

# PROPOSED MINOR MODIFICATION EASTERN CREEK WASTE MANAGEMENT CENTRE



December 2014

## **CERTIFICATION**

This Minor Modification Report has been prepared by National Environmental Consulting Services Pty Ltd on behalf of the Waste Assets Management Corporation.

In accordance with Part 3A of the *Environmental Planning and Assessment Act* it is certified that the information contained in this report is neither false nor misleading.

A handwritten signature in black ink, appearing to read 'Warren Atkinson', is positioned above the printed name.

**Warren Atkinson**  
**Director**  
**National Environmental Consulting Services Pty Ltd**

**December 2014**

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**TABLE OF CONTENTS**

**CERTIFICATION**

**EXECUTIVE SUMMARY**

<b>1</b>	<b>INTRODUCTION .....</b>	<b>1</b>
1.1	The Proponent .....	1
1.2	Background .....	1
1.3	Proposed Modification of Consent .....	4
1.4	Statutory Context .....	5
<b>2</b>	<b>ENVIRONMENTAL ASSESSMENT .....</b>	<b>6</b>
2.1	Waste Disposal in Western Sydney .....	6
2.2	Flora and Fauna .....	9
2.3	Ephemeral Creek Diversion .....	9
2.4	Landscaping and Visual Amenity .....	9
2.5	Odour .....	9
2.6	Environmental Management .....	11
<b>3</b>	<b>CONSULTATION .....</b>	<b>12</b>
<b>4</b>	<b>PROPOSED CHANGES TO CONDITIONS OF CONSENT .....</b>	<b>13</b>
<b>5</b>	<b>CONCLUSION .....</b>	<b>14</b>

**TABLES**

Table 1	Eastern Creek Stage 2 Northern Extension Filling Plan
Table 2	Eastern Creek Stage 2 Northern Extension Proposed Modification
Table 3	Revised Filling Schedule including Proposed Modification
Table 4	Environmental Assessment of Impacts Due to Proposed Minor Modification

**APPENDICES**

Appendix A	Site Survey
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## ABBREVIATIONS

AWT	Alternative Waste Treatment
BCC	Blacktown City Council
DECCW	Department of Environment, Climate Change and Water
EPA	Environment Protection Authority
<i>EP&amp;A Act</i>	<i>Environmental Planning &amp; Assessment Act</i>
EPL	Environment Protection Licence
ESD	Ecologically Sustainable Development
LEMP	Landfill Environmental Management Plan
LRP	Landscape Rehabilitation Plan
RMS	Roads and Maritime Services
t	tonnes
tpa	tonnes per annum
WAMC	Waste Assets Management Corporation
WMC	Waste Management Centre
WSID	Western Sydney International Dragway
WSPT	Western Sydney Parklands Trust

## **EXECUTIVE SUMMARY**

*The Waste Assets Management Corporation is seeking a minor modification to the development consent for landfilling operations currently being undertaken on the Eastern Creek Waste Management Centre site.*

*The proposed modification will allow the approved final landform to be achieved with no change to the approved final landfill height and profile. Recent survey data demonstrates that intermediate settlement within the waste cells and improved compaction rates occurring during landfilling activities has resulted in the need for additional material to achieve the currently approved landform.*

*The proposed modification seeks to allow for continuation of existing landfilling activities, maintaining the approved waste disposal rate for the period to June 2018 with an overall increase in approved landfill capacity of 650,000 tonnes.*

*Apart from the extended duration of landfilling of waste there would be no other changes to activities and operations on the site to which the current development consent applies.*

*The modification request for MOD 4 was submitted under Section 75W of the EP&A Act. The development consent was modified on 16 November 2010 under Section 75W of the Act. The current request for a minor modification to that consent is submitted under Section 75W.*

*The legislation and planning considerations outlined in Section 2 of the Environmental Assessment which supported the MOD 4 application apply to this application (WSN May 2010).*

*The MOD 4 application assessed the environmental issues in relation to the expansion of the Northern Extension of Eastern Creek Stage 2 and identified mitigative measures to minimise any identified impacts. Key issues raised in submissions received during the public review period related to landfill operations, diversion of the drainage channel where the current Cell 5 is located, proposed vegetation offsets and the site landscaping and rehabilitation plan. The approval for the MOD 4 application included modified Conditions of Consent for the project. WAMC has complied with the MOD 4 modified Conditions of Consent during implementation works to the satisfaction of relevant Agencies including the Department of Planning and Environment.*

*The proposed minor modification would require amendment of the current consent primarily in relation to the description of the project in Schedule 1 and the timing of completion of landfill activities would be extended from 30 June 2017 to 30 June 2018 in Schedule 2 in particular Conditions 4.1, 4.2 and 4.3. The capacity of the Northern Extension area of Eastern Creek Stage 2 would be increased from 4.5 Million tonnes to 5.15 Million tonnes.*

*As a result of the proposed modification landfilling activities at the Eastern Creek WMC would be extended to June 2018 at the currently approved annual tonnage. All activities will be in accordance with the site consent, EPL and associated conditions. The proposed modification will allow the approved final landform to be achieved taking into account intermediate settlement occurring during landfilling activities. The environmental assessment undertaken demonstrates that the environmental impacts will be in accordance with those assessed for the previous MOD 4 application.*

## 1. INTRODUCTION

### 1.1 The Proponent

The Waste Assets Management Corporation (**WAMC**) is seeking a minor modification to the development consent for landfilling operations currently being undertaken on the Eastern Creek Waste Management Centre (**WMC**) site. WAMC is a statutory corporation created under the *Waste Recycling and Processing Corporation (Authorised Transaction) Act 2010* and an agency of the Office of Finance and Services. The proposed modification seeks to allow for continuation of existing landfilling activities, maintaining the approved waste disposal rate for the period to June 2018 with an overall increase in approved landfill capacity of 650,000 tonnes (t).

The proposed modification will allow the final landform included in the Landscape Master Plan to be achieved with no change to the approved final landfill height and profile. Recent survey data demonstrates that intermediate settlement within the waste cells and improved compaction rates occurring during landfilling activities has resulted in the need for additional waste material to achieve the currently approved landform.

### 1.2 Background

The Eastern Creek WMC has provided an essential waste management service as a putrescible landfill since 1984 and currently accepts up to 550,000 tonnes per annum (**tpa**) of putrescible waste. The original Eastern Creek approval was for the area on the western side of Eastern Creek known as Eastern Creek 1 (Areas 1-3). Eastern Creek 1 was approved as a regional waste disposal depot in 1982 by Blacktown City Council (BCC). The Eastern Creek 1 Extension (Area 4) was approved by the Department of Planning in 1990. The Eastern Creek 2 landfill area (Eastern Extension) to the east of Eastern Creek was approved by the Department of Urban Affairs and Planning in 2001 and the Eastern Creek 2 Northern Extension was approved by the Department of Infrastructure, Planning and Natural Resources in 2005. The Eastern Creek WMC currently operates under Modification 4 to the Northern Extension consent as granted in 2010. This proposed Modification seeks approval for an additional 650,000 tonnes of putrescible waste and the extension of closure until June 2018.

WAMC is responsible for operational management of landfilling at the Eastern Creek WMC while SITA Australia are responsible for the management and receipt of waste and recyclables at the weighbridge, community recycling drop off facility and green waste facility. Figure 1 shows the location of the Eastern Creek WMC site and its layout. The entrance to the site is via Wallgrove Road, approximately 1.8 km south of the M4 Motorway and less than 0.5 km south of the M7 Eastern Creek exit.

The Eastern Creek WMC accepts only solid wastes which are defined by the NSW Environment Protection Authority (**EPA**) as suitable for disposal in a Solid Waste Class 1 Landfill and operates in accordance with Environment Protection Licence (**EPL**) No 5272. Landfilling is currently being undertaken in Cells 4, 5, 6 and 7 on the landfill area known as the Northern Extension of Eastern Creek Stage 2 located on the eastern side of Eastern Creek. Infrastructure has been located in accordance with the existing development consent. Approved landfill capacity for this area is 4.5 million tonnes (t) as per Table 1.





**Figure 1 – Eastern Creek WMC**

**Table 1**  
**Eastern Creek Stage 2 Northern Extension**  
**Filling Plan**

Cell No.	Excavation Depth	Air Space (m <sup>3</sup> )	Proposed Tonnage @ 1.09 m <sup>3</sup> /t Compaction rate	Completion Dates
4	23m	697,600	640,000	Mar 2012
5	10m	1,090,000	1,000,000	June 2017
6	15m	941,760	864,000	June 2017
7	20m	2,175,640	1,996,000	June 2017
<b>TOTAL</b>		<b>4,905,000</b>	<b>4,500,000</b>	

The existing landfill operations are being undertaken in accordance with development consent (DA 271-6-2003-i) issued by the NSW Minister for Planning. In 2010 a modification to the development consent (MOD 4) was approved under Part 3A of the *Environmental Planning and Assessment Act (EP&A) Act*. The modification included:

1. Increasing the landfill capacity of Cells 4, 6 and 7 (ie the Northern Extension) from 2.9 Million tonnes to approximately 3.5 Million t;
2. Excavation of the area between Cells 4 and 6 (to be called Cell 5) and landfilling with approximately 1 Million tonnes of waste. This set the total Northern Extension tonnage at 4.5 Million t;
3. Construction of a drainage channel to divert runoff from a culvert under Ferrers Road through the area to Eastern Creek;
4. Increasing the approved waste disposal rate:
  - (a) From 500,000 tonnes to a maximum of 550,000 tpa from 1 July 2010 to 30 June 2011; and
  - (b) From 350,000 tonnes to a maximum of 550,000 tpa, from 1 July 2011 to 30 June 2014; and
5. Extending the cessation date for acceptance of putrescible waste at the site from 30 June 2014, to 30 June 2017 and disposing of a maximum of 550,000 tpa during this time.

Works associated with the MOD 4 application have been completed in accordance with the relevant conditions of Consent.

Once the Northern Extension cells are filled to final contour they will be capped to meet the performance goals of the NSW EPA Guidelines for Solid Waste Landfills (NSW EPA 1996). Soil will then be placed above the landfill cap to the required depth to establish a growing medium which will then be planted with trees and other vegetation in accordance with the Landscape Master Plan for the Northern Extension of Eastern Creek Stage 2 and the Eastern Creek Landscape Rehabilitation Plan (LRP). The final landform resulting from landfill operations will provide a range of opportunities with aspect, slope and scale that complement the objectives of the SEPP Western Sydney Parklands 2009 to create 'a multi-use urban parkland for the region of Western Sydney'. The approved pre-settlement height of the Northern Extension landfill mound is RL 86.5m with a post-settlement height of RL 82.5m approved.



### 1.3 Proposed Modification of Consent

WAMC has reviewed the most recent survey of the landfill (June 2014). Appendix A shows the current landform as defined by the survey. Review and analysis of the survey data indicates that an increase in airspace has resulted from settlement which has occurred between episodes of waste placement in the Northern Extension Cells. This indirect increase in available airspace was foreshadowed in Golders 2009 (Appendix C, Volume 1 EA 2010). Further settlement is also predicted to occur prior to completion of landfilling.

The approved waste capacity for the Northern Extension is 4,500,000t. This capacity was estimated on the basis of a waste compaction rate of 1.09 m<sup>3</sup>/t. WAMC has been able to achieve a compaction rate of 1.08m<sup>3</sup>/t due to the more efficient use of GPS assisted compactors on the landfill.

The enhanced gas collection system has also indirectly resulted in increased airspace capacity.

Based on the improved gas extraction rate, compaction rate and intermediate settlement it has been estimated that up to 650,000t of waste will be required to fill the approved airspace to RL 86.5 and achieve final settlement to RL 82.5 as defined in MOD 4.

Table 2 provides a summary of the proposed changes to the tonnage of waste for the Northern Extension. Based on the results of the most recent survey and the settlement and compaction rates achieved to date it has been calculated that a minimum of 610,907 t of additional waste will be required to achieve the approved landform. A contingency approval is also sought for an additional 39,093 t of waste to ensure that the final landform is achieved in the event that intermediate settlement is greater than has been estimated. The proposed modification would allow a continuation of landfilling activities extended to June 2018. Table 3 presents a revised filling schedule based on an additional 650,000 t of waste at a maximum filling rate of 550,000 tpa.

**Table 2**  
**Eastern Creek Stage 2 Northern Extension Proposed Modification**

Approved Tonnage @ 1.09 m <sup>3</sup> /t compaction rate	4,500,000 t
Original Constructed Air Space (m <sup>3</sup> )	4,905,000 m <sup>3</sup>
Forecast Remaining Air Space within the Approved Final Landform (based on the 30 <sup>th</sup> June 2014 survey) (m <sup>3</sup> )	1,877,456 m <sup>3</sup>
Final Forecast Air Space in tonnes (based on 1.08 m <sup>3</sup> /t Compaction rate)	1,738,385 t
Remaining Approved Capacity as at 30 <sup>th</sup> June 2014 out of 4.5 M Approved Capacity (t)	1,127,478 t
Additional Capacity available as at 30 <sup>th</sup> June 2014	610,907 t

**Table 3**  
**Revised Filling Schedule including Proposed Modification**

<b>EC2 NORTHERN CELL Waste Filling Schedule</b>	<b>Waste Filled/ Proposed to be Filled from 2014-15 Including Proposed Modification (t)</b>
2007-2008	273,610
2008-2009	549,790
2009-2010	507,600
2010-2011	476,809
2011-2012	509,659
2012-2013	527,288
2013-2014	527,764
2014-2015	520,000*
2015-2016	520,000*
2016-2017	520,000*
2017-2018	217,480*
<b>TOTAL</b>	<b>5,150,000</b>

\*Estimated waste tonnage to be filled

Apart from the extended duration of landfilling of waste there would be no other changes to activities and operations on the site as set out in the MOD 4 documentation and to which the current development consent applies.

#### **1.4 Statutory Context**

Development consent for the Northern Extension of Eastern Creek Stage 2 was granted by the then Minister for Planning on 3 June 2005 under Part 4 of the *EP&A Act*. Clause 8J of the EP&A Regulation 2000 sets out the transitional provisions in relation to development approvals and consents made under Part 4 of the *EP&A Act*. Part 3A of the Act was repealed in October 2011. Transitional provisions remain in place.

Clause 8J(8) provides that: A development consent in force immediately before the commencement of Part 3A of the *EP&A Act* may be modified under Section 75W of the *EP&A Act* as if the consent were an approval under that Part.

The development meets the requirements of Clause 8J (8) (a). On 15 January 2010, approval was given for the 2005 Development Consent (DA 271-6-2003-i) for the Northern Extension to the Eastern Creek WMC to be treated as a Part 3A approval for the purposes of modification under Section 75W of the *EP&A Act*.

The modification request for MOD 4 was submitted under Section 75W of the *EP&A Act*. The development consent was modified on 16 November 2010 under Section 75W of the Act.

The current request for a minor modification to that consent is submitted under Section 75W.

The legislation and planning considerations outlined in Section 2 of the Environmental Assessment which supported the MOD 4 application apply to this application (WSN May 2010).

## 2. ENVIRONMENTAL ASSESSMENT

The MOD 4 application assessed the environmental issues in relation to the expansion of the Northern Extension of Eastern Creek Stage 2 and identified mitigative measures to minimise any identified impacts. Key issues raised in submissions received during the public review period related to landfill operations, diversion of the drainage channel where the current Cell 5 is located, proposed vegetation offsets and the site landscaping and rehabilitation plan. The approval for the MOD 4 application included modified Conditions of Consent for the project.

Following approval of the MOD 4 application site activities have been undertaken in accordance with the Conditions of Consent, the Statement of Commitments included in the application for MOD 4, EPL 5272 and the Landfill Environmental Management Plan (**LEMP**). The LEMP includes a site LRP which outlines the vegetation management works that will be undertaken to rehabilitate the landfill site. The works in the LRP are designed to prepare the site for appropriate future uses (post landfilling) as part of the Western Sydney Parklands. These proposed improvement works aim to increase the environmental and landscape values of the site post landfilling, delivering considerable public benefit in terms of recreational and catchment outcomes.

Since commencement of activities associated with MOD 4 WAMC has undertaken consultation with the Western Sydney International Dragway (**WSID**) which is located to the east of the landfill area to ensure site activities have a minimal impact on WSID operations. An Agreement has been made between WAMC and the WSID in relation to ensuring mitigative measures are undertaken to minimise affects on the WSID operations. These measures relate specifically to traffic, dust and litter control, odour, hours of operation, complaints procedures and future planning.

The changes in impact associated with this minor modification are summarised in Table 4 and Sections 2.1 to 2.5.

### 2.1 Waste Disposal in Western Sydney

The Eastern Creek WMC is centrally situated in the Western Sydney Region from which the sourced waste is received. As described in the MOD 4 application the Eastern Creek WMC is the largest waste management facility in Sydney. The site is a strategic location for essential waste disposal in the economically dynamic Western Sydney region which has been operational since 1984 with a well established internal infrastructure and environmental management procedures and services. In 2010 the NSW Government released a report by Tony Wright which had been commissioned by the Department of Planning to provide an analysis of Sydney's landfill demand and capacity to 2024. On the basis of this report the MOD 4 application was approved.

The site receives on average up to 550,000tpa of putrescible waste in accordance with the development consent. Included in its inflow are the residual materials from the existing Alternative Waste Treatment (**AWT**) UR-3R facility sited directly adjacent to the Eastern Creek WMC. The landfill also provides emergency disposal services for the AWT as required. It is also appropriately located to receive residual material and provide an emergency disposal option for existing and potential AWTs established at other sites within the Western Sydney Region.

Since the MOD 4 application no new AWT or waste disposal facilities have come on line with the overall demand within the Sydney Metropolitan area remaining strong. Recent NSW EPA figures (2012-13) show a 1.4% decrease in waste disposal which may be related to lower economic activity. SITA Australia has advised WAMC that it will utilise the additional landfill capacity.

The additional capacity would allow WAMC to continue operations for an additional year maintaining 25 operational jobs for that period. This will be achieved utilising the current on-site infrastructure and landfill areas with comparatively little additional disturbance.

**Table 4**  
**Environmental Assessment of Impacts Due to Proposed Minor Modification**

<b>Environmental Aspect</b>	<b>Existing Impacts</b>	<b>Impact Due to Proposed Minor Modification</b>
Topography, Geology and Soils	Previous landscape modified for landfill activities. Proposed final landform to be rehabilitated in accordance with LEMP and LRP.	No change. Proposed Modification will allow final landform to be achieved as defined in MOD 4.
Water Management	Landfill design required diversion of drainage line. Water management is in accordance with LEMP which includes a Surface Water Monitoring and Management Plan.	No change. Continued management and monitoring in accordance with LEMP.
Leachate Management	Leachate management involves the capture, management and disposal of leachate in accordance with the EPL. LEMP includes a leachate management plan, leachate monitoring plan and a groundwater management and monitoring plan.	No Change. Continued management and monitoring in accordance with LEMP.
Flora and Fauna	Vegetation clearance was required for landfill activities. No additional clearing required.	No change. LRP includes rehabilitation measures.
Aquatic Ecology	Diversion of drainage channel was approved under MOD 4. No changed required for the proposed modification.	No change. LRP includes measures to rehabilitate drainage channel.
Air Quality - Odour	Potential for odour impacts as a result of landfilling activities. Odour modelling was undertaken for MOD 4. Management measures were adopted to minimise potential impacts on the WSID and other adjacent property holders. LEMP includes an odour management plan and monitoring program. Installation of odour neutralising system.	No change to nature of activities. Extension of duration. Continued consultation with WSID.
Air Quality - Dust	A revised dust management plan was included in the LEMP to take account of MOD 4. The dust monitoring plan was revised as part of update of LEMP.	No change. Continued management and monitoring. Major dust generating activities, such as Cell excavation (Cell 5) & Ephemeral creek diversion construction works have already been completed.
Noise	The approval conditions for the MOD 4 included requirements in relation to compliance with noise limits and preparation of a noise management plan.	No change. Continued management and monitoring.
Land use	Extension of existing land use for a period of 12 months. Final land use remains as proposed.	Extension of landfilling for a period of 12 months. No change to proposed landform or rehabilitation for final use as part of Regional Parklands.
Visual	Landfilling activities are part of the existing landscape. No change to proposed rehabilitation of final landform.	Extension of time period for current impacts. No change to final landform.
Traffic	Traffic accesses the site though a controlled intersection and utilises the existing internal roads.	Extension of time period for existing impacts. No change to existing traffic volumes.

Environmental Aspect	Existing Impacts	Impact Due to Proposed Minor Modification
	LEMP includes management measures for internal site traffic.	
Socio-economics	Employment on site is generated as a result of the existing waste management activities.	Continuation of existing employment levels.
Heritage	Heritage impacts had been addressed as part of the original development consent.	No change.
Potential Hazards	Risk assessment was undertaken for MOD 4 application.	No change.
Greenhouse Gas Emissions	Greenhouse Gas Emissions have been calculated for the landfill on an annual basis.	Extension of duration of emissions. Ongoing progressive gas capture infrastructure works will mitigate these impacts.
Cumulative Impacts	The Eastern Creek WMC has operated on the site since 1984.	Continuation of existing operations for an additional year.
Ecologically Sustainable Development (ESD)	Eastern Creek WMC designed and operated in accordance with the principles of ESD.	No change.



## **2.2 Flora and Fauna**

The MOD 4 application included the removal 1.02 hectares of woodland vegetation. The Applicant included a Biodiversity Vegetation Offsets Strategy which was approved by the Department of Planning and Infrastructure and the Department of Environment, Climate Change and Water (**DECCW**). WAMC has already complied with and implemented the Biodiversity Vegetation Offsets.

This minor modification does not change the extent of the area of landfilling and will have no additional impact on flora and fauna.

## **2.3 Ephemeral Creek Diversion**

The construction of Cell 5 required the diversion of a drainage line to the south of Cell 4. The diverted channel has already been rehabilitated to a natural looking and functioning drainage channel as per the MOD 4 consent conditions.

In May 2012 the WAMC provided the Department of Planning and Infrastructure with the results of an audit of the constructed Ephemeral Creek Diversion Works which the Department subsequently reviewed. The Department advised that the information provided satisfied the requirements of the relevant Conditions.

There will be no change to the proposed final landform or rehabilitation as a result of the proposed minor modification.

## **2.4 Landscaping and Visual Amenity**

The landfill is located within the Western Sydney Parklands. The proposed increase in capacity would allow the final landform identified in MOD 4 to be achieved. As discussed previously an LRP has been prepared for the development.

Duration of landfilling activities will be extended for one year which will extend the duration of existing visual impacts. There will be no change to the proposed final landform or rehabilitation as a result of the proposed minor modification.

## **2.5 Odour**

Odour concentrations for the existing and proposed operations were modelled for the MOD 4 application and there was no significant increase in odour levels predicted at private resident locations due to the proposed operations. Compliance with the DECCW odour criteria of 2 ou was achieved at all private resident locations located to the north and west of the site. Exceedances of the DECCW odour criteria were predicted at several industrial sites (Brickworks, UR-3R) and public venues (Eastern Creek Raceway and WSID). These public venues usually operate in daytime hours (9 am to 9 pm). Further analysis was undertaken of the predicted odour levels during the operating hours of these public venues. Conditions of development consent require that WAMC does not undertake any activities associated with the development after 4pm on any day on which an event, attended by members of the general public, is occurring at the WSID. The conditions of consent for the MOD 4 application required WAMC review its Agreement with the WSID to ensure that activities associated with MOD 4 did not impact on events held at the WSID. In June 2011 WAMC provided a copy of the Agreement prepared in accordance with this condition to the Department of Planning and Infrastructure. WAMC has consulted with the WSID in relation to the proposal to extend landfilling by 12 months and the

WSID have not raised any objections. An updated and revised Agreement between WAMC and WSID has been agreed between both parties.

Since the landfilling activities associated with MOD 4 have been undertaken there have been ongoing odour issues in the Erskine Park, Eastern Creek and Kemps Creek Areas.

In August 2012 the NSW EPA in response to odour complaints and concerns regarding the level of odours originating from activities undertaken at 10 waste management and composting facilities in the Eastern Creek, Erskine Park and Kemps Creek Areas including the WAMC site, conducted a baseline odour assessment. During 2012-13 WAMC participated in the Regional Odour Assessment of Erskine Park, Eastern Creek and Kemps Creek. The study found that the WAMC site was one of three sites emitting odours detectable at significant levels beyond the site boundary.

In February 2013 the NSW EPA issued WAMC with an EPL Condition to undertake odour management requirements identified in the Eastern Creek 2 Gas Management Programme 2012/13 (WAMC 2012). Measures identified in the programme included:

- Installation of 15 new progressive and 10 perimeter gas wells in Cell 7 and connected to the gas collection system. The use of progressive gas wells allows early and effective gas capture, reduced odour impacts and enhanced power generation during the active landfilling phase;
- Installation of 10 new progressive wells in Cell 5 and connected to the gas collection system;
- Installation of 12 new progressive gas wells in Cell 4 and connected to the gas collection system;
- Final capping on the completed batters of Cell 4, 6 & 7 and an intermediate cap on interim surfaces. This would enhance the gas capture system and odour management;
- Installation of 12 new perimeter gas wells along the eastern and southern side of the final Eastern Creek 2 Northern Extension batters. An additional 8 new perimeter gas wells to be installed along the western side of the Eastern Creek 2 Northern Extension batters in December 2014;
- Continue to extract landfill gas from all the leachate risers at Eastern Creek 2 including Southern Cell, Cells 4, 6 and 7. Installation of an advanced gas extraction line to the leachate riser infrastructure on Cell 5. Gas extraction from the leachate risers has been an integral part of the overall gas management system and significantly reduced associated odour impacts;
- Installation of 4 new vertical gas wells along the north eastern corner of the Eastern Creek 2 Southern cell to replace damaged wells. Additional gas collection infrastructure (i.e. perimeter gas wells, horizontal cut-of trench etc.) to be installed in this area by late 2014/early 2015.

WAMC subsequently completed the requirements and reported to the NSW EPA in October 2013. In addition WAMC has entered into an Agreement with the WSID which outlines measures to mitigate the affects of odour on the dragway activities. Measures adopted include:

- Periodic determination of odour levels at the landfill, and at the boundaries, during landfill activities and identification of additional odour control measures to mitigate odour at the WSID;
- Installation of an advanced odour neutralizing system on the fence line adjacent to operational cells to enhance odour performance;
- As necessary inclusion of ongoing operational measures to mitigate the effect of odours;
- Application of odour neutralizing sprays when events are in progress at the WSID;
- Management of landfill operations as required during WSID activities that are opened to the public to mitigate the effect of odour;
- Ensuring the leachate holding dam is maintained in a condition that minimises the emission of odours from the site. Taking action to mitigate the effect of odours;
- Ensuring the active tipping face does not exceed the conditions of approval and covering of odourous wastes as soon as possible after delivery;
- Covering of all waste daily;
- Ensuring landfill gas generated by waste disposal facilities is treated to mitigate the effect of odours;
- Ensuring that outside its hours of operation that controls to mitigate odour material are in place; and
- Review of the current Odour Management Plan with WSID to secure improved outcomes.

WAMC has consulted with the WSID in relation to the proposed extension to the duration of landfilling activities.

## **2.6 Environmental Management**

The Eastern Creek WMC LEMP is updated periodically to meet the expectations of the community and regulatory bodies in relation to environmental performance. The LEMP includes a number of specific monitoring plans proposed to meet the requirements of the Conditions of Consent, Conditions of the EPL and commitments made in the Application (2003). These plans are incorporated as Appendices to the LEMP. The Statement of Commitments included in the Submissions Report for MOD 4 which relate specifically to landfill environmental management have been incorporated in the Eastern Creek WMC LEMP which is the basis for management of the ongoing landfill activities.

### **3. CONSULTATION**

WAMC has consulted with relevant government agencies and stakeholders regarding the proposed modification. The following section summaries the outcomes of this process.

#### **Western Sydney Parklands Trust**

WAMC consulted with Western Sydney Parklands Trust (**WSPT**) regarding the proposed modification and WSPT raised no objections with respect to the proposed modification.

#### **WSID**

As discussed in Section 2.5, WAMC has consulted with WSID and following these discussions an updated and revised Agreement was drafted by WAMC and signed by WSID and WAMC on 25 November 2014. WSID did not raise any objections to the proposed modification.

#### **NSW EPA**

WAMC consulted with the NSW EPA with respect to the proposed modification.

#### **Blacktown City Council (BCC)**

WAMC met with BCC and outlined the key elements of the proposed modification. WAMC confirmed to BCC that due to improved waste compaction rates the current (MOD 4) planning approval would result in a failure to attain the final (approved) landfill height and profile. This outcome could potentially reduce the effectiveness of the intended stormwater drainage.

WAMC also confirmed that the final visual impacts of the proposed modification would be the same as those assessed in the MOD 4 Environmental Assessment and found to be acceptable from a number of local vantage points.

BCC raised no objections to the proposed modification.

#### **Roads and Maritime Services (RMS)**

WAMC consulted with RMS regarding the proposed modification and confirmed that currently approved traffic volumes, arrival and departure times would remain unchanged. RMS stated that the proposed modification would likely gain their support to extend the facility operations to mid-2018.

#### **4. PROPOSED CHANGES TO CONDITIONS OF CONSENT**

The proposed minor modification would require amendment of the current consent primarily in relation to the description of the project in Schedule 1 and the timing of completion of landfill activities would be extended from June 2017 to June 2018 in Schedule 2 in particular Conditions 4.1, 4.2 and 4.3. The capacity of the Northern Extension area of Eastern Creek Stage 2 would be increased from 4.5 Million tonnes to 5.15 Million tonnes.



## **5. CONCLUSION**

As a result of the proposed modification landfilling activities at the Eastern Creek WMC would be extended to June 2018 at the currently approved annual tonnage. All activities will be in accordance with the site consent, EPL and associated conditions. The proposed modification will allow the approved final landform to be achieved taking into account intermediate settlement occurring during landfilling activities. The environmental assessment undertaken demonstrates that the environmental impacts will be in accordance with those assessed for the previous MOD 4 application.

## **APPENDIX A**

