

**DETERMINATION OF A DEVELOPMENT APPLICATION FOR STATE SIGNIFICANT AND DESIGNATED DEVELOPMENT PURSUANT TO SECTION 80 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979**

I, the Minister for Infrastructure and Planning, pursuant to section 80 of the *Environmental Planning and Assessment Act 1979* ("the Act") determine the development application ("the Application") referred to in Schedule 1 by granting consent subject to the conditions set out in Schedule 2.

The reason for the imposition of conditions is to:

- a) minimise any adverse environmental impacts associated with the development;
- b) ensure effective on-going environmental and safety management of the development;
- c) provide for regular monitoring and reporting in the development;
- d) implement the Commission of Inquiry recommendations; and
- e) restrict landfill capacity of the development in order to be consistent with the aims and objectives of *State Environmental Planning Policy No.48 – Major Putrescible Landfill Sites*, *State Environmental Planning Policy No.29 – Western Sydney Recreational Parklands* and *Sydney Regional Environmental Management Plan No.31 – Regional Parklands*.



Craig Knowles MP  
**Minister for Infrastructure and Planning**

Sydney,

3.6

2005

File No. S03/01582

**SCHEDULE 1**

- Application made by:** Waste Recycling and Processing Corporation Pty Ltd ("the Applicant").
- To:** The Minister for Infrastructure and Planning ("the Minister").
- In respect of:** Lot 11 DP1058722, Ferrers Road, Eastern Creek, Blacktown local government area.
- For the following:** Extension to the Eastern Creek Waste Management Centre to provide additional landfill capacity ("the development"), as described in *Eastern Creek Waste Management Centre – Proposed Modification: Eastern Creek Stage 2 - Environmental Impact Statement* (eleven volumes), prepared by National Environmental Consulting Services (NECS) and dated 10 June 2003.
- Development Application:** Development Application DA 271-6-2003-i, lodged with the Department of Infrastructure, Planning and Natural Resources on 17 June 2003, accompanied by *Eastern Creek Waste Management Centre – Proposed Modification: Eastern Creek Stage 2 - Environmental Impact Statement* (eleven volumes), prepared by NECS and dated 10 June 2003.

**State Significant Development**

The proposal is classified as State significant development under section 76A(7) of the *Environmental Planning and Assessment Act 1979* (the Act).

**Note:**

- 1) To ascertain the date upon which this consent becomes effective, refer to section 80 of the Act.
- 2) To ascertain the date upon which this consent is liable to lapse, refer to section 95 of the Act.
- 3) As a Commission of Inquiry was held into the proposed development, there are no rights of appeal to the Land and Environment Court for the Applicant under section 97 of the Act or for third-party objectors under section 98 of the Act.

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## SCHEDULE 2

In this consent, except in so far as the context or subject-matter otherwise indicates or requires, the following terms have the meanings indicated:

Act	<i>Environmental Planning and Assessment Act, 1979</i>
AEMR	Annual Environmental Management Report
Applicant	Waste Recycling and Processing Corporation (trading as WSN Environmental Services)
BCA	Building Code of Australia
Council	Blacktown City Council
DEC	Department of Environment and Conservation (incorporating NSW Environment Protection Authority and the NSW National Parks and Wildlife Service)
Department	NSW Department of Infrastructure, Planning and Natural Resources
Department (Natural Resources)	division of the NSW Department of Infrastructure, Planning and Natural Resources that administrates the <i>Rivers and Foreshores Improvement Act 1948</i> (formerly known as Department of Land and Water Conservation)
development	the development to which this consent applies, the scope of which is described in the documents listed under condition 1.1 of this consent
Director General	Director General of the NSW Department of Infrastructure, Planning and Natural Resources, or delegate
dust	any solid material that may become suspended in air or deposited
EIS	<i>Eastern Creek Waste Management Centre – Proposed Modification: Eastern Creek Stage 2 - Environmental Impact Statement</i> (eleven volumes), prepared by National Environmental Consulting Services (NECS) and dated 10 June 2003
EPL	Environment Protection Licence issued under the <i>Protection of the Environment Operations Act, 1997</i>
landfilling	any activity associated with the landfilling of putrescible waste at the site and the operation of associated support infrastructure, as described in the development application DA 271-6-2003-i
LEMP	Landfill Environmental Management Plan
Minister	NSW Minister for Infrastructure and Planning, or delegate
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
RTA	NSW Roads and Traffic Authority
site	the land to which this consent applies
site preparation	any activity involving significant excavation work and other site preparation works, road works, demolition, landfill cell preparation works (and infrastructure) or other works to enable the disposal of waste at the site as described in DA DA 271-6-2003-i
WSID	Western Sydney International Dragway

## 1. GENERAL

### Scope of Development

- 1.1 The Applicant shall carry out the development generally in accordance with:
- a) Development Application DA 271-6-2003-i, lodged with the Department of Infrastructure, Planning and Natural Resources on 17 June 2003;
  - b) *Eastern Creek Waste Management Centre – Proposed Modification: Eastern Creek Stage 2 - Environmental Impact Statement* (eleven volumes), prepared by National Environmental Consulting Services (NECS) and dated 10 June 2003;
  - c) *Response to Issues Raised in Submissions on EIS – Proposed Modification to Eastern Creek Stage 2*, prepared by National Environmental Consulting Services (NECS) and dated December 2003;
  - d) *Supplementary Report – Response to EIS Submissions – Proposed Modification to Eastern Creek Stage 2*, prepared by National Environmental Consulting Services (NECS) and dated December 2003;
  - e) *Odour Audit: Eastern Creek – Stage 2*, prepared by Holmes Air Sciences and dated December 2003;
  - f) correspondence from Waste Service NSW to the Department, titled *Eastern Ck Extension – EPA requirements – DA 271-06-2003-i* and dated 27 February 2004;
  - g) *Appendices – Response to EPA issues – Proposed Modification to Eastern Creek WMC*, prepared by Waste Service NSW and dated February 2004;
  - h) *Response to Questions – Eastern Creek WMC Commission of Inquiry*, prepared by Waste Service NSW and dated November 2004;
  - i) *Commission of Inquiry – Proposed Alterations to and Extensions of the Existing Eastern Creek Waste Management Centre – Submission in Reply* (with attachments), prepared by National Environmental Consulting Services (NECS) and dated November 2004; and
  - j) the conditions of this consent.
- 1.2 In the event of an inconsistency between:
- a) the conditions of this consent and any document listed from condition 1.1a) to 1.1i) inclusive, the conditions of this consent shall prevail to the extent of the inconsistency; and
  - b) any document listed from condition 1.1a) to 1.1i) inclusive, and any other document listed from condition 1.1a) to 1.1i) inclusive, the most recent document shall prevail to the extent of the inconsistency.

### Statutory Requirements

- 1.3 The Applicant shall ensure that all licences, permits and approvals are obtained and kept up-to-date as required throughout the life of the development. No condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approvals.

## 2. COMPLIANCE

- 2.1 The Applicant shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.
- 2.2 The Applicant shall be responsible for environmental impacts resulting from the actions of all persons on the site, including contractors, subcontractors and visitors.

- 2.3 At least two weeks prior to each of the events listed from a) to c) below, or within such period otherwise agreed by the Director General, the Applicant shall certify in writing to the satisfaction of the Director General, that it has complied with all conditions of this consent applicable prior to that event.
- a) commencement of any site preparation works on the land the subject of this consent; and
  - b) commencement of landfilling activities at the site subject of this consent; and
  - c) the closure of the landfill cells and commencement of the rehabilitation activities at the site subject of this consent.
- 2.4 Notwithstanding condition 2.3 of this consent, the Director General may require an update report on compliance with all, or any part, of the conditions of this consent. Any such update shall meet the requirements of the Director General and be submitted within such period as the Director General may require.
- 2.5 The Applicant shall meet the requirements of the Director General in respect of the implementation of any measure necessary to ensure compliance with the conditions of this consent, and general consistency with the documents listed under condition 1.1 of this consent. The Director General may direct that such a measure be implemented in response to the information contained within any report, plan, correspondence or other document submitted in accordance with the conditions of this consent, within such time as the Director General may require.

### **3. DEVELOPMENT SCHEDULE**

- 3.1 Within one month of granting of consent to the development, the Applicant shall provide to the Director-General and the DEC a schedule for the development that identifies:
- a) the remaining approved capacity at the entire facility as of 1 April 2005 that was available for landfilling;
  - b) the schedule for constructing any of the new landfill stages as approved by this consent; and
  - c) the timing for submitting all necessary information required by this consent to obtain the required approvals from the Director-General and the DEC and the EPL variation(s) to permit the continued landfill activities at the site.

### **4. LANDFILL CAPACITY**

- 4.1 The total capacity of the development shall not exceed 2.9 million tonnes, and shall not exceed a waste disposal rate of:
- a) 500,000 tonnes in any 12 month period, with an equivalent of 80,000 tonnes in any 12 month period on weekends, between 1 July 2005 and 30 June 2011; and
  - b) 350,000 tonnes in any 12 month period between 1 July 2011 and 30 June 2014.
- 4.2 Notwithstanding condition 4.1, the Applicant shall cease the acceptance of putrescible waste at the site by 30 June 2014, with the exception of residual waste classified as inert or solid waste originating from Alternative Waste Technology facilities (AWTs) located at the Eastern Creek Waste Management Centre. Residual waste from AWT's shall be permitted to be disposed of at the development until 5 June 2022 (or as reflected in the applicable lease expiry dates) or as agreed to by the Director General.

- 4.3 The Applicant may only dispose of residual waste at the site, as permitted by condition 0, if the Applicant demonstrates to the satisfaction of the Director General that:
- a) the disposal of this type of waste would not unnecessarily restrict the completion of the rehabilitation works for the majority of the site; and
  - b) this activity would be managed to minimise the disturbance to the site and reduce the impacts associated with the activity.

The Applicant shall not dispose of residual waste at the development after 30 June 2014 until the Applicant has obtained the Director General's approval for this activity and has suitably amended the Landfill Environmental Management Plan for the development.

#### **Input Rate Variations**

- 4.4 With the prior written approval of the Director General, the Applicant may exceed the annual waste input rates for the development, as specified in condition 4.1, by up to an equivalent of 50,000 tonnes per annum should an emergency situation occur within the Sydney metropolitan region that creates a need for emergency waste management capacity. The Director General may only grant approval for additional waste input if the Applicant can demonstrate an unavoidable need for additional landfill input capacity at the development in the immediate to short-term. Any approval issued by the Director General shall restrict the increased rate input to a finite period of time to reflect the demand created by that particular emergency situation.

In applying for the above, the Applicant shall submit to the Director General a review of the proposed rate variation that examines the emergency situation in light of the current landfill capacity and demand in the Sydney region at that point in time.

#### **Revised Landfill Layout**

- 4.5 Nothing in this consent permits the disposal of waste (overtopping) as described in the Environmental Impact Statement (condition 1.1b)) within areas positioned south of the power easement located at the site and defined as Stages 1, 2 and 3.
- 4.6 Nothing in this consent permits the removal of the Cumberland Plain Woodland (CPW) or the realignment of the ephemeral drainage line at the site as described in the Environmental Impact Statement (condition 1.1b)). In retaining the drainage line and the CPW, the Applicant shall provide an approximate 40 metre wide buffer on each side of the ephemeral drainage line.
- 4.7 The Applicant shall prepare a comprehensive **Landfill Plan** for the development that amends the landfill design and staging program outlined in documents listed in condition 1.1 of this consent to:
- a) reflect the requirements of this consent, in particular condition 4.1 (landfill capacity), condition 4.5 (overtopping) and condition 4.6 (drainage and Cumberland Plain Woodland), and condition 5.12 (site rehabilitation);
  - b) reflect the aims and objectives of *State Environmental Planning Policy No.29 – Western Sydney Recreational Area* and *Sydney Regional Environmental Management Plan No.31 – Regional Parklands* with respect to the future uses of the site, site rehabilitation and design of the final landfill form;
  - c) reflect the findings of the Commission of Inquiry held into the development; and
  - d) be generally consistent with the preliminary concept design for the development as provided in Plan 20010705-SK1014 (titled *Revised Layout – Split Landfill – Final Profile*, prepared by Maunsell-Aecom and dated 22 April 2005), Plan 20010705-SK1015 (titled *Revised Layout – Split Landfill – Typical sections*, prepared by Maunsell-Aecom and dated 22 April 2005) and Plan LMP – 02.556-02 RevB (titled *Eastern Creek 2 – Landscape Concept Master Plan*, prepared by Context Landscape Design and dated March 2005).

The Landfill Plan shall include (but not necessarily be restricted to):

- a) details of the layout and design of the landfill (including final contours, depth of waste and depth of VENM) and associated infrastructure. This shall include details of the surface contours of the landfill as predicated at six-month intervals;
- b) the construction quality assurance program; and
- c) the revised Landfill Staging Program that indicates the timing of the progressive stages of the development, specifically, the timing for the site preparation works, filling and rehabilitation stages of the development.

The Landfill Plan shall be incorporated into the Landfill Environmental Management Plan (condition 9.4). The Applicant shall not commence any works associated with the development until the Landfill Plan has been approved by the Director General and DEC.

## **5. LANDFILL CONSTRUCTION AND REHABILITATION**

### **Landfill Construction**

- 5.1 The Applicant shall prepare and submit as part of the Landfill Environmental Management Plan for the development (refer to condition 9.4), design drawings "for construction" for each stage of the development. These plans shall include, but not be necessarily be limited to:
  - a) top and base liner contour plans;
  - b) cross sections of typical wall lining; and
  - c) leachate collection pipe details, including the details of the junction with the leachate riser and level alarm, and pumping arrangements.
- 5.2 The Applicant shall install a compact clay liner on the base and walls of the landfill with no less than 900mm of clay that has an in-situ permeability of less than  $10^{-9}$  ms<sup>-1</sup>.
- 5.3 The Applicant shall install a leachate collection gravel drainage blanket over the entire basal surface of each landfill cell. The gravel drainage blanket shall be:
  - a) no less than 300mm in thickness at any point on the base of the landfill;
  - b) have a permeability of greater than  $10^{-3}$  ms<sup>-1</sup>;
  - c) consist of gravel;
  - d) rounded;
  - e) of grain size greater than 20mm (that is, by demonstrating than not greater than 10% is smaller than 20mm in size and no greater than 3% is smaller than 0.075mm in size under the design weight)
  - f) non-reactive in mildly acidic conditions;
  - g) relatively uniform in grain size; and
  - h) free of carbonates.

### ***Construction Quality Assurance Plan***

- 5.4 Prior to the commencement of site preparation works associated with the development, the Applicant shall prepare a Construction Quality Assurance Plan (CQAP) and Testing Program for the development to enable confirmation that works associated with the site preparation, landfilling operations and closure activities of the development have been installed in a manner that will achieve the design specifications as provided in the documents listed in condition 1.1 of this consent or as otherwise specified in this consent.

The CQAP and Testing Program shall include, but not necessarily be limited to, the following:

- a) Quality Assurance (QA) program to ensure that the landfill cap is installed in accordance with its design specifications;
- b) QA program to ensure that the leachate barrier, collection and storage system is installed in accordance with the design specifications; and
- c) provision for "as constructed" drawings for the top and bottom of the landfill liner, the top of all lateral leachate drainage pipes, the top of the geotextile place on the drainage aggregate and stage perimeter contours.

The CQAP and Testing program shall be submitted for the approval of the DEC prior to the commencement of any works at the site, and shall be implemented during all relevant works associated with the development.

- 5.5 The Applicant shall not commence the disposal of waste at the development until the Applicant has completed the installation of the landfill infrastructure to the satisfaction of the DEC, and has obtained written approval to that effect from the DEC, for the following components:
- the leachate barrier and leachate collection, conveyance, storage dam/s and disposal system;
  - leachate pipework, pumps and controls; and
  - stormwater control works.

The above works shall be constructed in accordance with the design requirements specified in any EPL issued for the development and in accordance with condition 5.4 of this consent. In seeking the DEC's approval, the Applicant shall submit documentary evidence prepared by a suitably qualified person demonstrating that the landfill infrastructure (refer to 5.5a)-c)) has been installed in a manner that meets the relevant design specifications.

- 5.6 Within six (6) months of completing site preparation works for each stage of the landfill, the Applicant shall submit to the DEC "as constructed" drawings for the development as prepared in accordance with condition 5.4c) of this consent.

This drawings shall be accompanied by a report signed by a suitably qualified person to provide evidence that the works were constructed to the design specification, and if not, justification for any departure from the approved design specifications/requirements.

#### **Landfill Operations**

- 5.7 The Applicant shall conduct landfilling activities at the site in accordance with the EPL issued for the development, the Landfill Plan, as prepared in accordance with condition 4.7 of the consent, and as detailed in the Landfill Environmental Management Plan for the development (refer to condition 9.4).
- 5.8 At least three (3) months prior to the completion of landfill activities at the site, the Applicant shall submit to the DEC a Landfill Closure Plan for the development in accordance with section 76 of the *Protection of the Environment Operations Act 1997*.

**Note:** Following the acceptance of the Landfill Closure Plan by the DEC, the Applicant shall suitably update (where relevant) the Landscape Management Plan (condition 5.12 of this consent) and the Landfill Environmental Management Plan (refer to condition 9.4 of this consent) to ensure consistency between these documents.

#### **Site Rehabilitation**

- 5.9 The Applicant shall progressively cap and revegetate the development in accordance with requirements of this consent and the EPL issued for the development, with each stage capped and revegetated within four (4) months of completing land filling activities in that stage.
- 5.10 The upper two layers of the final cap for the landfill shall meet the following requirements:
- the topsoil component of the vegetation layer shall be virgin excavated natural material as defined under the *Protection of the Environment Operation Act 1997*, unless otherwise approved by the DEC; and
  - the compost mulch shall comply with the requirements of Australian Standard AS4454-2003 *Composts, Soil Conditioners and Mulches - unrestricted*.

- 5.11 All shrubs, grasses and trees planted on the surface of the landfill as part of the site rehabilitation works shall have a root depth less than the depth of the cap's revegetation layer, unless as otherwise approved by the DEC.

#### **Landscape Rehabilitation Plan**

- 5.12 The Applicant shall prepare and implement a Landscape Rehabilitation Plan for the development that outlines the rehabilitation activities to be undertaken following the completion of works at the site. The Landscape Rehabilitation Plan shall:
- a) be consistent and integrated with the rehabilitation of the entire site;
  - b) be consistent with the aims and objectives of the *Sydney Regional Environmental Management Plan No.31 – Regional Parklands* and *State Environmental Planning Policy No.29 – Western Sydney Recreational Area* with respect to future land uses at the site and the final landform of the site;
  - c) provide a proposed revised design and specifications for the cap of the landfill, taking into details provided in documents referred to in condition 1.1 of the consent;
  - d) identify the rehabilitation works to be undertaken, including the rehabilitation of the Cumberland Plain Woodland and the Sydney Coastal River-Flat Forest located at the site to enhance the ecological values of these communities and the connections with other ecological communities in the vicinity of the site;
  - e) identify the rehabilitation standards and rehabilitation program that would apply to the works. These works shall involve the use of local Cumberland Plain Woodland species in the revegetation of landfill mounds, and the preparation of these mounds to support these species;
  - f) provide details of the monitoring and maintenance program to be conducted following initial rehabilitation works. This includes the monitoring and removal of weed infestations;
  - g) provide details of the interim rehabilitation works within undisturbed areas and/or completed stages of the landfill prior to the completion of all landfilling activities at the site. This includes the regular monitoring of existing vegetation to ensure no deterioration of these ecological communities during operations prior to the rehabilitation of the entire site;
  - h) detail the closure strategies in the event that landfilling activities conclude prior to reaching the final approved capacity;
  - i) incorporate monitoring programs for the post-closure monitoring of surface water, leachate management, bioreactor processes and landfill gas management.

The Landscape Rehabilitation Plan shall form part of the Landfill Environmental Management Plan for the development (refer to condition 9.4).

## **6. ENVIRONMENTAL PERFORMANCE**

### **Waste Management**

- 6.1 The Applicant shall not cause, permit or allow any waste generated outside the site to be received at the site for storage, treatment, processing, reprocessing or disposal or any waste generated at the site to be disposed of at the site, except as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*.

- 6.2 The Applicant shall ensure that only the following types of waste, specified in Table 1 and/or as otherwise specified in an EPL issued for the development, are disposed of at the site.

**Table 1 – Wastes Permitted to be Disposed of**

Type of Landfill	Wastes to be Landfilled
Solid Waste – Class 1 Landfill	<p>Waste, including putrescible waste, that is assessed as inert waste or solid waste following the technical assessment procedure outlined in Technical Appendix 1 of the Waste Guidelines or that specified as inert waste or solid waste in Schedule of the Protection of the Environment Operations Act 1997 and 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).</p> <p>Wastes assessed as inert waste or solid waste according to the EPA's Waste Guidelines, which are also subject to general or specific approvals of the immobilisation of contaminants in waste and which have disposal restrictions that "they must only be disposed of at solid waste landfills or industrial waste landfills which have currently operating leachate management systems and which are licensed to receive that particular class of waste, and that have licence conditions to receive waste subject to immobilisation approvals with this type of disposal restriction.</p>

**Note:** If the EPL issued for the development permits the disposal of asbestos waste, the Applicant must comply with Clause 29 of the *Protection of the Environment Operations (Waste) Regulation 1996*.

**Tyre Management**

- 6.3 Tyres shall not be disposed of at the site, unless otherwise permitted by an Environment Protection Licence issued under the *Protection of the Environment Operations Act 1997*.

**Litter Management**

- 6.4 The Applicant shall prepare and implement a Litter Management Protocol to manage windblown litter at the site, and to prevent the movement of litter to areas outside the site. The Protocol shall be prepared in consultation with Council and shall be incorporated into the Landfill Environmental Management Plan for the development, as required by condition 9.4j) of this consent.

**Water Quality**

- 6.5 Except as may be expressly provided by an Environment Protection Licence for the development, the Applicant shall comply with section 120 of the *Protection of the Environment Operations Act 1997*, which prohibits the pollution of waters.
- 6.6 The Applicant shall ensure that all works associated with the development are designed, constructed and operated in a manner that would result in minimal or nil harm to the aquatic and riparian environments, and do not cause erosion, sedimentation or increase flood levels of protected waters.

**Leachate Management**

- 6.7 Leachate generated at the site shall be captured, managed and disposed of in accordance with the Environment Protection Licence issued for the development under the *Protection of the Environment Operations Act 1997*.
- 6.8 Water that has been in contact with waste (other than daily or intermediate cover) at the site shall be classified and managed as leachate.

- 6.9 The Applicant shall manage leachate generated at the site by:
- a) discharging leachate into the leachate storage dam on the eastern side of Eastern Creek; and/or
  - b) injecting leachate into the land filled waste cells (if approved by the DEC); and/or
  - c) disposing leachate into sewer; and/or
  - d) periodically removing leachate by tanker to a premises offsite which can lawfully received the leachate.
- 6.10 The Applicant shall install and maintain surface drainage works around the top of benches of the quarry void. The design of these works shall be documented in the Landfill Environmental Management Plan for the development (refer to condition 9.4).
- 6.11 The Applicant shall install on all leachate transfer pipes associated with the development a leak detection system. Details of the design, operation, maintenance and monitoring of this system shall be documented in the Landfill Environmental Management Plan for the development (refer to condition 9.4).
- 6.12 The Applicant shall ensure that the level of leachate within the landfill cells do not rise more than 1000 mm above the top of the basal clay liner at any point, unless the leachate holding dams has a freeboard of less than or equal to 0.5 metres or as otherwise approved by the DEC.
- 6.13 The Applicant shall install a high level alarm and pump interlock system shall be installed on the leachate storage pond(s). The system shall be configured such that the alarm system is activated, and any pump transferring leachate to the pond(s) shut down, when the freeboard in the pond(s) is reduced to less than 0.5 metres. The design, operation, maintenance and monitoring of this system shall be documented in the Landfill Environmental Management Plan for the development (refer to condition 9.4).
- 6.14 Prior to the commencement of construction works associated with the leachate storage pond(s), the Applicant shall obtain the DEC's approval for the size and location of the leachate storage dam(s). In doing so, the Applicant shall provide a revised water balance for the development, based on the balance provided in documentation listed in condition 1.1f) and 1.1g).
- 6.15 The Applicant shall install a leachate barrier system beneath the leachate storage dams. The barrier shall be 1.5mm of HDPE with a coefficient of permeability of less than  $10^{-14}$  m/s, unless otherwise approved by the DEC. The design and construction details of the system shall be detailed in the Landfill Environmental Management Plan for the development (refer to condition 9.4).
- 6.16 The Applicant shall ensure that the overflow from the leachate storage dam drains into the landfill void of the development.
- 6.17 The Applicant shall not transfer leachate collected from the development to the leachate storage dam/s located on the western side of Eastern Creek, unless otherwise approved by the DEC.
- 6.18 The Applicant shall provide to the DEC the detailed design specifications for the intermediate bund walls proposed to be installed six months prior to the level of filling exceeds the natural ground level. The design specifications are to be accompanied by an analysis to determine whether or not the leachate collection system for the development would be effective to prevent the perching of leachate and/or fugitive leachate seep if installed behind the proposed intermediate bund walls as proposed in the drawing R8-238.

Should the DEC be satisfied that this configuration would be satisfactory for the collection and management of leachate at the site, the design specifications for the bund walls shall be detailed in the Landfill Environmental Management Plan for the development.

**Note:** Details regarding the infrastructure design, management and disposal of leachate must be provided within the Landfill Environmental Management Plan for the development (condition 9.4).

**Note:** Any discharges to the sewer will require the Applicant to obtain a Section 73 Compliance Certificate under the *Sydney Water Act 1994* for the development.

### **Surface Water**

- 6.19 The Applicant shall design, construct, manage and dispose of surface water runoff generated at the development in accordance with the requirements of the EPL issued for the development and the Soil and Water Management Plan prepared as part of the Landfill Environmental Management Plan for the development (refer to condition 9.4). This shall include measures to appropriately manage surface water runoff generated at the excavated material stockpile(s).
- 6.20 Any discharge of water from any sediment control dam associated with the development shall not exceed 50mg/L for Total Suspended Solids, unless the discharge is an overflow resulting from a rainfall event(s).
- 6.21 The Applicant shall only manage stormwater removed from the landfill void differently to leachate provided that:
- a) the conditions 6.5 and 6.17 are satisfied;
  - b) the concentration of ammonia in the stormwater does not exceed 0.9mg/L; and
  - c) the stormwater contains no leachate.

### **Groundwater**

- 6.22 The Applicant shall investigate the need to include groundwater depressurisation works to prevent the upheaval of the liner for any stage of the development. The results of these investigation works shall be incorporated in the Landfill Environmental Management Plan for the development as required by condition 9.4 of this consent.

### **Watercourse Crossing**

- 6.23 The watercourse crossing for the ephemeral drainage line shall be designed in a manner that takes into account the ecology, wildlife corridor and geomorphic functions of the watercourse. The crossing shall be designed to the satisfaction of the Department (Natural Resources) and shall be approved by the Department (Natural Resources) prior to the commencement of any construction works associated with the crossing.
- 6.24 Following the completion of the watercourse crossing as specified in condition 6.23, the Applicant shall rehabilitate the existing crossing located downstream to the satisfaction of the Department (Natural Resources). This disturbed area shall be suitably rehabilitated to restore the area to a form that represents a natural watercourse. The rehabilitation works shall be carried out in accordance with a **Stream Works Plan** (SWP) that has been approved by the Department (Natural Resources) prior to the commencement of these works. The Plan shall include (but not necessarily be limited to):
- a) details for the timing/staging, maintenance, monitoring and performance criteria, costing for the works and details of personnel that will be responsible for the implementation of these works;
  - b) representative cross sections of the watercourse and riparian zones showing the existing and proposed ground surface levels. In addition, a longitudinal section of the existing and proposed watercourse in sufficient detail to identify any changes in bed level and hydraulic features;

- c) detailed designs of any stabilisation works. Any works shall be of 'soft engineering' design and shall incorporate natural stream features; and
- d) contingency measures in the event of flooding during construction.

The Applicant shall maintain and monitor works undertaken in accordance with the SWP for a minimum two years following the completion of the works. Any failures or bank instability be detected in these works, the Applicant shall immediately rehabilitate the area with the prior approval of the Department (Natural Resources).

**Note:** The Applicant will need to obtain any necessary approvals from the Department of Infrastructure, Planning and Natural Resources under the *Rivers and Foreshores Improvement Act 1948* prior to commencing works associated with condition 6.23 and 6.24. In making an application for any approvals, the Applicant must submit a copy of the Stream Works Plan for the development as required for the above.

### **Landfill Gas**

- 6.25 The Applicant shall progressively install landfill gas management infrastructure to reflect the landfilling activities at the development. Details regarding the design, installation, monitoring and maintenance of the landfill gas infrastructure shall be detailed within the Landfill Environmental Management Plan (refer to condition 9.4).
- 6.26 Prior to the commencement of landfilling activities at the site, the Applicant shall install landfill gas flare(s) at the development. The flare(s) shall be at ground level, shrouded, provided with automatic combustion air control, automatic shut-off gas valve and an automatic re-start system.
- 6.27 The Applicant shall ensure that landfill gas extraction and utilisation system for the development is designed and installed to withstand the forces created by the weight and settlement of waste in the landfill.
- 6.28 The Applicant shall ensure that landfill gas generated by waste disposal activities associated with the development are appropriately collected and treated by being oxidised to carbon dioxide.
- 6.29 Notwithstanding condition 6.28 of this consent, should a landfill gas turbine(s) be approved and installed on the site, the Applicant shall maximise the use of landfill gas generated by the development in that turbine(s).

### **Air Quality**

#### ***Odour***

- 6.30 The Applicant shall ensure that the leachate holding dam is maintained in a condition that minimises the emission of odours from the site.
- 6.31 The Applicant shall ensure that the active tipping face for the development does not exceed 1,250m<sup>2</sup> at any time and 250m<sup>2</sup> on weekends, or as otherwise approved by the DEC and the Director General.

#### ***Dust***

- 6.32 The Applicant shall design, construct, commission, operate and maintain the development in a manner that minimises dust emissions from the site.
- 6.33 All trafficable areas and vehicle manoeuvring areas on the site shall be maintained in a condition that will minimise the generation or emission of wind blown or traffic generated air pollution from the site at all times.

- 6.34 All roads on the site used for the development (including during site preparation activities) shall be sealed to within 200 metres of the outer boundary of the landfill cells.
- 6.35 Trucks associated with the development entering and departing the site shall be covered at all times, except during loading and unloading.

### **Flora and Fauna**

- 6.36 The Applicant shall ensure that existing flora communities at the site, particularly Sydney Coastal River-Flat communities along Eastern Creek and Cumberland Plain Woodland, are protected and monitored during site preparation works and operational activities.

### ***Riparian Zone Rehabilitation***

- 6.37 The Applicant shall ensure that remnant local native riparian vegetation located at the site is protected during works associated with the development.
- 6.38 A riparian zone of 40 metres shall be maintained along the top of the eastern bank of Eastern Creek for the length of all works associated with the development. No works shall be permitted in this zone (excluding rehabilitation works specified in condition 6.37), unless otherwise approved by the Department.
- 6.39 Any area within 40 metres of the top of the bank of the watercourse that has been disturbed by the development is to be rehabilitated in accordance with the requirements of Department's guideline *Watercourse and Riparian Rehabilitation Requirements (Version 3)*.
- 6.40 Prior to the commencement of any works associated with the development, the Applicant shall prepare and implement a **Vegetation Management Plan** for the rehabilitation and maintenance of the riparian zones of Eastern Creek and the ephemeral drainage line. The Vegetation Management Plan shall be prepared in accordance with the Department's guidelines *How to Prepare a Vegetation Management Plan* and *Watercourse and Riparian Rehabilitation Requirements (Version 3)*. The Plan shall include, but not necessarily be limited to:
- a) details of how riparian zones at the site would be protected, established and maintained over time;
  - b) drawings of the rehabilitation works, including the typical cross sections of the creek and associated riparian zones up to the boundaries of the rehabilitated areas;
  - c) details of planting densities and species mix for all areas to be rehabilitated; and
  - d) outline of the time frames for the implementation of these works.

The Plan shall be approved by the Department (Natural Resources Division) prior to the commencement of any works within 40 metres of Eastern Creek or the ephemeral drainage line. The rehabilitation works shall be carried out to the satisfaction of the Department and completed within the timeframes agreed to between the Department and the Applicant.

These works shall be incorporated into Landscape Rehabilitation Plan for the development, as required by condition 5.12 of this consent.

**Note:** The Applicant will need to obtain any necessary approvals from the Department of Infrastructure, Planning and Natural Resources under the *Rivers and Foreshores Improvement Act 1948* prior to commencing site preparation works associated with the development with 40 metres of a watercourse. In making an application for any approvals, the Applicant must submit a copy of the Vegetation Management Plan for the development as required for the above.

6.41 Rehabilitated riparian zones, as identified in condition 6.40 and condition 6.38, shall be maintained and monitored for a period of at least two (2) years after final planting or as agreed to by the Department (Natural Resources). At the end of the maintenance period, the Applicant shall submit to the Department (Natural Resources) a monitoring report addressing the performance criteria as specified in the Vegetation Management Plan, and reporting on the stability and conditions of any associated stream works.

**Pest Control**

6.42 The Applicant shall take all reasonable steps to manage and monitor bird populations at the development. In doing so, the Applicant shall prepare and implement an appropriate management and monitoring protocol for the development, which shall include measures to minimise the potential for the transfer of pathogens to the Prospect Reservoir by bird populations. The protocol, prepared in consultation with the DEC and the Sydney Catchment Authority, shall be incorporated into the Landfill Environmental Management Plan (LEMP) for the site (refer to condition 9.5j)).

**Noise**

**Hours of Operation**

- 6.43 The Applicant shall only undertake site preparation works associated with the development between 7am and 6pm Monday to Saturday.
- 6.44 The Applicant shall only carry out landfilling activities associated with the development, between the following hours:
  - (a) 4am to 4pm, Mondays to Fridays;
  - (b) 8am to 5pm, Saturdays, Sundays and Public Holidays.
- 6.45 Notwithstanding condition 6.44, the Applicant shall not undertake any activities associated with the development (including site preparation works) after 4pm on any day on which an event, attended by members of the general public, is occurring at the Western Sydney International Dragway (WSID).

In achieving the above, the Applicant must maintain (where possible) an up-to-date record of the event dates for the WSID, for a minimum period of six months in advance.

**Noise Criteria**

6.46 The Applicant shall design, construct, operate and maintain the development to ensure that the noise contributions from the development to the background acoustic environment do not exceed the maximum allowable noise contributions specified in Table 2, at those locations and during those periods indicated.

**Table 2: Noise Criteria**

Locations	Day 7am – 6pm Monday to Saturday and 8am – 6pm Sundays and Public Holidays	Evening 6pm – 10pm Monday to Sunday	Night 10pm – 7am Monday to Saturday and 10pm – 8am Sunday
	$L_{Aeq(15\text{ minute})}$ (dB(A))	$L_{Aeq(15\text{ minute})}$ (dB(A))	$L_{Aeq(15\text{ minute})}$ (dB(A))
Poultry Farm, Wallgrove Road, Eastern Creek	47	47	45

**Note:** Noise from the premises is to be measured at the most affected point on or within the residential boundary or at the most affected point within 30 metres of the dwelling (rural situations) where the dwelling is more than 30 metres from the boundary to determine compliance with the  $L_{Aeq(15\text{ minute})}$  noise limits specified in the above condition

- 6.47 Noise emission limits specified in condition 6.46 apply under the following meteorological conditions:
- (a) wind speed up to 3m/s at 10 metres above ground level; or
  - (b) temperature inversion conditions of up to 3°C/100 metres and wind speed up to 2m/s at 10 metres above ground.

### **Blasting**

- 6.48 The Applicant shall ensure that blasting activities associated with the development are limited to:
- (a) occurring at the site between 9.00am and 5.00pm Monday to Saturday (inclusive); and
  - (b) one blast event per day.

Should the Applicant wish to conduct blasting activities outside the hours specified in condition 6.48(a), the Applicant must obtain the approval of the DEC prior to undertaking these activities.

### **Overpressure**

- 6.49 The Applicant shall ensure that the overpressure level from blasting activities conducted at the site do not:
- (a) exceed 115dB (Lin Peak) for more than 5% of the total number of blasts over any 12 month period; and
  - (b) exceed 120dB (Lin Peak) at any time;

when measured at any point that is located at least 3.5 metres from any building or structure at any nearby residential property or other noise sensitive location such as a school or hospital.

### **Ground Vibration (Peak Vector Sum)**

- 6.50 The Applicant shall ensure that the ground vibration peak vector sum from blasting activities conducted at the site do not:
- (a) exceed 5 mm/s for more than 5% of the total number of blasts over any 12 month period; and
  - (b) exceed 10 mm/s at any time.

when measured at any point within the grounds of noise sensitive locations and within 30 metres of any residence or other noise sensitive location such as a school or hospital.

### **Blasting and Vibration Management Protocol**

- 6.51 Prior to the commencement of blasting activities at the site, the Applicant shall prepare and implement a **Blasting and Vibration Management Protocol** for the development. The Protocol shall be prepared in consultation with Council (with respect to road closure protocols) and shall include, but not necessarily be limited to, the following:
- (a) details of the blasting program for the development;
  - (b) details of the monitoring program for vibration/overpressure levels, monitoring parameters and monitoring locations. Monitoring locations shall include (where the Applicant can obtain the permission of landowners), the provision of monitoring stations to measure vibration and overpressure levels at off-site locations or at key infrastructure. This shall include (where permitted) the SCA pipeline and the Austral Brick Company (Wallgrove Road);
  - (c) details of a monitoring program for flyrock distribution during these activities;
  - (d) identification of mitigation measures to protect underground utilities (i.e. rising mains, subsurface telecommunication and electric cables), road infrastructure, and nearby livestock, and to ensure no damage by flyrock to people, property, livestock, powerlines and other infrastructure during these activities;
  - (e) details of the management procedures to be undertaken where road closures are required for safety purposes during blasting activities. These management procedures shall be designed to minimise the disruption to traffic flows within the local region;

- (f) details of the notification procedures for neighbouring properties and Council prior to blasting activities;
- (g) the reporting mechanisms for the monitoring results, including details of the record distribution to the Department; and
- (h) outline of the contingency measures and notification procedures that are to be followed by the Applicant should monitoring detect levels above the set criteria.

The Protocol shall be incorporated into the Landfill Environmental Management Plan for the development as required by condition 9.5g) of this consent.

## **Traffic and Transport**

### ***Ferrers Road Site Access***

6.52 The Applicant shall ensure that:

- (a) only maintenance vehicles associated with the development utilise Ferrers Road access point(s). No vehicles used for the purpose of waste disposal are to access the development via the site access point(s) provided along Ferrers Road; and
- (b) the site access points along Ferrers Road are only used during non-peak traffic periods and remain closed when not in use by the development.

6.53 Prior to the commencement of construction activities associated with the Ferrers Road site access point(s), the Applicant shall obtain any necessary approvals from the relevant road authority for these road works. The final design for the road access point(s) shall be designed to address Council's and RTA requirements, and at a minimum address the following (unless otherwise agreed to by the relevant road authority):

- (a) the requirements of AS 2890.1 – 1993 with respect to site distance requirements for the relevant speed zone of Ferrers Road;
- (b) improvements to sight lines by providing site access point(s) perpendicular to (or close to) Ferrers Road;
- (c) provision of street lighting to improve visibility at access point(s).

These road works shall be undertaken at no cost to the relevant road authority, and shall be completed prior to the commencement of operations at the site.

6.54 The Applicant shall obtain relevant permits from the RTA for the use of Ferrers Road by oversized vehicles associated with the development prior to any acceptance of these vehicles at the site via the Ferrers Road access point(s).

### ***Wallgrove Road Site Access***

6.55 Prior to the commencement of landfilling activities associated with the development, the Applicant shall enter into an agreement with the RTA to provide a monetary contribution of \$10,000 towards the maintenance of the intersection of the facility's site access point and Wallgrove Road.

## **Dangerous Goods**

6.56 All chemicals, fuels and oils shall be stored in appropriately bunded areas, with impervious flooring and sufficient capacity to contain 110% of the largest container stored within the bund. The bund(s) shall be designed and installed in accordance the requirements of the DEC's Environmental Protection Manual *Technical Bulletin Bunding and Spill Management*.

## **Visual Amenity Impacts**

6.57 The Applicant shall ensure that all external lighting associated with the development is mounted, screened, and directed in such a manner so as not to create a nuisance to the surrounding environment, properties and roadway. The lighting shall be the minimum level of illumination necessary and shall comply with *AS 4282(INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting*.

- 6.58 Prior to the commencement of site preparation activities associated with the development, the Applicant shall submit for the Director General's approval details of the landscaping works to be undertaken within the site to visually screen the proposed development as far as practicable when reviewed from Ferrers Road.

### **Western Sydney International Dragstrip Agreement**

- 6.59 Prior to the commencement of any works associated with the development or as otherwise agreed by the Director General, the Applicant shall enter into an agreement with the operators of the Western Sydney International Dragstrip (WSID) to ensure that activities at the site do not adversely conflict with events held at the WSID. This agreement shall include agreed measures to address:
- a) traffic conflicts between the vehicles generated by the development and the general public during events. This may include the prohibition or restriction of vehicle movements associated with the development along Ferrers Road during event periods at the WSID; and
  - b) air quality (dust and odour). This may include the reduction of landfilling activities during events at the WSID.

A copy of the agreement shall be provided to the Department prior to the commencement of any works associated with the development, and the agreed measures incorporated into the Landfill Environmental Management Plan for the development (as required by condition 9.4 of this consent).

- 6.60 Should the Applicant and operators of the WSID be unable to reach an agreement in accordance with condition 6.59 of this consent, the Applicant shall provide to the Director General written documentation outlining:
- a) the consultation undertaken to comply with the condition; and
  - b) the proposed measures that would be implemented to meet the requirements of this condition.

Should the Director General be satisfied that all reasonable attempts have been made by the Applicant to reach an agreement with the operators of WSID and that appropriate management controls are in place to address potential conflicts between the two sites, the Director General may agree to remove the requirement for the Applicant to comply with the requirements of condition 6.59.

### **Community Contribution**

- 6.61 Prior to the commencement of any works associated with the development, the Applicant shall enter into an agreement with Blacktown City Council regarding the provision of contributions towards infrastructure and/or environment enhancement programs within the local government area, or any other works as agreed to by the Applicant and Council. A copy of the final agreement shall be forwarded to the Department prior to the commencement of any works associated with the development.

### **Miscellaneous**

- 6.62 The Applicant shall ensure that all operations and activities occurring at the site are carried out in a manner that prevents and/or minimises the risk of fire at the development.
- 6.63 The Applicant shall take all practicable steps to control entry to the site throughout the life of the development.

## 7. ENVIRONMENTAL MONITORING AND AUDITING

7.1 Prior to the commencement of any works associated with the development, the Applicant shall prepare and implement a comprehensive **Landfill Monitoring Plan** for activities associated with site preparation, landfilling and rehabilitation stages of the development. The Landfill Monitoring Program shall include, but not be necessarily be limited to, the following components:

- a) a **Groundwater Monitoring Program**. The program shall be prepared in consultation with the Sydney Catchment Authority and shall include:
  - i) details of the watertable levels and baseline groundwater quality levels at the site;
  - ii) details of the monitoring program, including details of the monitoring and sampling methods to be employed the identification of the parameters to be monitored and the set quality criteria for each parameter; and
  - iii) outline of the contingency measures to be implemented should monitoring detect levels above the set criteria. This includes contingency measures should monitoring detect potential impacts on the Prospect Reservoir.
- b) a **Surface Water Monitoring Program**. The program shall include the monitoring of surface water flows captured at the site and water quality within Eastern Creek.
  - i) details of the monitoring program, including monitoring frequency, sampling and analysis methodology, water quality parameters to be monitored, applicable water quality criteria and monitoring locations. This shall include the monitoring of surface water runoff from landfill areas (during site preparation, operation and rehabilitation) and water quality within Eastern Creek; and
  - ii) contingency and notification procedures to be followed by the Applicant should monitoring detect water quality levels above the set criteria.
- c) a **Leachate Monitoring Program**. The program shall specifically monitor on a daily basis the volumes of leachate stored within the leachate storage dams. In doing so, the Applicant shall record the volume of leachate stored, added and removed from the storage dam each day. The Applicant shall keep the results of the monitoring program for a minimum four (4) years and shall be made available to the DEC on request.
- d) a **Landfill Gas Monitoring Program**. The program shall be designed to monitor surface and sub-surface landfill gas and shall be consistent with the benchmark techniques 16 and 17 of the DEC's *Environmental Guidelines: Solid Waste Landfills* (1996). The program shall include, but not necessarily be limited to:
  - i) details of the monitoring program, including monitoring frequency, sampling methodology, monitoring parameters and monitoring locations. Monitoring locations shall include areas along site boundaries or where the Applicant can obtain the permission of landowners the provision of monitoring stations at off-site locations in order to detect any potential off-site landfill gas migration;
  - ii) details of the reporting mechanisms for the monitoring results, including details of the record distribution to relevant authorities; and
  - iii) outline of the contingency measures and notification procedures that are to be followed by the Applicant should monitoring detect levels above the set criteria.

The program shall also incorporate monitoring requirements of the DEC with respect to landfill gas flare(s) that are used for the combustion of landfill gas at the site. This shall include the monitoring of flare(s) at least four (4) times per year (on a quarterly basis) for any quarter in which the flare(s) are utilised to combust landfill gas, and shall involve the recording of temperature in the flare(s) and the residence time of landfill gas in the flare(s).

- e) a **Dust Monitoring Program**. The program shall be designed to monitor dust levels at the site, including depositional and PM<sub>10</sub> levels, and shall meet the requirements of the *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW* (NSW EPA, 2001).

- f) an **Odour Monitoring Program**. The program shall be designed to periodically determine odour levels at the landfill during landfilling activities and to identify if additional odour controls are required at the development. The program shall be consistent with the requirements of the relevant DEC guidelines and shall include:
  - i) details of the reporting mechanisms for the monitoring results, including details of the record distribution to relevant authorities. This shall include the provision of initial monitoring results within the first 3 months of landfilling activities to the Department; and
  - ii) contingency measures that would be implemented should the monitoring detect levels above the relevant criteria for the development.
- g) a **Noise Monitoring Program**. The program shall monitor noise levels during site preparation and landfilling activities, and shall be consistent with the guidelines provided in *New South Wales Industrial Noise Policy* (EPA, 2000).
- h) a **Meteorological Monitoring Program**. The program shall be designed to monitor the meteorological conditions at the site, including (at a minimum) monitor wind speed and direction, rainfall (daily) and evaporation (daily) at the site. The monitoring program shall be consistent with the DEC guideline *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW*.

The Landfill Monitoring Program shall be approved by the Director General and the DEC prior to the commencement of any activities associated with the development and shall be incorporated into the Landfill Environmental Management Plan for the development (refer to condition 9.4 of this consent).

**Note:** For the purposes of condition 7.1h), the Applicant may, with the written approval of the DEC, utilise an existing meteorological monitoring station. In doing so, the Applicant must confirm in writing: (1) the location of the station (2) whether the station was installed and generates data in accordance with the DEC's *Methods for the Sampling and Analysis of Air Pollutants in NSW*, and (3) the reasons why the data from such a pre-existing weather monitoring station are representative of the meteorological conditions encountered on the site subject to the EPL. Should the DEC accept the existing station for the purposes of condition 7.1h), the above information must be documented in the LEMP for the development.

### **Leachate Storage Dam(s) Audit**

- 7.2 Within one year of the commencement of operations (or as otherwise specified by the DEC), the Applicant shall submit to the DEC (Manager, Sydney Waste) an audit report that compares the actual volumes of leachate generated at the development with the volumes predicted in documentation required by condition 6.14 of this consent. The report shall consider data obtained under condition 7.1c) of this consent, weather monitoring data (rainfall and evaporation) and volumes of stormwater removed from the relevant stages of the landfill.

The report shall demonstrate that the leachate storage dam has sufficient capacity to store the volume of leachate cumulatively generated from the landfill (while taking into account annual rainfall and groundwater inflow) while not exceeding the dam 0.5 metre freeboard or the 1 metre head of leachate on the liner. Should the report indicate that the leachate storage dam(s) is not sufficient in managing the amount of leachate generated by the development, the Applicant shall provide details to the DEC on how it intends to rectify the situation in order to ensure the Applicant is able to meet the necessary freeboard and head criteria at the storage dam(s).

## 8. COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT

- 8.1 Subject to confidentiality, the Applicant shall make all documents required under this consent available for public inspection on request.

### Complaints Procedure

- 8.2 Prior to the commencement of site preparation works, the Applicant shall ensure that the following are available for community complaints:

- a) a 24-hour, toll-free telephone number on which complaints about the development may be registered;
- b) a postal address to which written complaints may be sent; and
- c) an email address to which electronic complaints may be transmitted.

The telephone number, the postal address and the email address shall be advertised on at least one occasion prior to the commencement of site preparation works for each stage of the development, through a medium approved by the Director General. These details shall also be provided on the Applicant's internet site, should one exist. The telephone number, the postal address and the email address shall be maintained throughout the life of the development.

- 8.3 The Applicant shall record details of all complaints received through the means listed under condition 8.2 of this consent in an up-to-date Complaints Register. The Register shall record, but not necessarily be limited to:

- a) the date and time, where relevant, of the complaint;
- b) the means by which the complaint was made (telephone, mail or email);
- c) any personal details of the complainant that were provided, or if no details were provided, a note to that effect;
- d) the nature of the complaint;
- e) any action(s) taken by the Applicant in relation to the complaint, including any follow-up contact with the complainant; and
- f) if no action was taken by the Applicant in relation to the complaint, the reason(s) why no action was taken.

The Complaints Register shall be made available for inspection by the Director General upon request.

### Community Communication Strategy

- 8.4 Prior to the commencement of any works associated with the development at the site, the Applicant shall prepare and implement a **Community Communication Strategy** for the development. This strategy shall be designed to enable the Applicant to respond to any enquiries from the local community and/or adjoining landowners and to provide mechanisms to inform the local community and adjoining landowners as to the operational environmental performance of the facility. The Strategy shall include, but does not necessarily be limited to:

- a) mechanisms through which the Applicant can report to the local community and adjoining landowners on the operations of the development and its environmental performance;
- b) mechanisms through which the community and/or adjoining landowners can provide feedback to the Applicant in relation to the environmental management of the development; and
- c) mechanisms through which the Applicant can respond to any enquires or feedback from the community and/or adjoining landowners in relation to the environmental performance of operations at the development.

The Strategy shall be approved by the Director General prior to the commencement of any activities associated with the development.

- 8.5 Should the Applicant have existing communication strategies in place for the broader operations at the Eastern Creek Waste Management Centre, the Applicant may submit these strategies to the Director General for approval in order to comply with condition 8.4 of this consent.

## **9. ENVIRONMENTAL MANAGEMENT**

### **Environmental Representative**

- 9.1 Prior to the commencement of site preparation works at the development, the Applicant shall nominate a suitably qualified and experienced Environmental Representative(s) whose appointment is to receive prior approval of the Director General. The Applicant shall employ the Environmental Representative(s) on a full-time basis, or as otherwise agreed by the Director General, during the site preparation, landfilling operations and rehabilitation of the development. The Environmental Representative shall be:
- a) the primary contact point in relation to the environmental performance of the development;
  - b) responsible for all Management Plans and Monitoring Programs required under this consent;
  - c) responsible for considering and advising on matters specified in the conditions of this consent, and all other licences and approvals related to the environmental performance and impacts of the development;
  - d) responsible for receiving and responding to complaints in accordance with condition 8.2 of this consent; and
  - e) given the authority and independence to require reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to direct that relevant actions be ceased immediately should an adverse impact on the environment be likely to occur.

The Applicant shall notify the Director General of any changes to that appointment that may occur from time to time.

### **Staff Training Program**

- 9.2 Prior to the commencement of site preparation works, the Applicant shall prepare to the satisfaction of the Director General, a Staff Training Program for all relevant staff associated with the development. The Program shall be designed to ensure that staff are appropriately trained in the key aspects of the development and pollution control measures to ensure the environmental outcomes of the development are achieved. The Program shall include, but not necessarily be limited to:
- a) identification of relevant employment positions (including contractors) associated with the development that have an operational or management role related to the environmental performance of the development;
  - b) a description of appropriate training requirements for relevant employees;
  - c) a program for training relevant employees in operational and/or management issues associated with the environmental performance of the development; and
  - d) a program to confirm and update the environmental training and knowledge during the employment of relevant persons.

The Program shall be approved by the Director General prior to the commencement of any works associated with the development, and shall be incorporated into the Landfill Environmental Management Plan (refer to condition 9.4). The Applicant shall undertake a periodic review of the training program, and where relevant, update the program to reflect the various stages of the development and/or to make improvements to the program.

- 9.3 Prior to the commencement of each stage of the development (site preparation, landfilling operations and rehabilitation), unless otherwise approved by the Director General, the Applicant shall ensure that all relevant staff associated each stage of the development are fully trained in accordance with the program required by condition 9.2 of this consent.

## Landfill Environmental Management Plan

- 9.4 The Applicant shall prepare and implement a comprehensive **Landfill Environmental Management Plan** to outline environmental management practices and procedures to be followed during the site preparation, landfilling, landfill closure and rehabilitation activities during each stage of the development. The Plan shall be integrated and consistent with any existing Landfill Environmental Management Plans for the entire waste management facility. The Plan for the development shall be prepared in accordance with the DEC's *Environmental Guidelines: Solid Waste Landfills* and shall include, but not necessarily be limited to:
- a) the Landfill Plan for the development (condition 4.7);
  - b) a description of all activities to be undertaken on the site, including an indication of stages of site preparation/landfilling/rehabilitation (condition 4.7);
  - c) details of the design specifications of the landfill cells and associated infrastructure, including the inclusion of the 'for construction' design drawings of the development required by condition 5.1 of this consent, and details of the Construction Quality Assurance Plan and Testing Program for the development required by condition 5.4 of this consent;
  - d) statutory and other obligations that the Applicant is required to fulfil for the development, including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;
  - e) include overall environmental policies and principles to be applied to the development;
  - f) details of how the environmental performance of the development during the various stages will be monitored in accordance with the requirements of condition 7.1 of this consent, and what actions will be taken to address identified adverse environmental impacts;
  - g) a description of the roles and responsibilities for all relevant employees involved in the various stages of the development;
  - h) the Management Plans listed under condition 9.5 of this consent; and
  - i) the community communication strategy (condition 8.3), and the complaints handling procedures during the life of the development (as required by conditions 8.2 and 8.3).

The Plan shall be submitted to the Director General and DEC no later than one month prior to the commencement of any site preparation works associated with the development, or within such period otherwise agreed by the Director General. Site preparation works associated with the development shall not commence until written approval has been received from the Director General and the DEC.

- 9.5 As part of the Landfill Environmental Management Plan for the development, required under condition 9.4 of this consent, the Applicant shall prepare and implement the following Management Plans:
- a) a **Landscape Rehabilitation Plan**, as required by condition 5.12 and condition 6.37 of this consent.
  - b) a **Surface Water and Groundwater Management Plan** to detail measures to manage surface water runoff at the site and to minimise dust, erosion and the discharge of sediment and other pollutants to lands and/or waters during works associated with the development. The Plan shall also detail measures to prevent the contamination of groundwater at the site. The Plan shall include, but not necessarily be limited to:
    - i) details of all relevant surface water and groundwater control infrastructure, and procedures for the installation and maintenance of these measures. This shall include measures to prevent the contact of surface water runoff with waste (other than VENM) at the site;
    - ii) details of erosion and sediment control measures to be implemented during the site preparation activities, landfilling operations and rehabilitation of the site. These measures shall be documented in a revised Soil and Water Management Plan that is consistent with the requirements of Landcom's *Managing Urban Stormwater: Soils and Construction* (2004);

- iii) details of environmental controls for the management of excavated material stockpiles at the site;
  - iv) results of any investigative works undertaken for the development, specifically condition 6.22;
  - v) details of the monitoring requirements of this consent, specifically the requirements of condition 7.1 of this consent; and
  - vi) details of any contingency measures that would be followed to ensure the protection of groundwater and neighbouring waterways should any non-compliance be detected or during an accident or emergency situation at the site that could result in the contamination of surface water or groundwater.
- c) a **Leachate Management Plan** to outline the measures to collect, minimise, manage and dispose of leachate generated by the development. The Plan shall include, but not necessarily be limited to:
- i) details of the design, installation, maintenance and management of leachate control infrastructure at the site during all stages of the development;
  - ii) address the disposal of leachate from the leachate holding dam, taking into account the volumes of leachate that may require disposal as predicted in the outcome of condition 6.14 of this consent;
  - iii) a monitoring program of the leachate management infrastructure at the site to ensure leachate is appropriately managed, stored and disposed of. This shall address the requirements of conditions 6.7 -7.2, and condition 7.1 of this consent; and
  - iv) details of any contingency measures that would be followed to ensure the protection of groundwater and surface water should any non-compliance be detected or during an accident or emergency situation at the site that could result in surface water or groundwater contamination. and
- d) a **Landfill Gas Management Plan** to outline measures to manage landfill gas generated by the development during the operation, closure and rehabilitation of the site. The Plan shall address the requirements of the Environmental Protection Licence for the development, and shall include, but not necessarily be limited to:
- i) details of the maintenance and management of landfill gas infrastructure over time;
  - ii) a monitoring program of the landfill gas infrastructure at the site to ensure landfill gas is appropriately managed, extracted and disposed of. This shall address the requirements of condition 7.1 of this consent; and
  - iii) details of contingency measures to protect air quality and/or to prevent off-site mitigation of landfill gas should any non-compliance be detected or procedures to be followed during an emergency/system failure of the relevant infrastructure.
- e) an **Odour Management Plan** to outline measures to minimise odour impacts associated with the development. The Plan shall include, but not necessarily be limited to:
- i) identification of all sources of odour associated with the development;
  - ii) a detailed description of the odour mitigation methods and management practices that will be used to ensure offensive odour impacts do not occur off site;
  - iii) details of the implementation of industry best practice management measures to ensure potential odour impacts are managed;
  - iv) a detailed description of the methods used for monitoring the effectiveness of the odour mitigation methods (condition 7.1 of this consent) and management practices for all sources of odour associated with the development;
  - v) details of proposed contingency measures should odour impacts occur; and
  - i) a procedure for handling potential odour complaints that includes recording, investigating, reporting and acting.

- f) a **Dust Management Plan** to detail measures to minimise the generation of dust at the site during each stage of the development, and the impacts of dust on surrounding land uses. The Plan shall include, but not necessarily be limited to:
  - ii) measures to manage dust emissions from the site and to reduce the potential for offsite impacts during all stages of the development;
  - iii) a description of what procedures would be followed to ensure compliance with relevant air quality criteria;
  - iv) details of the monitoring program for dust emissions at the site (refer condition 7.1 of this consent) to ensure compliance with the relevant air quality criteria;
  - v) details of proposed contingency measures should dust impacts occur; and
  - vi) the establishment of a protocol for handling dust complaints that include recording, reporting and acting on complaints.
- g) a **Noise Management Plan** to detail measures to minimise noise generated during site preparation and landfilling activities associated with the development. The Plan shall include, but not necessarily be limited to:
  - i) identification of the potential sources of noise during the proposed works;
  - ii) specification of the noise criteria for the proposed works;
  - iii) a detailed description of what actions and measures would be implemented to ensure that these works would comply with the relevant noise criteria;
  - iv) a description of how the effectiveness of these actions and measures would be monitored during the proposed works (refer to condition 7.1 of this consent); and
  - v) a description of what procedures would be followed to ensure compliance.

The Plan shall also incorporate the requirements of the **Blasting and Vibration Management Protocol**, required by condition 6.51 of this consent.
- h) a **Traffic Management Plan** to detail measures to ensure traffic movements associated with the development are undertaken in a manner that does not adversely impact on the performance and safety of the surrounding road network or conflict with events held at WSID. This shall include measures to provide for the safe and efficient movement of vehicles associated with all stages of the development.
- i) an **Emergency Plan**, which will include management procedures that would be undertaken to during an emergency event to protect the environment, human health and/or property/infrastructure. This shall include emergencies resulting from fire, overflow, power or other utility failure; flooding, chemical spills, other natural disasters, etc.
- j) other management plans including a **Pest, Vermin and Weed Management Plan** and a **Litter Prevention Management Plan**.

9.6 The Applicant shall undertake a periodic review of the Landfill Environmental Management Plan for the development (condition 9.4 of this consent) and update (where necessary) to reflect the various stages of the development and/or improvements to the management procedures at the site. This shall include the incorporation of the Landfill Closure Plan when prepared in accordance with section 76 of the *Protection of the Environment Operations Act 1997* (refer to condition 5.8 of this consent).

**Note:** The Applicant shall consult with the Department regarding any major adjustments to the LEMP as a result of the review to confirm whether or not an additional approval from the Director General would be required.

## 10. ENVIRONMENTAL REPORTING

### Incident Reporting

- 10.1 The Applicant shall notify the DEC and the Director General of any incident with actual or potential significant off-site impacts on people or the biophysical environment as soon as practicable after the occurrence of the incident ("initial notification"). The Applicant shall provide written details ("written report") of the incident to the DEC and the Director General within seven days of the date on which the incident occurred.
- 10.2 The Applicant shall meet the requirements of the Director General to address the cause or impact of any incident, as it relates to this consent, reported in accordance with condition 10.1 of this consent, within such period as the Director General may require.

Note: Condition 10.2 of this consent does not limit or preclude the DEC from requiring any action to address the cause or impact of any incident, in the context of the DEC's statutory role in relation to the development.

### Independent Environmental Auditing

- 10.3 Within two years of the commencement of site preparation works associated with the development, and then every year thereafter or as otherwise agreed with the Director General, the Applicant shall commission an independent person or team to undertake an Environmental Audit of the development. The independent person or team shall be approved by the Director General prior to the commencement of the Audit. The Audit shall:
- be carried out in accordance with *ISO 19011:2002 - Guidelines for Quality and/or Environmental Management Systems Auditing*;
  - assess compliance with the requirements of this consent, and other licences and approvals that apply to the development;
  - assess the environmental performance of the development against the predictions made and conclusions drawn in the documents referred to under condition 1.1 of this consent or within documents submitted to satisfy ; and
  - review the effectiveness of the environmental management of the development, including any environmental impact mitigation works.

An **Environmental Audit Report** shall be submitted to the Director General within two months of the completion of the Audit, detailing the findings and recommendations of the Audit and including a detailed response from the Applicant to any of the recommendations contained in the Report.

The Director General may require the Applicant to undertake works to address the findings or recommendations presented in the Report. Any such works shall be completed within such time as the Director General may require.