

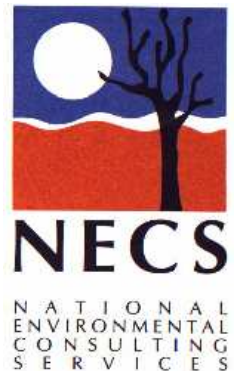


**PROPOSED MODIFICATION TO THE
MUNICIPAL SOLID WASTE PROCESSING & RECYCLING FACILITY
AT
EASTERN CREEK WASTE & RECYCLING CENTRE**

WSN ENVIRONMENTAL SOLUTIONS

OCTOBER 2009

PRELIMINARY ENVIRONMENTAL ASSESSMENT



**PROPOSED MODIFICATION TO THE
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ABBREVIATIONS

CAC	Community Advisory Committee
DECC	Department of Environment and Climate Change
DECCW	Department of Environment, Climate Change and Water
EA	Environmental Assessment
<i>EP&A Act</i>	<i>Environmental Planning & Assessment Act</i>
EP&A Regulation	Environmental Planning & Assessment Regulation
<i>EPBC Act</i>	<i>Environment Protection and Biodiversity Conservation Act</i>
EPL	Environment Protection Licence
ESD	Ecologically Sustainable Development
GRL	Global Renewables Limited
IMS	Integrated Management System
LEMP	Landfill Environmental Management Plan
LGA	Local Government Area
m	Metres
MSW	Municipal Solid Waste
PEA	Preliminary Environmental Assessment
SEPP	State Environmental Planning Policy
SOP	Standard Operating Procedure
SREP	State Regional Environmental Plan
SOP	Standard Operating Procedure
tpa	Tonnes per Annum
UR-3R	Urban Resource – Reduction, Recovery & Recycling
WRC	Waste & Recycling Centre
WSN	WSN Environmental Solutions

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PRELIMINARY ENVIRONMENTAL ASSESSMENT

1. INTRODUCTION

1.1 PURPOSE OF THIS DOCUMENT

This document provides a description of the proposed modification to the development consent for the Municipal Solid Waste (MSW) Processing & Recycling Facility at the Eastern Creek Waste & Recycling Centre (WRC).

Development consent for the Facility was granted by the Minister for Planning on 25 February 2002 under Part 4 of the *Environmental Planning and Assessment (EP&A) Act*. Clause 8J of the Environmental Planning and Assessment Regulation (EP&A Regulation) 2000 sets out transitional provisions in relation to development approvals and consents made under Part 4 of the Act. Clause 8J(8) provides that:

A development consent in force immediately before the commencement of Part 3 of the Act may be modified under Section 75 W of the Act as if the consent were an approval under that Part, but only if:

- (a) the consent was granted with respect to development that would be a project to which Part 3A of the Act applies but for the operations of clause 6(2) (a) of State Environmental Planning Policy (Major Projects) 2005, and*
- (b) the Minister approves of the development consent being treated as an approval for the purposes of section 75W of the Act.*

The process utilised in the Facility is the Urban Resource – Reduction, Recovery & Recycling (UR-3R) Process developed by Global Renewables Limited (GRL). In previous documentation associated with the development consent the Facility is referred to as the UR-3R Facility.

The Facility meets the requirements of Clause 8J(8)(a) (refer Section 2.2). Accordingly, an application is made to the Minister for Planning to approve of the development consent being treated as an approval for the purposes of Section 75W of the Act and to request the Ministers approval of the proposed modification under Section 75W of the Act.

This document provides the following information:

- The basis for confirmation that the development is a project to which Part 3A of the Act applies;
- The location and description of the development site;
- A description of current operations;
- The legislation and planning provisions applicable to the site;
- A description of the proposed modification;

- Justification for the proposed modification;
- Consultation to be undertaken;
- Preliminary environmental assessment of the proposed modification to identify potential environmental issues; and
- Current and proposed environmental management measures.

The Preliminary Environmental Assessment (PEA) identifies the key environmental issues based on the environmental assessments undertaken for the previous Development Applications for the site. It provides a brief assessment of the likely extent and nature of the potential impacts of the proposed modification for the purpose of providing advice to the Director-General of the Department of Planning for the issue of environmental assessment requirements.

1.2 THE PROPONENT

The proponent is the Waste Recycling and Processing Corporation trading as WSN Environmental Solutions (WSN). The Waste Recycling and Processing Corporation is listed as a statutory State owned corporation under Schedule 5 of the *State Owned Corporations Act 1989*. WSN is a “public authority” for the purposes of the *EP&A Act* and instruments made under the Act.

WSN principal statutory functions under Section 6(2) of the *Waste Recycling & Processing Corporation Act 2001* are:

- to establish, maintain and operate waste facilities, secondary resource facilities and related facilities; and*
- to conduct businesses or provide services relating to waste, and secondary resource recovery; and*
- to provide waste management services, secondary resource management services and related services; and*
- to research, develop and implement alternative technologies for managing waste; and*
- to trade in waste and secondary resources.*

The UR-3R Facility is owned by GRL and operated under a 25 year private partnership contract with WSN. The agreement is part of WSN's commitment to resource recovery.

1.3 THE SITE

1.3.1 Regional and Local Context

The site of the UR-3R Facility is located within the Eastern Creek WRC. The WRC lies within the City of Blacktown Local Government Area (LGA) and just north of the boundary with the City of Fairfield LGA. The Eastern Creek WRC site is bordered to the north by the M4 Motorway, the west by the M7 Motorway and Wallgrove Road, to the east by Ferrers Road and to the south by the Sydney Water Supply Pipeline (refer Figure 1.1). The WRC site is crossed east to west by two separate electricity transmission lines and north to south along Eastern Creek by a gas pipeline.

The WRC site is located within lands comprising the Western Sydney Parklands which include the former Eastern Creek, Prospect, Horsley Park and Hoxton Park open space / special uses corridors. State Environmental Planning Policy (Western Sydney Parklands) 2009, applies to the WRC site.

1.3.2 Site Description

The UR-3R Facility is located on Lot 2 DP 1059698 in the south western corner of the Eastern Creek WRC. The land is owned by WSN and leased to GRL.

It is proposed to construct and operate a Pre-Sort Facility for the UR-3R Facility on adjacent Lot 2 DP 1073820 which is owned by the Department of Planning and leased to WSN. The Pre-Sort Facility would be located on the site of the existing Recycling Building.

Figure 1.2 shows the location of the two Lots and the location of the existing and proposed developments.

1.3.3 Background

The Eastern Creek WRC has operated as a putrescible landfill since July 1984. Completed landfill areas 1-4 are located on the western side of Eastern Creek and are known as Eastern Creek Stage 1. The UR-3R Facility is located adjacent to completed landfill area 4. Landfilling is currently being undertaken on land to the east of Eastern Creek known as Eastern Creek Stage 2.

In November 2001, the then Waste Service NSW applied for development consent for the construction and operation of the UR-3R Facility at the Eastern Creek WRC. The Minister for Planning granted development consent to the proposal on 25 February 2002 subject to conditions.

An application to modify the consent was subsequently lodged in accordance with Section 96 (2) of the *EP&A Act*. The modification sought an increased rate of diversion of waste from landfill to the UR-3R Facility of up to 220,000 tonnes per annum (tpa), compared to the approved Facility's 156,000 tpa capacity. On 25 November 2002 the Minister for Planning amended the development consent and modified relevant Conditions of Consent.

An application for a minor modification was sought in July 2003 to relocate some of the composting fans, a carpark and access to the maturation area (File No. S01/00516, DA: MOD 70-7-2003i). A further minor modification was sought in January 2007 to allow the installation of a presorting system and compost refining and maturation systems to be modified to enable improved environmental performance. Supplementary plans were provided in September 2007. Consent for this modification was issued on 28 April 2008.

1.4 MODIFICATION SUMMARY

In summary the proposed modification includes:

1. Construction of a Pre-Sort Facility on the site within the East Creek WRC currently utilised by the recycling shed and education centre.
2. Construction/installation of associated pollution controls and amenities.
3. Relocation of the recycling operations and education centre and associated infrastructure to an adjacent site on the WRC.

4. Operation of the Pre-Sort Facility to remove Out of Specification Material including, oversize objects and Hazardous Materials from the MSW stream delivered to the WRC and destined for the UR-3R Facility.
5. Transportation of the Out of Specification Material to the landfill and the remaining material to the UR-3R Facility.

2. LEGISLATIVE AND PLANNING CONSIDERATIONS

2.1 COMMONWEALTH LEGISLATION

The *Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)* established an assessment and approvals procedure for, among other criteria, actions that will have or are likely to have a significant impact on matters of national environmental significance. The proposed modification has no impact on the matters defined in the Act as national environmental significance and there are no other grounds on which the legislation would apply.

2.2 STATE LEGISLATION

2.2.1 EP&A Act

Part 4

The development application and subsequent modification applications for the UR-3R Facility have been assessed and determined under Part 4 of the *EP&A Act*. The development applications are described in Section 1.3.3 of this PEA. On 5 April 2001, the proposed development was declared to be a "State Significant Development" by the then Minister for Urban Affairs and Planning. Accordingly the Minister was the Consent Authority for the proposal.

Part 3A

Part 3A of the *EP&A Act* commenced on 1 August 2005 after the consent for the UR-3R Facility was granted. Part 3A provides an approval process specifically adopted for major projects in NSW.

Clause 8J(8) states:

A development consent in force immediately before the commencement of Part 3A of the Act may be modified under Section 75W of the Act as if consent were an approval under that Part, but only if:

- (a) *The consent was granted with respect to development that would be a project to which Part 3A of the Act applies but for the operation of clause 6(2)(a) of State Environmental Planning Policy (Major Projects) 2005; and*
- (b) *The Minister approves of the development consent being treated as an approval for the purposes of Section 75W of the Act.*

The development consent, if so modified, does not become an approval under Part 3A of the Act.

Section 75W of the Act states:

- (1) *In this section:*

Minister's approval means an approval to carry out a project under this Part, and includes an approval of a concept plan.

Modification of approval means changing the terms of a Minister's approval including:

- (a) *revoking or varying a condition of the approval or imposing an additional condition of the approval; and*

- (b) *changing the terms of any determination made by the Minister under Division 3 in connection with the approval.*
- (2) *The Proponent may request the Minister to modify the Minister's approval for a project. The Minister's approval for a modification is not required if the project as modified will be consistent with the existing approval under this Part;*
- (3) *The request for the Minister's approval is to be lodged with the Director-General. The Director-General may notify the proponent of environmental assessment requirements with respect to the proposed modification that the proponent must comply with before the matter will be considered by the Minister.*
- (4) *The Minister may modify the approval (with or without conditions) or disapprove of the modification.*
- (5) *The proponent of a project to which Section 75K applies who is dissatisfied with the determination of a request under this section with respect to the project (or with the failure of the Minister to determine the request within 40 days after it is made) may, within the time prescribed by the regulations, appeal to the Court. The Court may determine any such appeal, prescribed by the regulations, appeal to the Court. The Court may determine any such appeal.*
- (6) *Subsection (5) does not apply to a request to modify:*
 - (a) *an approval granted by or as directed by the Court on appeal;*
 - (b) *a determination made by the Minister under Division 3 in connection with the approval of a concept plan.*
- (7) *This section does not limit the circumstances in which the Minister may modify a determination made by the Minister under Division 3 in connection with the approval of a concept plan.*

As described in Section 2.3.1 the UR-3R Facility currently meets the requirements of the Major Projects SEPP, Schedule 1. Under Clause 6(2)(a) of the SEPP the original development application would be a project to which Part 3A of the Act would apply. On this basis, the Minister for Planning may form the opinion that the Facility is development described in Schedule 1 of the Major Projects SEPP and that the consent could be treated as a Part 3A approval. If this is confirmed an application for a modification of the consent could be made under Section 75W of the EP&A Act.

The proposed modification described in this PEA in accordance with Section 75W of the Act seeks to change the terms of the Minister's approval in the 2002 development consent by enabling the construction and operation of the Pre-Sort Facility. The consent and other conditions would remain substantially the same.

Section 75(3) of the EP&A Act provides that the Minister cannot approve of the carrying out of a project that would be wholly prohibited under an environmental planning instrument by the operation of Section 76B of the Act. The review undertaken of the planning instruments applying to the ECWRC site is documented in Section 2.3. The review indicates that the proposed development on the site is permissible with the Ministers consent and consequently can be approved under Part 3(a).

2.2.2 POEO Act

The Eastern Creek WRC operations are the subject of an Environment Protection Licence (EPL) under the *POEO Act* being EPL 5272 Eastern Creek Waste Management Centre issued by the Department of Environment, Climate Change and Water (DECCW) to the Waste Recycling &

Processing Corporation, Licence Varied by Notice 1101389, issued on 23 June 2009 effective 23 June 2009. A Landfill Environmental Management Plan (LEMP) has been prepared and implemented under the terms of the Licence.

The UR-3R Facility operations are undertaken in accordance with DECC EPL No 11798.

2.3 PLANNING INSTRUMENTS

2.3.1 State Environmental Planning Policies (SEPPs)

The relevant SEPPs applicable to the site and the modification are:

- SEPP No 29 - Western Sydney Recreation Area;
- SEPP (Western Sydney Parklands) 2009;
- SEPP (Infrastructure) 2007; and
- SEPP (Major Projects) 2005.

SEPP No 29

The SEPP enables development to be carried out for recreational, sporting and cultural purposes within the Western Sydney Recreation Area. The Eastern Creek WRC is within land covered by the SEPP.

The primary aim of the SEPP is to enable the development of a recreation area. Other aims are included in Clause 2(2) of the Policy. Clause 2(2)(c) allows the carrying out of public authority undertakings and infrastructure. As described in Section 1.2 WSN is a public authority as defined under the *EP&A Act*. Clause 2(2) (d) aims to ensure that any development will contribute to or not impede the implementation of the primary aim of the Policy ie recreation area development. The proposed final land use Eastern Creek WRC site is open space rehabilitated so as to be compatible with recreational use of it and the surrounding area.

Clause 7 of the SEPP specifies that the Minister for Planning is the consent authority for the purpose of the policy other than for "interim development". The development of the Eastern Creek WRC is not interim development as defined under the Policy.

Clause 9 of the Policy states that "a public authority may, with the consent of the Minister, carry out development for any purpose in the exercise of its functions. WSN is a public authority and can carry out development on the site with the consent of the Minister.

Clause 13 of the SEPP states as follows:

The consent authority, whether it is the Minister or the Council, may refuse consent to development if, in the opinion of the consent authority:

- (a) *the provision for drainage of land or other land, or the level of the ground, will be inadequate; or*
- (b) *the provision of water services to the land is inadequate, or*
- (c) *development of flood liable land will:*
 - i. *adversely effect the efficiency or capacity of the floodway or the flow of flood water on adjoining lands, or*
 - ii. *be unsafe in time of flood;*
 - iii. *cause unavoidable erosion and siltation or the unnecessary destruction of streambank vegetation, or*

- iv. create a hazard to life of property in time of flood,
- (d) access to an arterial road will impede traffic flow to an unacceptable degree;
- (e) methods to control the disposal of effluent and the retention and quality of water run-off will be inadequate, or
- (f) the operation of State or Commonwealth facilities will be adversely affected, and the relevant matter may not satisfactorily be dealt with by means of the imposition of appropriate conditions under section 91 of the Act.

These issues were addressed in the EIS prepared for the UR-3R Facility (2001) and the EIS for the Northern Extension Landfill (2003) and it was assessed that the developments on the WRC site were not captured by any of the Clause 13 restrictions on development within the SEPP provisions.

SEPP (Western Sydney Parklands) 2009

This SEPP applies to all lands within the Western Sydney Parklands, including the area of the Eastern Creek WRC. The aim of this Policy is to put in place planning controls that will enable the Western Sydney Parklands Trust to develop the Western Parklands into a multi-use urban parkland for the region of Western Sydney by:

- (a) Allowing for a diverse range of recreational, entertainment and tourist facilities in the Western Parklands; and
- (b) Allowing for a range of commercial, retail, infrastructure and other uses consistent with the Metropolitan strategy, which will deliver beneficial social and economic outcomes to western Sydney; and
- (c) Continuing to allow for and facilitate the location of government infrastructure and service facilities in the Western Parklands; and
- (d) Protecting and enhancing the natural systems of the Western Parklands, including flora and fauna species and communities and riparian corridors; and
- (e) Protecting and enhancing the cultural and historical heritage of the Western Parklands; and
- (f) Maintaining the rural character of parts of the Western Parklands by allowing sustainable extensive agriculture, horticulture, forestry and the like; and
- (g) Facilitating public access to, and use and enjoyment of, the Western Parklands; and
- (h) Facilitating use of the Western Parklands to meet a range of community needs and interests, including those that promote health and well-being in the community; and
- (i) Encouraging the use of the Western Parklands for education and research purposes, including accommodation and other facilities to support those purposes; and
- (j) Allowing for interim uses on private land in the Western Parklands if such uses do not adversely affect the establishment of the Western Parklands or the ability of the Trust to carry out its functions as set out in Section 12 of the *Western Sydney Parklands Act 2006*; and
- (k) Ensuring that development of the Western Parklands is undertaken in an ecologically sustainable way.

Clause 11 (l) of the Policy provides that the following development may be carried out without development consent but only if it is carried out by or on behalf of a public authority:

Cafes; community facilities; entertainment facilities; environmental facilities; environmental protection works; function centres; information and education facilities; kiosks; landscaping; maintenance depots; public administration buildings; recreation areas; recreation facilities (outdoor); signage (for directional, informative , or interpretative purposes); ticketing facilities.

Other developments, excluding development for the purposes of residential accommodation, may be carried out in the Western Parklands only with development consent.

Clause 12 of the Policy sets out the matters to be considered by a consent authority. In determining a development application for development on land in the Western Parklands, the consent authority must consider each of the following matters as are relevant to the development:

- (a) The aim of the Policy, as set out in Clause 2;
- (b) The impact on drinking water catchments and associated infrastructure;
- (c) The impact on utility services and easements;
- (d) The impact of carrying out the development on environmental conservation areas and the natural environment, including endangered ecological communities;
- (e) The impact on the continuity of the Western Parklands as a corridor linking core habitat such as the endangered Cumberland Plain Woodland;
- (f) The impact on the Western Parkland's linked north-south circulation and access network and whether the development will enable access to all parts of the Western Parklands that are available for recreational use;
- (g) The impact on the physical and visual continuity of the Western Parklands as a scenic break in the urban fabric of western Sydney;
- (h) The impact on public access to the Western Parklands;
- (i) Consistency with:
 - (i) Any plan of management for the parklands, that includes the Western Parklands, prepared and adopted under Part 4 of the Western Sydney Parklands Act 2006, or any precinct plan for a precinct of the parklands, that includes the Western Parklands, prepared and adopted under that Part,
- (j) The impact on surrounding residential amenity;
- (k) The impact on significant views;
- (l) The effect on drainage patterns, groundwater, flood patterns and wetland viability;
- (m) The impact on heritage items;
- (n) The impact on traffic and parking.

Clause 9(l) of the Policy provides that land within the Parklands is unzoned. However Part 3 of the SEPP Infrastructure (2007) applies to the Western Parklands as if the Western Parklands were in a prescribed zone under this Policy.

Based on the above it is concluded that the proposed modification is permissible with Ministerial consent.

Of note Aim (c) of the Policy continues to allow for the location of government infrastructure and facilities in the Parklands area.

Sydney Regional Environmental Plan No 31 – Regional Parklands is repealed. This Plan applied to the Eastern Creek WRC site except for the site of Eastern Creek Stage 2 between Eastern Creek and Ferrers Road. This was a deferred matter and SEPP No 29 – Western Sydney Recreation Area applied to this land. SEPP No 29 has not been repealed.

In relation to Part 3A Projects, the Minister remains the approving authority for projects within the Parklands. The Minister is also the consent authority for other proposed developments on public land within the Parklands.

SEPP (Infrastructure) 2007

The SEPP commenced on 1 January 2008. It repealed SEPP No 48 - Major Putrescible Landfills under which the development of the landfill was assessed in 2003-5.

Division 23 of the SEPP applies to "waste or resource management facilities." "Waste Disposal Facility" is defined in clause 120 as follows:

Waste disposal facility means a facility for the disposal of waste by landfill, incineration or other means, including associated works or activities such as

recycling, resource recovery and other resource management activities, energy generation from waste gases, leachate management, odour control and the winning or extractive material to generate a void for disposal of waste or to cover waste after its disposal.

“Waste or resource management facility” is defined as follows:

“Waste or resource management facility means a waste or resource transfer station, a resource recovery facility or a waste disposal facility.

Clause 121 of the Infrastructure SEPP provides that development for the purpose of a waste or resource management facility may be carried out with consent. This section provides that development for the purpose of waste or resource management facilities, other than development referred to in subclause (2), may be carried out by any person with consent on land in a prescribed zone. Subclause (2) refers to waste and resource transfer stations which are not applicable to the Eastern Creek WRC.

As noted above, Clause 6 (2) of SEPP (Western Sydney Parklands) provides that Part 3 of SEPP (Infrastructure) applies as if the Western Parklands were in a prescribed zone under that Policy. On this basis Clause 121 of the Policy applies to the site and Clause 123 sets out the matters to be taken into account in determining a development application.

Clause 123 of the SEPP requires that:

In determining a development application for development for the purpose of the construction, operations or maintenance of a landfill for the disposal of waste, including putrescible waste, the consent authority must take the following matters into consideration:

- (a) whether a justifiable demand exists for the landfill, having regard to the provisions of the NSW Waste Avoidance and Resource Recovery Strategy and the waste disposal data provided from time to time by the Department of Environment and Climate Change,*
- (b) whether the location of the development is consistent with any regional planning strategies or locational principles included in the publication EIS Guideline: Landfilling (Department of Planning, 1996), as in force from time to time,*
- (c) the views of relevant public authorities and councils responsible for the area from which the waste material is proposed to be sourced.*

SEPP (Major Projects) 2005

This SEPP was introduced in conjunction with the commencement of Part 3A Of the *EP&A Act* and after the development consent for the UR-3R Facility.

Schedule 1 of the SEPP provided a list of the classes of development which can be considered major projects for the purposes of Part 3A of the Act. Clause 6(2) of the Policy specifies development that, in the opinion of the Minister, is a development of the kind described in the Schedules of the SEPP and is declared to be a Part 3A Project.

Resource and “waste related industries” is development that is described in Group 9 of Schedule 1 of the SEPP. Clause 27 (3) of Schedule 1 provides that:

Resource recovery or waste facilities

- (3) Development for the purpose of resource recovery or recycling facilities that handle more than 75000 tonnes of waste per year or have a capital investment of more than \$30 million.*

The UR-3R Facility currently meets the requirements of the SEPP as a “resource and waste related industry” in the terms of clause 27(3) of Schedule 1 of the Policy.

If the Minister forms the opinion that the current proposal is development of a kind described in Clause 27(1), then Part 3A of the *EP&A Act* applies.

SEPP (Western Sydney Employment Area) 2009

The provisions of this SEPP apply to the land on the western side of Wallgrove Road opposite the Eastern Creek WRC and lands to the north and east of Prospect Reservoir. It has no direct implications for the site or the proposed modification.

2.3.2 Sydney Regional Environmental Plans (SREPs)

One SREP is of relevance to the site and the application:

- SREP No 20 – Hawkesbury – Nepean River (1997).

SREP No 20

This SREP applies to the Eastern Creek lands as they are located within the nominated catchment. The Plan aims to promote the principles of total catchment management and to protect water quality and recreation areas along the Hawkesbury – Nepean River. A consent authority in determining an application for consent to the carrying out of development must take into account the general planning considerations set out in Clause 5 and the specific planning policies and related recommended strategies set out in Clause C which are applicable to the proposed development. The EP&A Regulation (Plan Making) Regulation 2009 came into force on 1 July 2009. Under the Regulation, REP planning instruments are deemed to be SEPPs as of that date. The Regulation includes saving provisions, so that a provision of the REP that becomes a deemed SEPP on 1 July 2009 does not have the same effect as a provision of a SEPP for the purposes of Part 3A of the Act, it would not have that affect before 1 July 2009.

Section 75(R) of the EP&A Act provides that planning instruments (other than SEPPs) do not apply to or in respect to an approved project to which Part 3A of the Act applies. On the basis of the saving provisions this SREP does not apply to the approved modification. However for the sake of completeness the SREP planning considerations are summarised in this section.

The general planning considerations in Clause 5 are:

- (a) the aim of this plan, and*
- (b) the strategies listed in the Action Plan of the Hawkesbury-Nepean Environmental Planning Strategy, and*
- (c) whether there are any feasible alternatives to the development of other proposal concerned, and*
- (d) the relationship between the different impacts of the development or other proposal and the environment, and how those impacts will be addressed and monitored.*

The specific planning policies and recommended strategies in Clause 6 are:

- (1) Total Catchment Management;*
- (2) Environmentally Sensitive Areas;*
- (3) Water Quality;*
- (4) Water Quantity;*
- (5) Cultural Heritage;*
- (6) Flora and Fauna;*
- (7) Riverine Scenic Quality;*
- (8) Agriculture/Aquaculture and Fishing;*

- (9) *Rural Residential Development;*
- (10) *Urban Development;*
- (11) *Recreation and Tourism;*
- (12) *Metropolitan Strategy.*

The relevant specific planning policies listed in Schedule 3 of the SREP include:

- *Water quality;*
- *Significant vegetation habitats (including wetlands);*
- *Environmental heritage and scenic quality;*
- *Recreation and tourism; and*
- *Representations made by public authorities.*

Clause 11 (Item 18) of the Plan requires that the following additional matters in relation to waste management facilities are required to be considered by the consent authority:

- (a) *Any potential for groundwater contamination,*
- (b) *The adequacy of the proposed leachate management system and surface water controls,*
- (c) *The long-term stability of the final landform and the adequacy of the site management plan,*
- (d) *If extraction of material is involved in the creation or other development of the waste management site, whether the extractive operation will have an adverse impact on the river system.*

2.3.3 Blacktown LEP and DCP

The Blacktown City Council Section 149(2) Certificate states that the land is not affected by Blacktown Council LEP 1988 or DCP 2006.

2.4 CURRENT CONSENTS AND APPROVALS

As described above, development consent for the UR-3R Facility was granted in 2002 subject to conditions set out in Schedule 2 of the consent.

Condition of Consent No 1 currently requires that:

The UR-3R Facility (the Project) shall be carried out substantially in accordance with:

- The proposal contained in the EIS prepared for the “Eastern Creek Waste Management Centre Proposed UR-3R Facility” and associated documents prepared by the Applicant by National Environmental Consulting Services (NECS) dated 9 November 2001;
- All identified plans, safeguards and mitigation measures presented in the Construction Environmental Management Plan and Operational Environmental Management Plan, dated 9 November 2001;
- All supplementary material presented by the Applicant entitled “Additional Information Required by the NSW EPA on Air”, “Additional Information Required by the NSW EPA on Water”, “Noise Assessment” by Holmes Air Sciences dated February 2002;

- The modified proposal as described in the “Statement of Environmental Effects Modification of Development Consent UR-3R Facility, Eastern Creek Waste Management Centre” prepared on behalf of the Applicant by National Environmental Consulting Services (NECS) dated July 2002;
- The modified proposal as described in the “Statement of Environmental Effects – Proposed Minor Modification UR-3R Facility – Eastern Creek WMC” prepared on behalf of the applicant by National Environmental Consulting Services and dated July 2003;
- The modified proposal as described in the “Minor Modification of Development Consent UR-3R Facility Eastern Creek Waste and Recycling Centre” prepared on behalf of the applicant by National Environmental Consulting Services and dated December 2006;
- The modified proposal as described in the “Minor Modification of Development Consent UR-3R Facility Eastern Creek Waste and Recycling Centre (DA No. 323-11-2001)” prepared by the applicant and dated 24 September 2007; and
- The Conditions of Consent granted by the Minister.

3. CURRENT OPERATIONS

3.1 EXISTING WRC SITE OPERATIONS

The Eastern Creek WRC is a modern, integrated waste management facility. In addition to the putrescible landfilling activities at the Eastern Creek landfill, the facility also provides:

- The UR-3R Facility in conjunction with GRL to treat up to 220,000 tpa of municipal waste;
- Processing of greenwaste material into compost;
- Drop-off facilities for glass, plastic, paper and container recycling;
- Collection and disposal of household hazardous waste materials; and
- Services to local residents to recover and reuse resources.

The WSN operations at the Eastern Creek WRC are regulated by DECCW EPL No 5272. The landfill only accepts general solid waste (putrescible) suitable for landfill disposal in a Solid Waste Class 1 landfill as defined by the EPL and the DECC Waste Classification Guidelines (2009).

3.2 THE UR-3R FACILITY

The UR-3R Facility is located on in-filled land adjacent to the completed landfill Area 4. Operations are undertaken in accordance with DECCW EPL No 11798.

3.3 THE UR-3R™ PROCESS

The UR-3R™ Facility uses mechanical and biological technologies designed to recover resources from the MSW stream. Below is a description of key processes.

Receivals and Separation

MSW is received into an enclosed receivals building generally Monday to Friday. The waste is stockpiled by a front-end loader and fed into the facility at a pre-set rate over 5-6 days. Waste is then screened to remove hazardous and incompatible materials by manual sorters on an elevated lift conveyor in the Receivals Hall. It is conveyed from there to a series of trommels which separate waste based initially on size and then by magnetic and non-ferrous separators to remove ferrous and non-ferrous metals. Paper and plastic are removed for recycling using manual, air and infra-red autosorting processes. An organic-rich fraction of the MSW is then fed to the four percolators.

Percolation and Anaerobic Digestion

Percolation is the first stage of biological processing in the UR-3R™ Process. To aid aerobic degradation in the percolators, water is fed back through the top and compressed air is blown through nozzles at the base. The two objectives of percolators are to hydrolyse the waste, through microbial and mechanical actions, and wash out organics from the organic-rich waste into the liquid. The solid organic waste remaining in the percolators is dewatered and sent for composting. The liquid generated from the percolators, called percolate, is rich in dissolved and fine organics. This liquid is cleaned to remove sand, grit and fibre and pumped to the two anaerobic digesters. The organics within the percolate are consumed in the anaerobic digesters to produce biogas, which is then utilised for electricity generation. There is 4 ML of anaerobic digester capacity currently on site.

Composting and Refining

The solid organic material is fed into the enclosed composting operation where degradation, odour reduction and pasteurisation is achieved using an aerobic process. The aerobic bacteria generate heat during the organic degradation process. The heat is retained in the compost to achieve pasteurisation. Pasteurisation is a time and temperature relationship whereby pathogens, weed seeds and plant diseases are destroyed. Overheating of the compost reduces the effectiveness of the bacterial degradation process, so temperature must be controlled as described below to enable pasteurisation and prevent overheating.

Effective composting is achieved by providing the bacteria with air, water and a temperature controlled environment. An excess of air is used to evaporate water, retained as moisture in the organic matter, to create the cooling required to control the compost temperature. The composting process uses the SCT Biomax system to produce a pasteurised soil conditioner. After the intensive rot process is complete in the compost hall, this product is externally cured on the maturation area, and in the initial design, it was then processed in the Final Refinery before transportation to market. In the initial facility design, the compost hall was divided into two sections, with separate Biomax machines operating on the finer OGM product and the coarser alternative daily cover (ADC) for landfill. This arrangement meant that the entire organic fraction in the ADC composting system was destined for landfill. ADC was composed of the separately composted coarse stream, plus the rejects (glass, plastics and oversize) from the OGM final refining process.

The revised flow sheet eliminated the coarse/fine split before the composting hall in order to allow recovery of some of the organics previously included in the ADC fraction, thereby increasing the potential OGM production from the original 30,000 t/a up to around 40,000 t/a. This required the installation of an enclosed intermediate refining system to enable the coarse/fine split after the compost hall, thus increasing organic product recovery and reducing the impact of litter, dust and odour. This process allows the composting of the fine and coarse fractions to be combined by separating the two fractions post-composting rather than pre-composting. The composting process now operates as a single stream process, eliminating the earlier fine and coarse material composting split in the compost hall. Now both SCT Biomax machines operate on the same feedstock to produce a pasteurised soil conditioner. The separation post composting allows for improved recovery of organic material that would otherwise become ADC and thus be landfilled.

The composting and refining processes are designed to produce a pasteurised soil conditioner to meet the requirements of AS4454 (2003) for Composts, Mulches and Soil Conditioners. GRL has achieved product certification by SAI Global for OGM-P as a pasteurised and composted soil conditioner.

ADC is produced from the oversize fractions of the intermediate and final refineries and the WSN landfill environment protection licence allows this to be landfilled.

Water Services

A first flush system is in place to capture the initial run off from the Facility and prevent it from entering the local waterways. This first flush water is captured and is the primary source of water used for the composting process. During periods of dry weather, the reserves within the first flush holding dam (FFHD) are consumed and an external water source is required. Imported stormwater and potable water have been used to make up the deficit during dry periods. There is no sewer connection to the Facility. The office and amenities are serviced by an onsite septic treatment system and the treated and disinfected liquid is sent to the first flush holding dam.

UR-3R Products

The UR-3R Facility produces a number of products, broadly divisible into biogas for electricity, OGM, ADC and recyclates.

4. PROPOSED MODIFICATION

4.1 PRE-SORT FACILITY

It is proposed to construct and operate a fully enclosed Pre-Sort Facility on Lot 2 DP 1073820 on the site currently occupied by a recycling shed and education centre. The Facility is designed to process a maximum of 750 tonnes per day of MSW to remove Out of Specification Material including, hazardous and oversize materials.

The MSW is currently delivered by trucks through the Eastern Creek WRC weighbridge to the UR-3R Facility. The proposal would see trucks diverted to the new Pre-Sort Facility where they would be unloaded within the Facility building. After pre-sorting of the waste material, the Out of Specification Material including hazardous and oversize materials would be delivered by truck to the Eastern Creek Stage 2 landfill. The remaining material would be transported by truck to the receival hall at the UR-3R Facility for processing.

The Facility will process MSW from Monday to Saturday over 10 hours per day. The new technology in the Facility will provide improved processing and sorting capabilities and enable WSN to provide an improved waste stream to the UR-3R Facility.

The existing recycling shed and domestic dispatch area would be modified to house the Facility. The length of the building will be extended by 30m including the concrete platform and the height of half the existing building will be raised approximately 4m. Equipment in the building will comprise a receival bin in the receivals area with an infeed transfer conveyor from the bin to an elevated conveyor in the sorting station. Within the fully enclosed sorting station manual sorting of waste would be undertaken off an elevated conveyor with chutes to collection skip bins for the reject material. After the initial manual sorting stage, the waste would be separated into two single conveyors and fed into a specifically designed bag openers to improve the removal of materials within bags. The conveyors would feed into two specifically built trommels which would separate material based on size, removing oversized material.

The Out of Specification Material captured in the trommels would be conveyed to a disposal bin in the dispatch area. The material which passes through the trommel and is classed as acceptable would be delivered by a conveyor under the trommel to trucks which would transport it to the UR-3R Facility. Hazardous materials will be removed in the sorting area and temporarily stored in allocated bins. Once each bin is filled the hazardous material will be disposed of in accordance with current procedures. Figures 4.1 to 4.3 show the layout and conceptual views of the Pre-Sort Facility. The existing roadworks around the shed would be modified to enable waste delivery and removal without interfering with other vehicle movements on the site. The Facility is designed to accept up to 95 truck deliveries over an 8 hour period. Waste transported to the UR-3R Facility would amount to approximately 2 truck loads every hour. Waste transported to the landfill would amount to 1 truck every 3 hours.

Water usage will be restricted to floor washdown, emergency showers and amenities. A water misting system will be installed for odour and dust control. Leachate, being water that has come into contact with waste will be collected in leachate sumps. Individual sumps would be located in the receival separation and dispatch areas. Once collected the leachate would be pumped to the existing leachate pond adjacent to the Facility.

The building will be fitted with high speed roller doors to ensure it is enclosed at most times. This will minimise noise, odour and dust emissions. Overnight storage of MSW is not intended with all deliveries sorted by 5pm. In the event that processing is disrupted, delivery trucks will be diverted to the landfill with any unsorted material.

It is anticipated that there will be 14 new staff employed in the Facility including sorters, transport and loader drivers.

Fire management will be incorporated in the building design with hose reels and extinguishers located in accordance with the relevant regulations.

The projected life of the Facility is 20 years.

The benefits of the proposed Facility would include:

- Improved turnaround of Council waste vehicles;
- Improved waste stream to the UR-3R Facility;
- Cost savings to WSN and GRL; and
- Operational Health and Safety (OH&S) risk improvement.

4.2 RELOCATED FACILITIES

The existing recycling and domestic dispatch operations would be relocated to an area to the east of the Facility building. A new recycling shed would be constructed with associated concrete base and roadworks. The unloading area would be designed to provide improved service to the public.

The training and education centre would be moved to adjoin the existing administration buildings.

5. NEED AND JUSTIFICATION

Currently waste is received at the UR-3R Facility in the Receival Hall. Waste is screened by manual sorters using a single belt elevated lift conveyor sorting system. The system was upgraded following a modification of the development consent in 2007. The waste is then conveyed to a series of trommels for further separation.

The aim of that modification was to improve the reliability of the Facility and improve recyclables and compost quality. This was to be achieved by improvements in the recovery of hazardous materials such as batteries, gas bottles and stringy/bulky materials.

While that modification has resulted in some improvement in reliability the sorting system has been found to be unable to effectively sort the quantity of hazardous and bulky materials in the MSW stream currently being received at the Facility. This has resulted in diversion of some waste truck deliveries from the UR-3R Facility to the landfill.

The size and configuration of the Receival Hall limits the ability to install an additional pre-sort system designed to remove the hazardous and bulky materials before they enter the current sorting system. There is limited land on the site and it would be insufficient to accommodate an extension of the Receival Hall.

An alternative to carrying out the pre-sort of the waste in the Receival Hall is to construct the Facility on the Eastern Creek WRC site which would sort waste material after delivery trucks have passed through the weighbridge. The sorted material would then be delivered to the UR-3R Receival Hall.

This would be achieved by a modification to the existing UR-3R development consent. This would enable:

- Construction of the Pre-Sort Facility;
- Receipt of UR-3R MSW deliveries at the Facility;
- Presorting of this waste removing Out of Specification Material including, hazardous and bulky materials;
- Transporting of the sorted waste to the UR-3R Facility; and
- Transporting residual wastes collected by the Pre-Sort Facility to the landfill.

6. COMMUNITY AND STAKEHOLDER CONSULTATION

WSN has been engaging with the local community at Eastern Creek since 1994 via a Community Advisory Committee (CAC). The CAC meets quarterly to discuss the operations at the Eastern Creek Landfill, other operations on the WRC, the future of the site and other related matters, including amenity impacts on local residents. The CAC is independently facilitated. Members of the committee include local residents, neighbouring businesses, Australian Native Landscapes (the operator of the Green Waste Facility), GRL and WSN.

The CAC will be briefed on the proposed modification at its next meeting and will continue to discuss it during the approval and implementation periods.

WSN will liaise with Government Authorities including DECCW and Blacktown City Council in the course of development of the proposed modification. Consultation will also be undertaken with GRL.

7. PRELIMINARY ENVIRONMENTAL ASSESSMENT

The Preliminary Environmental Assessment identifies the key potential environmental issues associated with the proposed modification. A brief description of the likely nature and extent of the potential impacts of the modification is provided.

The assessment is based on the findings of previous investigation of the Eastern Creek WRC site including those associated with the UR-3R Facility.

7.1 TOPOGRAPHY, GEOLOGY AND SOILS

There will be minor surface disturbance during construction of the Pre-Sort Facility. The existing concrete platform will be extended and the road system modified. Operations will be managed in accordance with the Eastern Creek WRC LEMP.

7.2 WATER MANAGEMENT

There will be no impact on groundwater. Leachate comprising floor washdown and water misting system run-off will be collected in the leachate sump and pumped to the existing leachate pond adjacent to the facility.

CES will review the leachate quantities and composition and undertake an assessment of the capacity of the leachate pond and disposal system for incorporation in the Environmental Assessment (EA).

Rainwater will be collected from the building roof to supplement the water supply. Water from the emergency shower and amenities will be disposed of in the existing system.

7.3 AIR QUALITY

Dust and odour will be generated in the course of the unloading, sorting and dispatch operations.

The proposed Facility will be fully enclosed. Entry and exit doors will be fitted with high speed roller doors to ensure it is enclosed. Inside the shed a water misting system will be installed for odour and dust control.

The dust and odour emission levels within the building will be similar to existing levels in the receivals hall and sorting area of the UR-3R Facility and to levels at the landfill tipping face when Council trucks are unloading waste.

Within the overall context of operations at the Eastern Creek WRC, including the adjacent ANL composting operations and the UR-3R Facility, the dust and odour emissions from the proposed Pre-Sort Facility are not anticipated to be significant.

PAE Holmes will undertake an odour and dust investigation of the proposed pre-sort operations including emission modelling and to assess the impact of the emissions based on DECCW criteria and guidelines.

There will be greenhouse gas emissions associated with the operations and transport of the waste material. These will be offset to a large extent by the increased efficiency of the UR-3R Facility operations and landfilling of the reject material.

7.4 NOISE

Potential noise impacts may result from operations within the Facility building and from truck movements at the Eastern Creek WRC site. The full enclosure of the building will minimise impacts from the conveyor and trommel operations. The location of the Facility is such that noise levels outside the WRC boundaries should not be affected.

There will be a minor increase in truck movements on the WRC comprising trucks transporting waste from the Pre-Sort Facility to the UR-3R Facility. It is anticipated this will amount to an additional 2 truck loads every one hour. Council deliveries and the transport of reject material to the landfill should be similar to existing traffic levels.

Heggies will undertake a noise assessment of the proposed modification in accordance with DECCW requirements.

7.5 TRAFFIC

There will be no impact on traffic movements off the Eastern Creek WRC site. Council delivery truck numbers associated with the deliveries to the UR-3R Facility will remain the same.

There will be less internal vehicle movements on site and the impact of these will be assessed in the context of noise levels.

7.6 VISUAL

Half of the existing shed will be raised approximately 4 m in height and the length of the building will be extended by 30 m. The relocated recycling and domestic dispatch facilities will be relocated to an area to the east of the building. While this will result in a change to the appearance of the area when viewed from within the Eastern Creek WRC site, the only views of the Facility from off site will be from the M7 Motorway and the existing road to the Eastern Creek WRC. From these viewpoints the change will be minor. A visual assessment will be included in the EA.

7.7 OTHER IMPACTS

There will be no impacts on biodiversity or heritage values as the areas involved are currently cleared and used for waste management related activities. In terms of socio-economics, the Facility will generate employment for an additional 14 staff.

Improvements in the operation of the UR-3R Facility and the disposal of reject materials should result in improved ESD outcomes.

7.8 STUDY TEAM

As described above a study team has been drawn together in relation to the following study components to assist in the preparation of the EA:

- Leachate Management – CES;
- Air Quality – PAE Holmes; and
- Noise – Heggies.

National Environmental Consulting Services will prepare the EA based on the findings of the specialist studies and other investigations.

Additional studies may be convened as required following receipt of the Director-General's Requirements for the EA.

8. ENVIRONMENTAL RISK ASSESSMENT

Environmental risks associated with waste management on the Eastern Creek WRC have been addressed in the Eastern Creek Waste Management Centre : Proposed Modification Eastern Creek Stage 2 Environmental Impact Statement (Waste Service NSW 2003) and the Eastern Creek Waste Management Centre Proposed UR-3R Facility Environmental Impact Statement (Waste Service NSW 2001) and subsequent Statements of Environmental Effects.

The environmental risks associated with the proposed modification are incorporated in the risks associated with the operations of the Eastern Creek WRC and the UR-3R Facility.

No specific issue has been identified which has not been addressed in the previous environmental assessment and the management measures adopted for the WRC and the UR-3R Facility.

An environmental risk assessment based on the updated environmental monitoring data will be included in the EA.

9. ENVIRONMENTAL MANAGEMENT

The operations of the Eastern Creek WRC are undertaken in accordance with the Eastern Creek LEMP. The LEMP describes the construction and operational activities for operations on the Eastern Creek WRC associated with waste receipt and management and landfilling which are likely to have an impact on the assessment. It specifies the measure to be undertaken to minimise these impacts.

The operation of the UR-3R Facility is similarly addressed in the UR-3R Facility Operational EMP.

The Eastern Creek WRC LEMP will be amended to include the construction and operation of the Pre-Sort Facility and will include measures consistent with those set out in the UR-3R Facility EMP relevant to the sorting of waste. It will incorporate the findings of the EA and the modified conditions of consent.

WSN manages its environmental and OHS performance on-site through its Corporate Integrated Management System (IMS). The WSN IMS is structured on the requirements of AS/NZS 4801:2001 and AS/NZS 14001:1996 and contains Policies, Procedures, Management Plans, Emergency Response Plans, Standard Operating Procedures (SOP's) and Forms. The Eastern Creek WRC LEMP is a key component of the IMS and both WSN and on-site contractors (where required) are responsible for its implementation.

10. REFERENCES

DECC (2009) *Waste Classification Guidelines*

Waste Service NSW & GRL (2001) *Environmental Impact Statement - Eastern Creek Waste Management Centre Proposed UR-3R Facility* Prepared by National Environmental Consulting Services (NECS), Camperdown

Waste Service NSW & GRL (2002) *Statement of Environmental Effects Modification of Development Consent UR-3R Facility, Eastern Creek Waste Management Centre* Prepared by National Environmental Consulting Services (NECS), Camperdown

Waste Service NSW (2003) *Eastern Creek Waste Management Centre: Proposed Modification Eastern Creek Stage 2: Environmental Impact Statement*. Prepared by National Environmental Consulting Services (NECS), Camperdown

FIGURES