfall and evaporation. *(EPA GTA)*

Intermodal Facility Site

115. There shall be no offensive odour emitted from the premises, in accordance with Section 129 of the Protection of the Environment Act 1997. *(EPA GTA)*

Dust

Waste Management Facility Site

116. Activities occurring on the waste management facility site during the construction and operational phases must be carried out in a manner that will minimise emissions of dust from the premises. *(EPA GTA)*
117. The Applicant must take all practical steps to manage dust emissions during the construction and operational phase of the waste management facility to minimise off-site impacts of total suspended particulates, lead and dust deposition. *(EPA GTA)*
118. The LEMP must detail a system to prevent and suppress all dust emissions to meet the requirements in conditions 116 and 117. *(EPA GTA)*
119. Trucks which are entering and leaving the premises and carrying loads must be sealed or covered at all times, except during loading and unloading. *(EPA GTA)*
120. All internal permanent roadways between the container transfer area and Collector Road must be sealed. *(EPA GTA)*
121. All sealed surfaces intended to carry vehicular traffic must be managed to minimise the quantity of wind blown dust emissions. *(EPA GTA)*
122. All unsealed roads must be treated so that there are no visible dust emissions. Details of treatment measures must be documented in the LEMP.
123. A progressive rehabilitation strategy must be prepared and implemented for any unsealed areas of the site to prevent both wind blown dust emissions and contaminated stormwater runoff. This strategy must be documented in the LEMP. *(EPA GTA)*

Intermodal Facility Site

Construction and Operational Phases

124. Activities occurring at the premises must be carried out in a manner that will minimise emissions of dust from the premises. *(EPA GTA)*
125. The Applicant shall prepare a dust management plan that outlines measures to prevent wind blown dust. The dust management plan must be included as a component of the LEMP. The dust management plan must specify measures to prevent wind blown dust during the construction and operational phases. *(EPA GTA)*

126. Trucks entering and leaving the premises that are carrying excavated dusty materials including clays, sands and soils must be covered at all times, except during loading and unloading. (EPA GTA)
127. All sealed and unsealed surfaces shall be managed to minimise the quantity of wind blown dust emissions. (EPA GTA)

ENVIRONMENTAL MONITORING (EPA GTAs)

Waste Management Facility Site

Odour Monitoring

128. The Applicant must prepare and implement an odour monitoring plan. The plan must be developed in consultation with the EPA and documented in the LEMP.

Ambient Air Quality Monitoring

129. The Applicant must prepare and implement an ambient air quality-monitoring plan. The ambient air quality monitoring plan must be documented in the LEMP. The plan must address but may not necessarily be limited to the following:

- (a) Monitoring methodologies and standards;
- (b) Monitoring for concentrations of total suspended particulates (TSP), lead and dust deposition rates;
- (c) Locations where monitoring will be carried out;
- (d) Detailed monitoring cycle and the duration of each monitoring cycle; and
- (e) Reporting.

Monitoring is to be carried out in accordance with *Approved Methods for the Sampling and Analysis of Air Pollutants* NSW December 1999, or other methods stipulated in the EPL.

Landfill Gas Monitoring

130. The Applicant must prepare and implement a system of monitoring surface and subsurface landfill gas concentrations. Details of the surface and subsurface landfill gas monitoring system must be documented in the LEMP.

At a minimum, landfill gas shall be monitored for methane, carbon dioxide, and oxygen. The EPL may require other substances to be monitored.

Groundwater Monitoring

131. The Applicant shall prepare and implement a groundwater monitoring program that can detect groundwater flow and direction and any occurrence of groundwater pollution. The groundwater monitoring program must be documented in the LEMP.

Note: The specific requirements of the monitoring program will be stipulated in the EPL.

The program must include details on:

- (a) location of bore holes around the perimeter of the mine void and ED3—including the depth at which they are screened to enable access of groundwater;
- (b) monitoring the height of the groundwater table;
- (c) monitoring the groundwater gradient and to determine the direction of groundwater flow;
- (d) monitoring methodologies and standards to be employed;

- (e) reporting and assessment of results;
- (f) opportunities to integrate the monitoring program with other monitoring programs in the vicinity;
- (g) the parameters and substances that are proposed to be monitored, including sampling and analysis frequencies; and
- (h) groundwater height should be reported against water table contours around the site to assess any variation over time.

Note: The exploration drill holes around the perimeter of the void should be investigated as monitoring sites in the development of the groundwater monitoring program.

The EPA will require a more extensive listing of elements and compounds to be monitored for a period, prior to the landfilling of the first load of waste. The purpose of this program will be to establish a robust baseline of the quality of the groundwater. This comprehensive monitoring will then be required on an annual basis.

Surface Water Monitoring

132. The Applicant shall prepare and implement a surface water-monitoring program to monitor the environmental performance of the construction, operation and rehabilitation of the development on surface water. The surface water-monitoring program must be documented in the LEMP.

Note: The specific requirements of the monitoring program will be stipulated in the EPL.

The program must include details on:

- (a) Monitoring locations including:
 - (i) Crisps Creek ;
 - (ii) Allianoyonyiga Creek ;
 - (iii) ED3; and
 - (iv) rainwater collected in the mine void;
- (b) monitoring methodologies and standards to be employed;
- (c) monitoring frequency based on rainfall events and creek flow assessment;
- (d) an assessment of the contribution of surface water pollution from the Woodlawn Waste Management Facility as distinct from the Woodlawn Mine site;
- (e) the quantity of water relocated from the mine void into ED3;
- (f) the quantity of water relocated from ED3 into the mine void;
- (g) the chemical composition of liquids added to the landfilled waste;
- (h) the quantity of water that reports to ED3 , including its sources;
- (i) the quantity of water removed and/or discharged from ED3, including its destination;
- (j) the total quantity of water contained in ED3;
- (k) the parameters and substances that are proposed to be monitored, including sampling and analysis frequencies;
- (l) reporting and assessment of results; and
- (m) opportunities to integrate the monitoring program with other monitoring programs in the vicinity.

Notes: The EPA will require a broader range of elements and compounds to be monitored for a short period, prior to waste being received at the site. This comprehensive monitoring will then be required to be conducted on an annual basis.

The monitoring of ED3 will initially be at weekly intervals and will be reviewed 12 months after commencement of landfilling operations.

Leachate Monitoring

133. The Applicant shall prepare and implement a leachate quality and quantity monitoring program. The program must be documented in the LEMP.

Note: The specific requirements of the monitoring program will be stipulated in the EPL.

The program must include details on:

- (a) monitoring locations;
 - (b) monitoring methodologies and standards to be employed;
 - (c) monitoring frequency
 - (d) the height of the saturation level in the waste;
 - (e) the parameters and substances which are proposed to be monitored (eg redox potential, metals); and
 - (f) reporting and assessment of results.
134. The Applicant shall notify the EPA as soon as practicable after becoming aware that the height of the saturation level in the waste is above the height of the groundwater table that surrounds the mine void.

Environmental Performance of the Bioreactor Landfill

135. A Bioreactor Performance Monitoring Program (BPMP) must be developed and implemented which will:

- (a) assess the efficiency of the decomposition of the landfilled waste;
- (b) assess the optimum leachate recirculation program;
- (c) assess the optimum water injection program;
- (d) assess the effect of the saturation depth of the leachate on bioreactor performance; and
- (e) assess the quantity of methane and carbon dioxide (and the relative proportions) that are emitted by the biological decomposition of the landfilled waste;

The BPMP must also include monitoring of the quantity of rainwater that passively infiltrates into the landfilled waste, the quantity and chemical composition of water that is deliberately added to the landfilled waste, and the quantity of leachate in the landfilled waste.

The Bioreactor Performance Monitoring Program must be documented in the LEMP.

The specific requirements of the monitoring program will be stipulated in the EPL.

Noise Monitoring

136. Noise levels must be monitored to confirm performance and to assess compliance with Condition 99, A noise-monitoring program must be developed and implemented. The noise-monitoring program must be submitted to the EPA for review. The program must be documented in the LEMP.

The program must include details on:

- (a) methodologies for noise monitoring;
- (b) location of noise monitoring; and
- (c) frequency of noise monitoring.

Geo-technical Stability

137. The geo-technical stability of the premises must be monitored in accordance with the recommendations of the report prepared by BFP Consultants P/L dated 17 December 1998, titled *Woodlawn Landfill – Geo-technical Study*. The monitoring program must be documented in the LEMP.

Reporting

138. The Applicant must provide an annual return to the EPA in relation to the development as required by any licence under the POEO Act 1997 in relation to the development. In the return, the Applicant must report on the annual monitoring undertaken (where the activity results in pollutant discharges), provide a summary of complaints relating to the development, report on compliance with licence conditions and provide a calculation of licence fees (administrative fees and, where relevant, load based fees) that are payable. If load based fees apply to the activity the Applicant will be required to submit load-based fee calculation work-sheets with the return.

Intermodal Facility Site

Water Monitoring Program

139. A surface water-monitoring program must be developed and implemented. The program must include details on but need not necessarily be limited to the following:

- (a) monitoring locations including:
 - (i) Crisps Creek ;
 - (ii) Mulwaree River; and
 - (iii) the bypass from the first flush structure(s);
- (b) the monitoring methodologies and standards to be employed;
- (c) monitoring frequency based on rainfall event and creek flow assessment;
- (d) the quantity of water collected weekly in the first flush structure;
- (e) reporting and assessment of results;
- (f) the parameters and substances which are proposed to be monitored; and
- (g) opportunities to integrate the monitoring program with other monitoring programs in the vicinity.

The monitoring program must be documented in the LEMP.

Note: The specific requirements of the monitoring program will be stipulated in the EPL.

Noise Monitoring

140. Noise levels must be monitored to confirm performance and to assess compliance with Conditions 100 and 101. A noise-monitoring program must be developed and implemented. The program must include details on:

- (a) methodologies for noise monitoring;
- (b) location of noise monitoring; and

(c) frequency of noise monitoring.

The monitoring program must be documented in the LEMP.

Note: The specific requirements of the monitoring program will be stipulated in the EPL.

ROADWORKS

141. Prior to the commencement of construction, the Applicant shall undertake and submit to Council a detailed pavement analysis on the affected sections of Main Road 268 (Bungendore Road) and Collector Road. The Applicant shall fund any necessary rehabilitation work identified in the pavement analysis.

142. The Applicant shall fund and provide on Main Road 268 (Bungendore Road) a minimum bitumen sealed width of 9.0 metres, incorporating marked fog lines and centre-line as well as any required bus stops.

Note: This has been agreed between Mulwaree Shire Council and the Applicant. It has been accepted there will be a 7.0m wide road with 1m shoulders either side of the road which will be primed and sealed only.

143. The intermodal facility access road shall be constructed in accordance with Auspec specifications and shall have a 7.0 metre wide sealed bitumen pavement for two way roads and 5.0 metres on one way roads.

144. In accordance with the "Mulwaree Section 94 Contributions Plan", the Applicant shall provide a financial contribution to Council towards extraordinary road damage accept as may be waived by Council. The contribution is to be paid quarterly in arrears.

Note: the above contribution is current at the time of consent and will be indexed at six monthly intervals in accordance with any increase in the Consumer Price Index (All Groups) Sydney following publication by the Australian Bureau of Statistics.

145. Prior to the commencement of landfilling operations, the Applicant shall fund and undertake to the satisfaction of Council and the Roads and Traffic Authority the following works:

- (a) rehabilitation of the pavement at the intersection of Bungendore and Collector Roads;
- (b) provision of a right turn bay at the intersection of Bungendore and Collector Roads for south-bound traffic turning into Collector Road;
- (c) construction of a right turn bay on Bungendore Road for right-turning traffic into the Intermodal Facility. *(MSC GTA); and*
- (d) paving of the following areas with an asphalt concrete overlay:
 - (i) intersection of the Intermodal access road and Main Road 268
 - (ii) intersection of Main Road 268 and the Collector Road
 - (iii) intersection of the Collector Road and the access road to the landfill site.

146. The access point to the Intermodal Facility at Bungendore Road shall be constructed to a design and standard to the Roads and Traffic Authority (RTA) and Council specifications and shall have a minimum sight distance of 225 metres in both directions. *(MSC GTA)*

147. The access point to the Waste Management Facility site at Collector Road shall be constructed to accommodate B-doubles. *(MSC GTA)*

148. The Applicant shall liaise with Council in relation to upgrading the existing warning signposting at the junction of Bungendore and Collector Roads to better inform through traffic of the side road junction and turning trucks. (MSC GTA)

LANDSCAPING AND VEGETATION MANAGEMENT

149. The Applicant shall prepare a Landscaping and Vegetation Management Plan for both the Waste Management Facility and Intermodal Facility sites. The Plan shall be prepared by a suitably qualified person and shall address, but not be limited to, the following matters:
- (a) details of likely vegetation loss, means to minimise such loss and additional tree planting to offset this loss;
 - (b) proposed plant species; and
 - (c) details on landscaping treatment at the intermodal facility site, with particular attention to minimising the visibility of the facility from residences and public vantage points.
150. The Plan shall be prepared to the satisfaction of the Director-General and Council and shall be submitted at least three months prior to the commencement of landfilling operations.

AGRICULTURAL RISKS

151. The Applicant shall prepare to the satisfaction of NSW Agriculture a contingency plan for agricultural risks in the event of an incident such as an accident during the transportation of waste from Sydney.
152. As part of the LEMP, the Applicant shall prepare a plan to manage pests, diseases, vermin, and declared noxious weeds. The plan shall also address measures to manage bird pests in order to minimise the risk of any transfer of contaminants from the waste management facility site to regional waterways and water supply reservoirs. The plan shall also address the recommendations of the report prepared by Kinsella Consulting entitled "*Potential for Transport of Pests and Diseases of Plants and Animals from North Sydney to Tarago in Municipal Wastes*", dated February 1999 and included as Appendix L of the EIS. (EPA GTA)

FLORA AND FAUNA

Terrestrial Flora and Fauna

153. The Applicant shall consult with NPWS on measures to conserve the population of the vulnerable orchard (*Diuris aequalis* – Buttercup Doubletail) in retained natural woodland on land within the Woodlawn mine site that is subject to the DA or areas potentially affected by the operation of the waste management facility.

Aquatic Flora and Fauna

154. The Applicant shall consult NSW Fisheries prior to the commencement of any works (including, but not limited to channel realignment, dredging, reclamation, culverts, road crossings, pipelines and weirs) in or adjacent to aquatic habitats.
155. The Applicant shall undertake all practicable measures to maintain and, where possible, enhance existing habitat features in the Mulwaree River and Crisps Creek, including gravel beds, riffles, pools, snags and aquatic and riparian vegetation.

156. The Applicant shall, in consultation with NSW Fisheries, ensure that the bridge from the Intermodal Facility over Mulwaree River is designed so that fish passage, in-stream flow and stream bed continuity are maintained.

HERITAGE AND ARCHAEOLOGY

Aboriginal Heritage

Note: The Applicant has been given Consent to Destroy for sites Crisps Creek 1 and 2, Tarago, NSW under section 90 of the National Parks and Wildlife Act 1974. Artefacts from Crisp Creeks sites 1, 2 and 4 have been salvaged, in accordance with the conditions of NPWS Permit #SCHU 0071.

Non-Aboriginal Heritage

157. In the event that any items potentially of non-Aboriginal heritage significance are identified on the subject land during the carrying out of works, the Applicant shall arrange for a suitably qualified archaeologist to inspect the item/s, determine the level of significance of the item/s and advise on appropriate management measures.

CONTINGENCY PLANNING

Emergency Management Plan

158. In relation to activities, which in the event of a disruption to operations may result in significant pollution being emitted, the Applicant must:
- (a) conduct an assessment to determine the potential internal and external causes of disruption of operations at the premises;
 - (b) determine how these disruptions would impact on operations; and
 - (c) identify the pollution that would result due to the disruption of operations and what impact the pollution would have on the health of the community and the environment.
159. In relation to matters identified in Condition 158, as part of the LEMP, the Applicant must prepare an Emergency Management Plan. The Plan shall address, but not necessarily be limited to:
- (a) identification of threats to the environment and/or public health that could arise in relation to the construction and operation of Waste Management Facility and Intermodal Facility including the transportation of waste. These threats may include fire (waste transportation or within the landfill), overflow, dam failure, power or other utility failure, natural disaster etc;
 - (b) identification of strategies to minimise and ameliorate the effects of any groundwater surface water pollution identified from the groundwater and surface water monitoring programs;
 - (c) an estimate of the cost of implementation;
 - (d) actions to effectively respond to the disruption of operations so the risk of pollution is minimised;
 - (e) a communications strategy for alerting relevant agencies and the potentially affected community in the event of the disruption to operations leading to significant pollution; and

- (f) ensuring that all relevant employees are familiar with the emergency management plan.

The Applicant should regularly review the adequacy of the plan obtaining expert advice as required.

Note: When developing this emergency plan, opportunities may exist to integrate with the Woodlawn Mine site emergency management plans.

COMPLAINTS PROCEDURES

- 160. Prior to the commencement of construction, the Applicant shall establish a free-call telephone line that operates 24 hours per day 7 days per week on which complaints about the subject development can be registered. The Applicants shall record details of all complaints received and actions taken in response to complaints in an up-to-date log book. The Applicants shall ensure that an initial response to complainants is provided within 24 hours and detailed response within 10 days of the complaint being lodged. The system must also be provided with a complaint verification procedure which correlates potential sources of odours with an operation or activity by assessing relevant meteorological data.
- 161. The complaints register shall be available for inspection upon request by the Director-General, EPA, DLWC, and the CLC.

ATTACHMENT A

GENERAL AND MANDATORY CONDITIONS FOR ALL EPA LICENCES

Administrative Conditions

The Applicant must, in the opinion of the EPA, be a fit and proper person to hold a licence under the POEO (POEO) Act 1997, having regard to the matters in S.83 of that Act.

Limit Conditions

Pollution of waters

Except as may be expressly provided by a licence under the POEO Act 1997 in relation to the development, Section 120 of the POEO Act 1997 must be complied with.

Operating Conditions

Activities must be carried out in a competent manner

Licensed activities must be carried out in a competent manner.

This includes:

- (a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

Maintenance of plant and equipment

All plant and equipment installed at the premises or used in connection with the licensed activity:

- (a) must be maintained in a proper and efficient condition; and
- (b) must be operated in a proper and efficient manner.

Waste

The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by a licence under the POEO Act 1997.

This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if it requires an environment protection licence under the POEO Act 1997.

MONITORING AND RECORDING CONDITIONS

Testing Methods – Concentration Limits

Monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation areas must be done in accordance with:

- the Approved Methods Publication; or
- if there is no methodology required by the Approved Methods Publication or by the general terms of approval or in the licence under the POEO Act 1997 in relation to the development or the relevant load calculation protocol, a method approved by the EPA in writing before any tests are conducted,

unless otherwise expressly provided in the GTAs or Licence Conditions.

Monitoring records

The results of any monitoring required to be conducted by the EPA's general terms of approval (GTAs), or a licence under the POEO Act 1997, in relation to the development or in order to comply with the load calculation protocol must be recorded and retained as set out in GTAs or Licence Conditions.

All records required to be kept by the licence must be:

- in a legible form, or in a form that can readily be reduced to a legible form;
- kept for at least four years after the monitoring or event to which they relate took place; and
- produced in a legible form to any authorised officer of the EPA who asks to see them.

The following records must be kept in respect of any samples required to be collected: the date(s) on which the sample was taken;

- the time(s) at which the sample was collected;
- the point at which the sample was taken; and
- the name of the person who collected the sample.

Recording of pollution complaints

The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

The record must include details of the following:

- (a) the date and time of the complaint;
- (b) the method by which the complaint was made;
- (c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
- (d) the nature of the complaint;
- (e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
- (f) if no action was taken by the licensee, the reasons why no action was taken.

The record of a complaint must be kept for at least 4 years after the complaint was made.

The record must be produced to any authorised officer of the EPA who asks to see them.

Telephone complaints line

The licensee must operate a 24 hour telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.

The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.

This condition does not apply until 3 months after this condition takes effect.

REPORTING CONDITIONS

The Applicant must provide an annual return to the EPA in relation to the development as required by any licence under the POEO Act 1997 in relation to the development. In the return the Applicant must report on the annual monitoring undertaken (where the activity results in pollutant discharges), provide a summary of complaints relating to the development, report on compliance with licence conditions and provide a calculation of licence fees (administrative fees and, where relevant, load based fees) that are payable. If load based fees apply to the activity the Applicant will be required to submit load-based fee calculation work sheets with the return.

Annual Return documents

What documents must an Annual Return contain?

The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:

- (a) a Statement of Compliance; and
- (b) a Monitoring and Complaints Summary.

A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.

Period covered by Annual Return

An Annual Return must be prepared in respect of each reporting, except as provided below.

Note: The term “reporting period” is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

Where this licence is transferred from the licensee to a new licensee,

- (a) the transferring licensee must prepare an annual return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
- (b) the new licensee must prepare an annual return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose.

Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an annual return in respect of the period commencing on the first day of the reporting period and ending on:

- (a) in relation to the surrender of a licence – the date when notice in writing of approval of the surrender is given; or
- (b) in relation to the revocation of the licence – the date from which notice revoking the licence operates.

Deadline for Annual Return

The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').

Licensee must retain copy of Annual Return

The licensee must retain a copy of the annual return supplied to the EPA for a period of at least 4 years after the annual return was due to be supplied to the EPA.

Certifying of Statement of Compliance and Signing of Monitoring and Complaints Summary

Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:

- (a) the licence holder; or
- (b) by a person approved in writing by the EPA to sign on behalf of the licence holder.

A person who has been given written approval to certify a Statement of Compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review this licence.

Notification of environmental harm

Note: The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.

Notifications must be made by telephoning the EPA's Pollution Line service on 131 555.

The licensee must provide written details of the notification to the EPA within seven days of the date on which the incident occurred.

Written report

Where an authorised officer of the EPA suspects on reasonable grounds that:

- (a) where this licence applies to premises, an event has occurred at the premises; or
- (b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,

and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.

The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.

The request may require a report which includes any or all of the following information:

- (a) the cause, time and duration of the event;
- (b) the type, volume and concentration of every pollutant discharged as a result of the event;
- (c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; and
- (d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
- (e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
- (f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event;
- (g) any other relevant matters.

The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

GENERAL CONDITIONS

Copy of licence kept at the premises or on the vehicle or mobile plant.

A copy of this licence must be kept at the premises or on the vehicle or mobile plant to which the licence applies.

The licence must be produced to any authorised officer of the EPA who asks to see it.

The licence must be available for inspection by any employee or agent of the licensee working at the premises or operating the vehicle or mobile plant.

ATTACHMENT B
DEFINITIONS RELEVANT TO EPA LICENCES

In the EPA GTAs, except in so far as the context or subject matter otherwise indicates or requires:

“Applicant” means Collex Waste Management Pty Limited.

“Approved” means approved in writing by the EPA or as specified in a condition in a licence.

“End of Mine Life Steering Committee” means the steering committee formed from the MREMP process to oversee environmental issues relating to mine closure. The Committee consists of representatives from Denehurst P/L, Price Waterhouse Coopers P/L (Administrators Appointed), NSW Department of Mineral Resources, NSW Department of Land and Water Conservation, NSW Environment Protection Authority and Mulwaree Shire Council. *“EPA Tyre Disposal Specifications”* means the current approved EPA procedure for disposal of tyres. As at 31/8/99, this approved procedure is (for tyres less than 1.2 metres in diameter which originate in the Sydney Metropolitan area) shredding tyres into pieces which measure no more than 250 mm in any direction or removing the walls in tyres prior to disposal.

“Independent review” means a review that is undertaken by a suitably qualified Environmental Consultant of monitoring, reporting, testing and the environmental performance of a company in meeting Licence requirements.

“landfill gas” means the gas that is generated by the decomposition of waste.

“Landfill Guidelines” means the EPA's "Environmental Guidelines: Solid Waste Landfills", or as otherwise amended by the EPA

“Landfill site” means a waste facility used for the purposes of disposing of waste to land.

“Leachate” means the polluted liquid that is released by or has percolated through waste. Pollutants contained in leachate include dissolved and suspended solids, organic chemicals, and dissolved gases.

$L_{A10} T$ means the sound pressure level (A weighted) that is exceeded for 10 percent of the observed time “T”.

“LEMP” means landfill environment management plan.

“Licence” means an environment protection licence issued under the Protection of the Environment Operations Act 1997

“MREMP” means the Mining Rehabilitation Environmental Management Plan prepared by Denehurst P/L for the Woodlawn Mine site to meet mining lease requirements and overseen by the NSW Department of Mineral Resources.

“mg/L” means milligrams per litre

“Offensive odour” means odour:

- (a) that, by reason of its strength, nature, duration, character or quality, or the time at which it is emitted, or any other circumstances:
 - (i) is harmful to (or is likely to be harmful to) a person who is outside the premises from which it is emitted, or
 - (ii) interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted, or

- (b) that is of a strength, nature, duration, character or quality prescribed by the regulations or that is emitted at a time, or in other circumstances, prescribed by the regulations.

It is a defence in proceedings against a person for an offence against this section if the person establishes that:

- (a) the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of the licence directed at minimising the odour; or
- (b) the person affected by the odour were a person engaged in the management or operation of the premises.

A person who contravenes this section is guilty of an offence.

“*POEO*” means the Protection of the Environment Operations Act 1997

“*Putrescible waste*” has the same meaning as in the *Waste Minimisation and Management Act 1995*, which is waste being food or animal matter (including dead animals or animal parts) or unstable or untreated biosolids.

“*:g*” means micrograms

“*:g/m³*” means micrograms per cubic metre

“*:S/cm*” means micro siemens per centimetre

“*Void*” means the former open-cut mine pit at the Woodlawn mine site.

“*waste*” includes:

- (a) any substance (whether solid, liquid or gaseous) that is discharged, emitted or deposited in the environment in such volume, constituency or manner as to cause an alteration in the environment, or
- (b) any discarded, rejected, unwanted, surplus or abandoned substance, or
- (c) any otherwise discarded, rejected, unwanted, surplus or abandoned substance intended for sale or for recycling, reprocessing, recovery or purification by a separate operation from that which produced the substance, or
- (d) any substance prescribed by the regulations to be waste for the purposes of the *Waste Minimisation and Management Act, 1995*.

A substance is not precluded from being waste for the purposes of the *Waste Minimisation and Management Act, 1995* merely because it can be reprocessed, re-used or recycled.

“*Waste Guidelines*” means the EPA's *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes*, or as otherwise amended by the EPA.

“*Woodlawn Waste Management Facility*” means the landfill (mine void), intermodal facility, evaporation dam 3 (ED3) and includes other areas of the Woodlawn Mine site subject to the Development Application.

“*Woodlawn Mine site*” means the area bounded by the Woodlawn Mine property boundary nominated in figure 6.1 of the EIS titled Topography of Landfill Site and Surrounding Area in Woodlawn Waste Management Facility EIS Volume 1-Main Report prepared by Woodward Clyde P/L dated February 1999.