JRPP Ref. No. :	2011SYW032
DA No. :	DA11/0063
PROPOSED DEVELOPMENT:	Leachate Treatment Plant, Lot 4 DP 1094504, 50A Quarry Road, Erskine Park
APPLICANT:	Enviroguard Pty Ltd
REPORT BY:	Jonathon Wood, Environmental Planner, Penrith City Council



Leachate Treatment Plant General Arrangement. Source: Henry and Hymas (2010)

Assessment Report

# **Executive Summary**

Council is in receipt of a Development Application which proposes the construction of a leachate treatment plant at an existing landfill site. The 'capital investment value' (CIV) of the proposal is \$5.32 million. Having regard to the CIV being in excess of \$5 million, and the development being a listed category, the proposed development is to be determined by the Joint Regional Planning Panel – Sydney West pursuant to Part 3 - Regional Development of the State Environmental Planning Policy (Major Development) 2005.

The subject development site is part zoned IN1 General Industry, and E2 Environmental Conservation under the provisions of the State Environmental Planning Policy (Western Sydney Employment Area) 2009. The provisions of that planning instrument prohibit the current development proposal, however the provisions of State Environmental Planning Policy (Infrastructure) 2007 and Section 106 of the Environmental Planning and Assessment Act 1979 enable the proposal to be carried out.

The proposal is defined as 'Integrated Development' as concurrence from the NSW Office of Environment and Heritage (formerly Department of Environment, Climate Change and Water) is to be obtained as the site is regulated by an Environmental Protection License. General Terms of Approval have been issued for the proposed development.

The application was advertised in the local paper and placed on public exhibition from 1 March 2011 to 31 March 2011. No submissions were received in response.

The application has been assessed under the relevant provisions of the Environmental Planning and Assessment Act 1979 (as amended). Having regard to the matters discussed in this report, the application is recommended for approval, subject to the imposition of conditions.

### Background

The Erskine Park landfill operations commenced in 1993 as a means of rehabilitating a quarry that previously operated on the site. Development consent was granted for the disposal of non-putrescible waste under development consent 163/92 into the existing quarry pit as a means of establishing a future final landform.

Given the nature of the landfill operations the development was also required to obtain an Environment Protection License that regulates the ongoing landfill operations on the site to ensure that the impacts from the operational development are appropriately regulated. The current development proposal has arisen as a result of the provisions of the current Environment Protection License applying to the landfill operations.

Monitoring of the leachate levels within the landfill indicate that they are currently at 45m AHD despite the provisions of the Environment Protection License stipulating that the leachate levels are to be maintained below 30m AHD. The Office of Environment and Heritage (previously Department of Environment Climate Change and Water) has now added a Pollution Reduction Program Clause to the current Environment Protection License to reduce the leachate levels below the 30m AHD level. The current proposal is expected to facilitate this over a period of three (3) years after which leachate levels will be managed at 20m AHD. The deposition of waste is anticipated to cease in 2015 and upon completion of the required capping and rehabilitation the level of leachate generated is expected to reduce substantially as their will be less opportunity rainfall to seep into the landfill. The lifespan of the leachate treatment facility is approximately 10 years.

It is noted that a recent development application for the site was determined by the Joint Regional Planning Panel on 2 December 2010. That application provided for a landfill gas management system to capture and remove gaseous substances generated by the landfill. The proponent has outlined that the leachate treatment facility will increase the efficiency of the gas collection system by reducing blockages.

#### **The Proposed Development**

The specific elements of the proposal are as follows:-

- Construction of a 1700 square metre concrete pavement to accommodate drainage infrastructure, bunding walls, and the installation of a number of treatment tanks;
- Installation of two (2) sequencing batch reactor tanks measuring approximately 18m in diameter with an overall height of 6m;
- Installation of a final flow equalisation tank and an aerobic digester tank measuring approximately 12m in diameter with an overall height between 4.5m and 6m;

- Installation of an equalisation tank measuring approximately 8.5m in diameter with an overall height of 6m;
- Construction of a 200 square metre storage structure to house a number of chemical stores and equipment. The structure will partially enclose the chemical store areas and be approximately 6m in height;
- Construction of a 160 square metre truck unloading area with associated bunding;
- Installation of four 1.5m high 'blowers' to provide aeration during the treatment process;
- Treatment of leachate with a discharge rate of 8.5L per second to the sewer in order to reduce the leachate levels to less than the maximum 30 metre AHD leachate levels over a period of three years. This will necessitate 24 hour operation;
- Pump out of waste sludge not suitable for discharge to sewer which will be collected twice daily by an articulated vehicle (19m);
- Periodic maintenance as required however the system will largely operate unmanned and be monitored externally as required due to in built safety mechanisms.
- The systems is anticipated to be located on the site for a period of 7-10 years and in the long term this portion of the site will be replanted with endemic species as part of the rehabilitation strategy.

### Site and Surrounds

The site is located within the Erskine Park industrial area which forms part of the greater Western Sydney Employment Area. The site is located on the eastern side of Quarry Road approximately 100m north of the end of Quarry Road. It is regular in shape and has an area of 21.94 hectares. The site, and adjoining sites to the south and west, contains an existing solid waste landfill that is owned and operated by Enviroguard Pty Ltd. Vehicular access to the site is from Quarry Road as well as a right of carriageway over properties to north which provides linkage to Erskine Park Road.

The landfill operations are largely screened by established industrial buildings and revegetated riparian corridors, with the exception being the northern edge of the landfill sitewhich is the location of the current proposal. This area is currently visible from parts of Erskine Park Road, and the existing canopy structures on the site are visible for motorists travelling south. This is largely due to the changes in elevation, with the landfill site perched some 12m higher than Erskine Park Road, and a recent development on a property to the north which established a large retaining wall structure on the boundary with the current site that exacerbates the perceived change in levels.

Development surrounding the site is predominantly industrial in nature and contains a mixture of warehousing and manufacturing operations. The nearest residential area is approximately 700m north of the site beyond a series of vacant and developed industrial land parcels which form a partial buffer to the current site. There is also an established riparian corridor around much of the periphery of the site, however there is an area between the current site and Lenore Drive that has not been rehabilitated/replanted to date.

An aerial photograph is provided at **Figure 1** to give context to the current development proposal and its relationship with the surrounding area.



Figure 1: Aerial Photograph (Penrith City Council, 2011)

# **Planning Assessment**

The development has been assessed in accordance with the matters for consideration under Section 23G, 77A, 79C, and 91 of the Environmental Planning and Assessment Act 1979 as follows:

# Section 23G - Joint regional planning panels

A regional panel is empowered as a consent authority and may exercise any powers that would be vested in a consent authority under an environmental planning instrument. In this case, the regional panel is the consent authority as conferred on it under State Environmental Planning Policy (SEPP) (Major Development) 2005 due to the CIV being in excess of \$5 million and the development being a listed category.

# Section 77A – Designated development

This section provides that 'designated development is development that is declared to be designated development by an environmental planning instrument or the regulations'

Relevant to the current proposal is Schedule 3 of the Environmental Planning and Assessment Regulation 2000, which identified those developments identified as designated development. Waste management facilities or work are identified as designated development in particular circumstances, however Part 2 of Schedule 3 provides detail on whether alterations and additions are to be considered designated development. Detailed consideration of the matters prescribed in Part 2 are provided at *Attachment 1* to this report, however in summary the current proposal is not identified as designated development.

# Section 79C(1)(a)(i) – Any Environmental Planning Instrument

# State Environmental Planning Policy (Western Sydney Employment Area) 2009

### (i) Permissibility

The subject site is predominantly zoned E2 'Environmental Conservation' with a smaller portion being zoned IN1 'General Industrial' under the provisions of State Environmental Planning Policy (Western Sydney Employment Area) 2009 (WSEA SEPP). The development proposal is predominantly located within the IN1 zoned portion of the site, however the vehicle manoeuvring and access/egress is located within the E2 zone as depicted by **Figure 2**. The proposal is not identified as being permissible with consent in either the E2 or IN1 zone under the WSEA SEPP. There are no further enabling provisions contained within the WSEA SEPP, however as will be discussed further in this report the proposal is permissible with consent in the IN1 zoned land by virtue of State Environmental Planning Policy (Infrastructure) 2007 and in the E2 zoned land under the existing use rights provisions contained within Section 108(1)(c) of the Environmental Planning and Assessment Act 1979.



Figure 2: Zoning Extract (Penrith City Council 2011)

# (ii) Objectives of the Zone

Clause 11(2) provides that a consent authority must have regard to the objectives of the zone in determining a development application. The objectives of the IN1 General Industrial zone are as follows:

- To facilitate a wide range of employment-generating development including industrial, manufacturing, warehousing, storage and research uses and ancillary office space.
- To encourage employment opportunities along motorway corridors, including the M7 and M4.
- To minimise any adverse effect of industry on other land uses.
- To facilitate road network links to the M7 and M4 Motorways.
- To encourage a high standard of development that does not prejudice the sustainability of other enterprises or the environment.

- To provide for small-scale local services such as commercial, retail and community facilities (including child care facilities) that service or support the needs of employment-generating uses in the zone.

The fifth objective is of most relevance, and the proposal is consistent with the objective in that the development minimises effects on other land uses in the vicinity of the site by reducing leachate levels and minimising opportunities for the off-site migration of leachate. In the absence of the current proposal it is likely that there will be adverse effects on adjoining land uses and also the environment. The proposal is not strictly consistent with the other specified objectives however given that the current operations on the site are nearing completion, and that the current proposal will contribute to the restoration and rehabilitation of the landfill operations, longer term the proposal will facilitate future development envisaged by the WSEA SEPP.

The objectives of the E2 Environmental Conservation zone are as follows:

- To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values.
- To prevent development that could destroy, damage or otherwise have an adverse effect on those values.

When comparing the aerial photograph and zoning map provided at Figures 1 and 2 it can be seen that the land on the subject site zoned E2 is currently disturbed with limited ecological, scientific, cultural or aesthetic values. The development involves works that will provide for the future restoration of the E2 zoned land and also ensure that the potential for environmental harm occurring is reduced by better managing leachate generated by the landfill.

# (iii) Relevant Instrument Provisions

# Clause 18 Requirement for development control plans

Chapter 6.10 of Penrith DCP 2006 contains an area specific development control plan in accordance with the provisions of this clause. Accordingly development consent is able to be issued in accordance with the provisions of this clause.

#### Clause 20 Ecologically sustainable development

This clause requires that a consent authority must not grant consent to development unless it is satisfied that the development contains measures designed to minimise:

- (a) the consumption of potable water, and
- (b) greenhouse gas emissions.

The proposal does not consume potable water supply in the treatment process and the proponent has outlined that the proposal will complement the recently approved landfill gas management system by reducing flooding or blockage of the system. This in turn enables enhanced gas collection which reduces odour generation and greenhouse gas emissions (such as methane). Therefore the provisions of this clause are satisfied.

#### Clause 21 Height of Buildings

This clause requires that a consent authority must not grant consent to development unless it is satisfied that:

(a) building heights will not adversely impact on the amenity of adjacent residential areas, and

### (b) site topography has been taken into consideration.

With regard to point (a) the maximum height of structures is approximately 6.5m and they are sufficiently removed (over 700m) from nearby residential areas to ensure that the amenity of these areas is maintained. In relation to point (b) the site topography is undulating and the nature of the proposal and a recent development on the site to the north has exacerbated the difference in levels between the sites by cutting in to the side of the landfill site and constructing a substantial retaining wall.

The area of the landfill site to be developed is relatively flat and involves minimal earthworks, however it is noted that there will be partial views from Erskine Park Road. This cannot be avoided due to the nature and layout of the current landfill operations however the proposal does provide for additional cut of the building area to locate the bund levels below the natural ground level which reduces the overall height of the structures. Given the context of the surrounding industrial area, which is dominated by substantial built structures that are considerably larger than the structures proposed, the bulk and scale of the current development is considered appropriate. To mitigate visual impact **condition 1.5** is recommended that requires the structures be treated to adopt earthy tones to partially blend into the landscape.

The proposal adequately addresses items (a) and (b).

### Clause 23 Development adjoining residential land

As the proposal is located over 700m from the nearest residential land the provisions of this clause (which relate to development within 250m of residential land) are not relevant to the current proposal.

Clause 29 Industrial Release Area—satisfactory arrangements for the provision of regional transport infrastructure and services

As the proposal is a continuance of an existing industrial land use the provisions of this clause are not relevant.

#### Clause 31 Design principles

This clause provides that a consent authority must consider whether or not:

- (a) the development is of a high quality design, and
- (b) a variety of materials and external finishes for the external facades are incorporated, and
- (c) high quality landscaping is provided, and

(d) the scale and character of the development is compatible with other employmentgenerating development in the precinct concerned.

In relation to these four (4) matters the design and visual presentation of the development proposal is largely constrained by virtue of its nature. In order for the leachate treatment system to operate effectively the proposed arrangement of the relevant treatment tanks and associated infrastructure is necessary. In this context the development is not of a high quality design, however it is also not a poor quality design. There is not a variety of material and external finishes due to the nature of the proposal and the ongoing landfill operations preclude the provision of high quality landscaping at this stage. The scale and character of the development is not directly comparable to other employment generating development in

the area due to its nature, however the overall scale is less than the vast majority of built forms in proximity to the site. For example the building to north has a façade length of approximately 200m x 80m with a height of approximately 9m which is larger and far more bulky than the current proposal. The partial enclosure associated with the chemical store area is  $30m \times 7m$  and is 6.5m in height.

Recommended **condition 1.5** is provided to mitigate the obtrusiveness of the cluster of structures as viewed from Erskine Park Road (although it should be noted that the prominent viewing angle is some 450m north of the proposed development location which mitigates the visual prominence of the proposal). Moreover there is substantial benefit in the development proceeding from an environmental perspective and in the longer term the landfill site will continue to be rehabilitated and the structures will be removed.

# State Environmental Planning Policy (Infrastructure) 2007

As mentioned previously in this report State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP) provides for the establishment of 'Waste or Resource Management Facilities' in particular circumstances. Clause 8(1) of the Infrastructure SEPP provides:

(1) Except as provided by subclause (2), if there is an inconsistency between this Policy and any other environmental planning instrument, whether made before or after the commencement of this Policy, this Policy prevails to the extent of the inconsistency.

Based on the above the provisions (and relevant to the current proposal) where the Infrastructure SEPP provides for additional land uses not identified in the WSEA SEPP, it will prevail over any prohibition contained within the WSEA SEPP. Relevant to the current proposal is *Division 23 Waste or resource management facilities*, which provides for the establishment of waste disposal facilities in areas zoned IN1, where waste disposal facilities are defined as:

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 of extractive material to generate a void for disposal of waste or to cover waste after its disposal.

Based on this the portion of the development contained within the IN1 zoned land is permissible with consent. The portion of the development contained within the E2 zoned land remains prohibited under this instrument, however as discussed in *Attachment 2* to this report it is permissible by virtue of Section 108(1)(c) of the Environmental Planning and Assessment Act 1979.

The proposal is consistent with the other relevant provisions of the Infrastructure SEPP.

# Sydney Regional Environmental Plan No. 20- Hawkesbury Nepean

Sydney Regional Environmental Plan No. 20 – Hawkesbury-Nepean River (No. 2 – 1997) (REP 20) integrates planning with catchment management to protect the Hawkesbury-Nepean river system, requiring the impact of future land use to be considered in a regional context. The plan covers water quality and quantity, environmentally sensitive areas, riverine scenic quality, agriculture and urban and rural-residential development. It controls development that has the potential to impact on the river environment. The plan applies to all parts of the catchment in the Sydney region (15 local government areas, including Penrith), except for land covered by Sydney Regional Environmental Plan No. 11 – Penrith Lakes Scheme. The REP is supported by an Action Plan, which includes actions necessary to improve existing conditions.

The development proposal has been assessed and found to be in accordance with the general planning considerations set out in Clause 5 of the REP and the relevant specific planning policies and related recommended strategies set out in Clause 6. In particular the management of leachate levels will avoid off-site migration through the landfill and as a consequence ensure that nearby creek systems are not contaminated.

# Section 79C(1)(a)(ii) – Any Draft Environmental Planning Instruments

There are no draft environmental planning instruments applicable to the land.

# Section 79C(1)(a)(iii) – Any Development Control Plan

### Penrith Development Control Plan 2006

The relevant sections of Penrith DCP 2006 are outlined below.

### 2.4 Erosion and Sediment Control

The applicant has outlined that the measures outlined in the 'Blue Book' (Managing Urban Stormwater: Soils and Construction) will be incorporated during construction. Recommended *condition 1.14* reinforces this.

### 2.7 Notification and Advertising

In accordance with the provisions of this section the application was notified to adjoining properties that were considered to be affected by the matters prescribed in section B3. The application was also advertised in the local paper placed on public exhibition from 1 March 2011 to 31 March 2011 as the proposal is identified as Integrated Development. No submissions were received in response.

# 6.10 Erskine Business Park

This section of Penrith DCP 2006 is most relevant to the development as it provides controls specific to the Erskine Business Park. The provisions of this section that are relevant to the proposal are discussed below.

#### 4. Site Development and Urban Design

#### 4.1 Height

The development proposal is located within the southern area of the Erskine Business Park with a prescribed maximum height of 15m. The maximum height of the proposal is approximately 6.5m which is well below the DCP provisions.

#### 4.2 Site Coverage

Site coverage is well below the prescribed 50%.

#### 4.3 Setbacks

Setbacks are in excess of the prescribed DCP provisions, with the setback to Erskine Park Road being approximately 400m.

#### 4.4 Urban Design

As discussed previously in this report the development proposal is an atypical built form within the Erskine Business Park. The proposal requires the specified arrangement in order to perform its function and it is considered that there would be no substantive benefit in housing the structures in a large shed structure. The structures are envisaged to be located

on the site for a period of 10 years, which in the context of the Erskine Business Park is relatively short to medium term.

Recommended *condition 1.5* requires the submission of external finishes and stipulates that the finishes are to facilitate a partial blending into the existing backdrop as viewed from Erskine Park Road.

#### 4.7 Fencing

Security fencing is proposed which is acceptable given the lack of direct street address and the substantial distance to Erskine Park Road. Recommended condition 1.6 requires such fencing to be powder coated in black.

### 4.9 Enviroguard Facility and Surrounding Land

This part of the DCP requires compliance with the requirements of the 2006 Biodiversity Management Plan and the Enviroguard Erskine Park Landfill Environment Management Plan for any development on the site. The proposal remains consistent with the latter document as it provides for the ongoing management of leachate generation that is identified as an area requiring monitoring under the Enviroguard Erskine Park Landfill Environmental Management Plan.

The current proposal does not prejudice the provisions contained within the 2006 Biodiversity Management Plan. Long term rehabilitation is anticipated for the site which will occur upon cessation of the landfill operations and once the relevant approvals are obtained.

#### 5. Environmental Quality

#### 5.1 Noise Pollution

An acoustic assessment was submitted as part of the application to determine what noise impacts would be generated by the proposal. The assessment established that under a worse case scenario, with all noise generating equipment operating, the development would not require any attenuation due to acoustic losses attributed to distance between the noise generators and noise receivers. The assessment, prepared by Renzo Tonin and Associates, concluded:

Noise impacts from the proposed treatment plant upon potentially affected receivers has been quantified and compared to the noise guidelines set by the NSW Office of Environment and Heritage for the operation of the site.

Operational noise from the site have been predicted to comply with the intrusiveness and amenity criteria stipulated in the NSW Industrial Noise Policy during the critical night time period and during all adverse weather conditions at the nearest affected receiver locations.

Based on this report the measures prescribed within this section of the DCP are satisfied.

#### 5.2 Waste Management

Adequate detail relating to both construction and operation has been submitted that is consistent with this section of the DCP. Recommended *condition 1.7* provides that the disposal of the sludge is to be at a facility that is lawfully able to accept the material and also requires the retention of waste receipts.

#### 5.6 Stormwater Pollution Control

The development is consistent with these provisions as bunding is provided to all areas that could be subject to spillages. In addition only clean and unpolluted water will be discharged from the site. Recommended *condition 1.24* provides that a stormwater pre-treatment device is to be installed.

### 5.9 Trading/Operating Hours of Premises

The proposal is outlined to operate on a 24 hour basis which is acceptable given the nature and necessity of the leachate treatment system. The proposal has also demonstrated that impacts arising from its operation are acceptable with reference to the 24 hour operation.

### 7. Transport and Carparking

### 7.2 Carparking

The monitoring systems are to be housed within existing buildings on the site and during operation there is no additional demand for carparking, with the existing arrangements satisfactory. During the sludge removal relevant authorised staff will be present to monitor the operation.

### 9. Landscaping

There are no additional landscape treatments proposed as part of the application. This in part stems from the longer term identification for the site as a biodiversity corridor and also due to the nature of operations on the site. The development application that was granted consent for the landfill operations indicated that the site would be rehabilitated to form a park, and any requirement for additional landscaping as part of the current proposal would be inappropriate in this context. Given the transient nature of the proposal, combined with the ongoing operations on the site, the lack of vegetation plantings is appropriate. In the long term the site will be rehabilitated and replanted, however the final detail will be subject to detailed planning and design in conjunction with relevant stakeholders.

# Section 79C(1)(a)(iiia) - The Provisions of any Planning Agreement

There are no planning agreements associated with the subject site.

# Section 79C(1)(a)(iv) - The Regulations

This section is not applicable for the subject application.

# Section 79C(1)(b) - The Likely Impacts of the Development

#### **Environmental Impacts**

The development will deliver substantial environmental benefits by reducing the levels of leachate within the landfill site. The current leachate levels are non-compliant with the existing Environment Protection License regulating the landfill operations and the current proposal will reduce the level of leachate below 30m AHD within approximately three (3) years. This will minimise opportunity for the off site migration of the leachate and reduce the potential for environmental harm to occur. The proposal is one (1) element that will contribute to the rehabilitation of the site in the future and will complement the recently approved gas management system by improving the efficiency of the gas collection measures.

#### Noise

As has been discussed previously in this report an acoustic assessment was conducted to determine what impact the proposal would have on noise receivers. The assessment was carried out in accordance with the NSW Industrial Noise Policy and found that the equipment would not impact on nearby receivers due to acoustic losses derived from the separation of

the noise generating equipment and noise receivers. This was found to be the case during the daytime and evening periods as well as during adverse weather conditions (temperature inversions). No attenuation measures are necessary.

### Access, Transport and Traffic

Vehicular access to the leachate treatment facility will be from the existing Quarry Road access as well as via a right of carriageway over the adjoining property to the north which provides a legal means of access to Erskine Park Road. It is anticipated that during operation approximately two (2) articulated vehicles will access the site to pump out the residual sludge waste. These vehicles will utilise the Erskine Park Road access point and the four (4) additional traffic movements will not adversely impact the surrounding road network. The proponent has outlined that the road pavement on the right of carriageway will be upgraded as required to accommodate these vehicular movements.

### **Context and Setting**

The proposal will be visible from Erskine Park Road for motorists travelling in a south easterly direction. The development will not substantially change the visual presentation of the site when the existing site conditions (i.e. landfill operations) and the substantial buffer distance (over 400m) is considered. Ultimately the site is earmarked for rehabilitation within the next decade that will see the existing structures on the site removed and substantial revegetation is to occur.

# Section 79C(1)(c) - The Suitability of the Site for the Development

The site attributes are conducive to the development proposal. The proposal has been designed in a manner consistent with the character of the locality, and the future character of the locality earmarked under the SEPP and DCP will not be prejudiced by the development.

# Section 79C(1)(d) – Any Submissions made in relation to the Development

# (i) Referrals

The application was referred to the following stakeholders and their comments have formed part of the assessment:

Referral Body	Comments Received
NSW Office of Environment and Heritage	General Terms of Approval issued.
Building Surveyor	No objections, subject to conditions
Environment Officer	No objections, subject to conditions
Development Engineer	No objections, subject to conditions

# (ii) Community Consultation

In accordance with Council's Notification DCP, the proposed development was notified to adjoining property owners, advertised in the local paper and placed on public exhibition from 1 March 2011 to 31 March 2011 as the proposal is identified as Integrated Development. No submissions were received in response.

# Section 79C(1)(e) - The Public Interest

The leachate treatment plant will contribute to the protection of the environment by reducing leachate levels to comply with the Environmental Protection License applying to the landfill operations. It will also improve the efficiency of the recently approved landfill gas management system on the site. On this basis it can be seen that the proposal is in the public interest to proceed.

# Section 91- Integrated Development

The development proposal is identified as integrated development under Section 91 of the Environmental Planning and Assessment Act 1979, as waste disposal operations are identified as a scheduled activity under Section 43(b) of the Protection of the Environment Operations Act 1997. Accordingly the application was referred to the NSW Office of Environment and Heritage for their concurrence. General Terms of Approval were received and the comments can be found in *Attachment 3*. The comments made by the Office indicating that there may be potential for odour emissions from the operation, and also outlined that the quantity of sludge generated and location of sludge disposal should be established. Advice on bunding design and construction was also provided in terms of a document published by the NSW Office of Environment and Heritage.

The proponent has outlined that during a pilot program odour was not identified as an issue, however there is potential for installation of odour scrubbers in circumstances where odour is identified as a concern. Recommended *condition 1.8* deals with this issue. Recommended *condition 1.7* provides that the disposal of the sludge is to be at a facility that is lawfully able to accept the waste and the proponent has outlined that up to two (2) tankers in the 20kl size range will access the site on a daily basis to dispose of waste sludge. In addition recommended *condition 1.9* requires that the final bunding design is to incorporate the provisions of AS3600 and the Office of Environment and Heritage's document entitled 'Storing and Handling Liquids'.

# Section 94 Contributions

There are no Section 94 contributions associated with the current proposal as the landfill site is identified as a future biodiversity corridor and as such is excluded from the calculation of net developable area.

# Conclusion

The proposed development has been assessed against the relevant heads of consideration contained in Section 79C of the *Environmental Planning and Assessment Act 1979* and has been found to be satisfactory. The installation and operation of the leachate treatment plant is a critical piece of infrastructure in ensuring that the environmental impacts of the landfill operations are appropriately mitigated in order to safeguard surrounding development and the environment. It is therefore in the public interest for the development to proceed and as such the proposal is recommended for approval, subject to the imposition of conditions.

# Recommendations

That:

- 1. The Development Application for a Leachate Treatment Plant at Lot 4 DP 1094504, No 50A Quarry Road, ERSKINE PARK NSW be approved subject to the following conditions:
- 1.2 The development must be implemented substantially in accordance with the following plans/documents:

- Statement of Environmental Effects prepared by Enviroguard Pty Ltd and dated October 2010;
- Plan set entitled 'Erskine Park Leachate Treatment Plant' numbered:
  - 10265-GA-3.00 Rev 1, drawn by Henry and Hymas and dated August 2010;
  - 10265-GA-3.01 Rev 1, drawn by Henry and Hymas and dated August 2010;
  - 10265-DA-C100 Rev 1, drawn by Henry and Hymas and dated September 2010;
  - 10265-DA-C200 Rev 1, drawn by Henry and Hymas and dated September 2010;
  - 10265-DA-C101 Rev 1, drawn by Henry and Hymas and dated September 2010;
  - 10265-DA-SE01 Rev 1, drawn by Henry and Hymas and dated September 2010
  - 10265-DA-SE02 Rev 1, drawn by Henry and Hymas and dated September 2010;
  - 10265-GA-2.00 Rev 1, drawn by Henry and Hymas and dated August 2010;
  - 10265-GA-1.00 Rev 2, drawn by Henry and Hymas and dated August 2010;
  - 10265-GA-2.01 Rev 1, drawn by Henry and Hymas and dated August 2010;

and any supporting information received with the application, except as may be amended in red on the attached plans and by the following conditions.

- 1.3 The development shall not be used or occupied until an Occupation Certificate has been issued. The final Occupation Certificate shall not be issued until all conditions of consent, except those relating to ongoing operational matters, have been completed.
- 1.4 Works on the development shall not commence until:
  - A Construction Certificate has been issued,
  - A Principal Certifying Authority has been appointed for the project, and
  - Any other matters prescribed in the development consent for the subdivision and the Environmental Planning and Assessment Act and Regulation have been complied with.

A Notice of Commencement is to be submitted to Penrith City Council two (2) days prior to commencement of engineering works or clearing associated with the subdivision.

1.5 Prior to the issue of a Construction Certificate a schedule of external finishes is to be submitted to the Principal Certifying Authority. In this regard the external finishes are to be dull and non-reflective and are to adopt earthy tones that will blend the structures into the background as viewed from Erskine Park Road.

- 1.6 Any fencing that can be viewed from Erskine Park Road is to be powder coated (or similarly treated) black.
- 1.7 The sludge generated in the treatment process is to be disposed of at a facility that is lawfully able to accept the waste. Documentation is to be obtained and retained as evidence of the disposal location.
- 1.8 The development is not to cause offensive odour and is to comply with the relevant conditions specified in the Environmental Protection License issued for the landfill operations. In the event that odour is identified by ongoing monitoring (or other means) as an issue requiring rectification, measures are to be put in place to mitigate odour.
- 1.9 Final bunding design is to comply with the provisions of AS3600 and is to incorporate the matters listed within the Office of Environment and Heritage's document entitled 'Storing and Handling Liquids', where relevant.
- 1.10 A plan detailing spill prevention, contingency and emergency clean-up procedures for the development shall be submitted for approval **prior to construction works commencing**. The approved procedures plan shall be implemented in the event of a spill or emergency.
- 1.11 Noise levels from the operation of the treatment plant are not to exceed the relevant noise criteria detailed in the Environmental Noise Assessment prepared by Renzo Tonin and Associates, dated 18 May 2011, and those specified in the Environmental Protection License regulating the landfill operations.
- 1.12 Stamped plans, specifications, a copy of the development consent, the Construction Certificate and any other Certificates to be relied upon shall be available on site at all times during construction.

The following details are to be displayed in a maximum of 2 signs to be erected on the site:

- the name of the Principal Certifying Authority, their address and telephone number,
- the name of the person in charge of the work site and telephone number at which that person may be contacted during work hours,
- that unauthorised entry to the work site is prohibited,
- the designated waste storage area must be covered when the site is unattended, and
- all sediment and erosion control measures shall be fully maintained until completion of the construction phase.

Signage but no more than 2 signs stating the above details is to be erected:

- at the commencement of, and for the full length of the, construction works onsite, and
- in a prominent position on the work site and in a manner that can be easily read by pedestrian traffic.

All construction signage is to be removed when the Occupation Certificate has been issued for the development.

- 1.13 Construction works that are carried out in accordance with an approved consent that involve the use of heavy vehicles, heavy machinery and other equipment likely to cause offence to adjoining properties shall be restricted to the following hours in accordance with the NSW Environment Protection Authority Noise Control Guidelines:
  - Mondays to Fridays, 7am to 6pm
  - Saturdays, 7am to 1pm (if inaudible on neighbouring residential premises), otherwise 8am to 1pm
  - No work is permitted on Sundays and Public Holidays.

Other construction works that do not involve the use of equipment that emits offensive noise are not restricted to the construction hours stated above.

The provisions of the Protection of the Environment Operations Act, 1997 in regulating offensive noise also apply to all construction works.

1.14 Any Construction Certificate issued by the Principal Certifying Authority or Certifying Authority shall incorporate plans and details for erosion and sediment control in accordance with the Department of Housing's "Managing Urban Stormwater: Soils and Construction" 2004.

Prior to the commencement of works on site, including approved clearing of site vegetation, erosion and sediment control measures shall be installed. The erosion and sediment control measures are to be installed in accordance with the approved erosion and sediment control plan(s) for the development and the Department of Housing's "Managing Urban Stormwater: Soils and Construction" 2004.

Erosion and sediment control measures shall remain in place and be maintained until all disturbed areas have been rehabilitated and stabilised.

- 1.15 All land that has been disturbed by earthworks is to be spraygrassed or similarly treated to establish a grass cover.
- 1.16 No fill material shall be imported to the site until such time as a Validation Certificate (with a copy of any report forming the basis for the validation) for the fill material has been submitted to Council. The Validation Certificate shall:
  - state the legal property description of the fill material source site,
  - be prepared by an appropriately qualified person (as defined in Penrith Contaminated Land Development Control Plan) with consideration of all relevant guidelines (e.g. EPA, ANZECC, NH&MRC), standards, planning instruments and legislation,
  - clearly indicate the legal property description of the fill material source site,
  - provide details of the volume of fill material to be used in the filling operations,
  - provide a classification of the fill material to be imported to the site in accordance with the Environment Protection Authority's "Environmental Guidelines: Assessment, Classification & Management of Non-Liquid Wastes" 1997, and
  - (based on the fill classification) determine whether the fill material is suitable for its intended purpose and land use and whether the fill material will or will not pose an unacceptable risk to human health or the environment.
- 1.17 Dust suppression techniques are to be employed during construction to reduce any potential nuisances to surrounding properties.

- 1.18 Mud and soil from vehicular movements to and from the site must not be deposited on the road.
- 1.19 Prior to the issue of a Construction Certificate, the following service authority clearances shall be obtained and submitted to the Principal Certifying Authority:
  - Section 73 Compliance Certificate under the Sydney Water Act 1994, and
  - Notification of Arrangement from Integral Energy; and
- 1.20 All roadworks, drainage works and dedications, required to effect the consented development shall be undertaken at no cost to Penrith City Council.
- 1.21 All civil works shall be designed and constructed in accordance with Penrith City Council's Design and Construction Guidelines and Construction Specifications for Civil Works and applicable Australian Standards.
- 1.22 On-site detention shall be provided generally in accordance with the concept plan/s lodged for development approval, prepared by Henry and Hymas, reference number 10265\_DA\_C100- C200, revision 1, dated 8 October 2010.

The proposed development and stormwater drainage system shall be designed to ensure that stormwater runoff from upstream properties is conveyed through the site without adverse impact on the development or adjoining properties.

Engineering plans and supporting calculations for the on-site detention system are to be prepared by a suitably qualified person and shall accompany the application for a Construction Certificate.

**Prior to the issue of a Construction Certificate** the Certifying Authority shall ensure that the on-site detention system has been designed in accordance with Penrith City Council's Design Guidelines and Construction Specification for Civil Works.

- 1.23 Prior to the issue of a Construction Certificate the stormwater plan prepared by Henry and Hymas drawing number 10265-DA-C100 Rev.01 dated 8/10/10 shall be amended with regards to the Site Analysis information on the plan to state: "Proposed Controlled (PSD) 5 year ARI, tc=25min. Q= 39 l/s".
- 1.24 Stormwater runoff from parking, uncovered paved areas shall be directed to a stormwater pre-treatment system. The treatment devices shall be designed to remove expected pollutant loadings in accordance with the Department of Environment, Climate Change & Water's 'Managing Urban Stormwater Environmental Targets/ Treatment Techniques– October 2007' publications.

Any Construction Certificate issued by the Principal Certifying Authority or Certifying Authority shall incorporate:

- Specification & installation details of the stormwater pre-treatment system
- The approval of an operation and maintenance manual/ schedule for the proposed device

A copy of the approved operation and maintenance manual/ schedule shall be submitted to Penrith City Council with notification of the Construction Certificate issue.

- 1.25 **Prior to the issue of a Construction Certificate** the Certifying Authority shall ensure that vehicular access, circulation, manoeuvring, pedestrian and parking areas associated with the subject development are in accordance with AS 2890.1, AS2890.2, AS2890.6 and Penrith City Council's Development Control Plan.
- 1.26 Prior to the issue of an Occupation Certificate the Principal Certifying Authority shall ensure that the:
  - a) On-site detention system/s
  - b) Stormwater pre-treatment system/s
  - c) Overland flowpath works
  - d) Flood control works
  - Have been satisfactorily completed in accordance with the approved Construction Certificate and the requirements of this consent.
  - Have met the design intent with regard to any construction variations to the approved design.
  - Any remedial works required to been undertaken have been satisfactorily completed.

Details of the approved and constructed system/s shall be provided as part of the works-as-executed drawings.

- 1.27 Prior to the issue of an Occupation Certificate a restriction as to user and positive covenant relating to the:
  - a) On-site detention system/s
  - b) Stormwater pre-treatment system/s
  - c) Overland flowpath works
  - d) Flood control works

Shall be registered on the title of the property. The restriction as to user and positive covenant shall be in Penrith City Council's standard wording as detailed in Penrith City Council's Design and Construction Guidelines and Construction Specification for Civil Works.

# 1.28 Prior to the commencement of any earthworks, construction or demolition works on site, the proponent is to:

- a) employ a Principal Certifying Authority to oversee that the said works carried out on the site are in accordance with the development consent and related Construction Certificate issued for the approved development, and with the relevant provisions of the Environmental Planning and Assessment Act and accompanying Regulation, and
- b) submit a Notice of Commencement to Penrith City Council.

The Principal Certifying Authority shall submit to Council an "Appointment of Principal Certifying Authority" in accordance with Section 81A of the Environmental Planning and Assessment Act 1979.

#### Information to accompany the Notice of Commencement

Two (2) days before any earthworks or construction/demolition works are to commence on site (including the clearing site vegetation), the proponent shall submit a "Notice of Commencement" to Council in accordance with Section 81A of the Environmental Planning and Assessment Act 1979.

2. A copy of the decision be forwarded to the NSW Office of Environment and Heritage for their record.

# Attachment 1: Consideration of whether Development Application is 'Designated Development'

An extract of the relevant provisions of Schedule 3 of the Environmental Planning and Assessment Regulation 2000 is provided below.

### Part 2 Are alterations or additions designated development?

### 35 Is there a significant increase in the environmental impacts of the total development?

Development involving alterations or additions to development (whether existing or approved) is not designated development if, in the opinion of the consent authority, the alterations or additions do not significantly increase the environmental impacts of the total development (that is the development together with the additions or alterations) compared with the existing or approved development.

#### 36 Factors to be taken into consideration

In forming its opinion as to whether or not development is designated development, a consent authority is to consider:

(a) the impact of the existing development having regard to factors including:

(i) previous environmental management performance, including compliance with the conditions of any consents, licences, leases or authorisations by a public authority and compliance with any relevant codes of practice, and

- (ii) rehabilitation or restoration of any disturbed land, and
- (iii) the number and nature of all past changes and their cumulative effects, and

(b) the likely impact of the proposed alterations or additions having regard to factors including:

(i) the scale, character or nature of the proposal in relation to the development, and

(ii) the existing vegetation, air, noise and water quality, scenic character and special features of the land on which the development is or is to be carried out and the surrounding locality, and

(iii) the degree to which the potential environmental impacts can be predicted with adequate certainty, and

(iv) the capacity of the receiving environment to accommodate changes in environmental impacts, and

(c) any proposals:

(i) to mitigate the environmental impacts and manage any residual risk, and

(ii) to facilitate compliance with relevant standards, codes of practice or guidelines published by the Department or other public authorities.

Assessment of the application has determined that the proposal is not identified as designated development based on the factors for consideration listed above and the formation of the opinion that the development does not significantly increase the environmental impacts of the total development compared with the existing development. This stems largely from the fact that the proposal will reduce environmental impacts and bring the landfill operation into compliance with the existing license issued for the development.

# Attachment 2: Consideration of 'Existing Use Rights' for E2 Conservation Zone

### Definition

Section 106 of the Environmental Planning & Assessment Act 1979 defines an existing use as:

(a) the use of a building, work or land for a lawful purpose immediately before the coming into force of an environmental planning instrument which would, but for Division 4A of Part 3 or Division 4 of this Part, have the effect of prohibiting that use, and

(b) the use of a building, work or land:

(i) for which development consent was granted before the commencement of a provision of an environmental planning instrument having the effect of prohibiting the use, and

(ii) that has been carried out, within one year after the date on which that provision commenced, in accordance with the terms of the consent and to such an extent as to ensure (apart from that provision) that the development consent would not lapse.

The existing landfill operations located on the site were approved as part of development consent 163/92, which approved '*Rehabilitation of existing quarry through non-putrescible waste disposal*'. The use was permissible under the provisions of Interim Development Order No. 93.

The gazettal of State Environmental Planning Policy (Western Sydney Employment Area) 2009 prohibited waste management facilities on the site, however in accordance with Clause (b)(i) & (b)(ii), the proposal was granted development consent prior to the gazettal of the WSEA SEPP, and the proposal was carried out prior to one year after the date on which that provision commenced (the gazettal of the WSEA SEPP being 21/8/2009) to an extent that ensures that the existing development consent has not lapsed.

The application, and information regarding operations on the site, has demonstrated that the proposal enjoys existing use rights, as it satisfies Clause (a) and (b)(i)(ii) of the Environmental Planning & Assessment Act 1979.

#### Intensification

Section 41 of the Environmental Planning & Assessment Regulation 2000 outlines in relation to existing uses:

- (1) An existing use may, subject to this Division:
- (a) be enlarged, expanded or intensified, or
- (b) be altered or extended, or
- (c) be rebuilt, or

(d) be changed to another use, but only if that other use is a use that may be carried out with or without development consent under the Act, or

(e) if it is a commercial use—be changed to another commercial use (including a commercial use that would otherwise be prohibited under the Act), or

(f) if it is a light industrial use—be changed to another light industrial use or a commercial use (including a light industrial use or commercial use that would otherwise be prohibited under the Act).

The proposal is most appropriately defined as being 'altered or extended'. Section 43 of the Regulations outlines:

(1) Development consent is required for any alteration or extension of a building or work used for an existing use.

#### (2) The alteration or extension:

(a) must be for the existing use of the building or work and for no other use, and

(b) must be erected or carried out only on the land on which the building or work was erected or carried out immediately before the relevant date.

The proposal satisfies Clause 2(a) as it is directly associated with the landfill operations and has come about as a direct result of the ongoing operations of the landfill site (in terms of compliance with the EPA license) which does not alter the existing use of the premises as a landfill operation as per the provisions of development consent 163/92. The proposal also satisfies Clause 2(b) as it will be carried out only on the land to which the existing use was carried out.

The application has demonstrated that the works carried out in the E2 land benefit from existing use rights and the proposal is permissible with the consent of Council.

#### **Attachment 3: General Terms of Approval**



Environment, Climate Change & Water

> Our reference: DOC11/16128 Contact: Deanno Pitts (02) 9995 5739

Mr Jonathon Wood Environmental Planner Penrith City Council PO Box 60 PENRITH NSW 2751

#### EMAIL & STANDARD POST

Dear Mr Wood

#### Integrated Development Application – Leachate Treatment Plant – Erskine Park Landfill Lot 4 DP 1094504, 50 Quarry Rd Erskine Park NSW – DA11/0063

I refer to your letter dated 28 February 2011 and received by the Department of Environment, Climate Change and Water ("DECCW") on 4 March 2011 requesting general terms of approval in relation to the attached development application DA11/0063 lodged by Enviroguard Pty Ltd for the construction of a leachate treatment plant ("LTP") at Erskine Park Landfill, Quarry Rd, Erskine Park ("the Premises").

DECCW has reviewed the DA and the attached Statement of Environmental Effects ("SEE") dated January 2011 prepared by Transpacific Cleanaway trading as Enviroguard Pty Ltd. Accordingly, DECCW provides the following general terms of approval and comments to assist Penrith City Council in determining the application:

#### Odour

The SEE states that the LTP will, "include processes and control systems to ensure that the leachate is treated and minimise the emission of odours". Given the potential risk for odour generation from the LTP, DECCW suggests that the Applicant be required to provide a detailed description of the processes and controls that will minimise the emission of odours.

The SEE also states that sludge will be removed daily from the LTP. DECCW is concerned about the potential risk of fugitive odour emissions during this process. DECCW suggests that the Applicant be required to provide additional information on how fugitive odours will be managed from the LTP, particularly relating to the removal and transport of sludge.

The SEE states that the LTP will undergo regular routine maintenance, as well as major maintenance activities for longer intervals as needed. DECCW is concerned about the potential risk of odour emissions during maintenance activities, particularly if this includes a major equipment overhaul. DECCW suggests that the Applicant be required to provide additional information on how odours will be managed from the LTP during routine and major maintenance activities.

Noise

DECCW notes that the environment protection licence no. 4865 issued to Enviroguard Pty Ltd for scheduled activities at the Premises currently contains Noise Limits as listed under conditions L6.1,

> PO Cox A290 Sydney South NSW 1232 59-61 Coulburn SI Sydney NSW 2000 Tel: (02/ 9095 6000 Fax: 6/25 905 6999 TTY (02) 8211 4725 ABN 30 841 367 271 www.anvionmen.lasw.gov.au

L6.2 and L6.3. DECCW advises that the Applicant should be required to comply with these noise limits during construction and operation of the LTP. DECCW will regulate noise issues through the licence. The Noise Limits currently on the environment protection licence are below:

#### Condition 6.1

Noise generated from the premises must not exceed the noise limits presented in the table below.

	Day
Location	LA <sub>eq</sub> (15 minutes)
Mamre Road Residence	45
Erskine Park Road Residence	54

"As identified in section 7.8 of volume 1 of the document tilled "Environmental Impact Statement – Enviroguard – Erskine Park Landil" – Revised Final Profile – National Environmental Consulting Services" and dated 17 October 2005."

Note: the noise limits represent the noise contribution from the landfill site for the modifications to the final profile.

#### Condition 6.2

Noise from the premises is to be measured at the most affected point on or within the residential property boundary or, if that is more than 30 metres from the residence, at the most-affected point within 30 metres of the residence to determine compliance with condition L6.1.

#### Condition 6.3

The noise emission limits identified in condition L6.1 apply under meteorological conditions of:

- Wind speed up to 3m/s at 10 metres above ground level; or
- Temperature inversion conditions of up to 3<sup>5</sup>C/100m and wind speed up to 2m/s at 10 metres above the ground.

#### Other

DECCW suggests that the Applicant be required to provide additional information on the following:

- The quantity of sludge that will be removed from the LTP on a daily basis.
- The proposed disposal location (name of company, address and environment protection licence number if applicable) for the LTP cludge.

The SEE refers to Australian Standard AS3600: Concrete Structures to determine requirements for bunding associated with the LTP. DECCW suggests that the Applicant also refer to DECCW's guidelines, "Storing and Handling Liquids", which contains additional information about DECCW's bunding requirements. The Guidelines can be found on DECCW's website at:

http://www.environment.nsw.gov.au/resources/sustainbus/2007210liquidsManual.pdf

DECCW advises that the cheque for \$250 provided with the integrated development application has been processed and a receipt will be provided to the Applicant in due course.

DECCW requests that Penrith City Council forward a copy of the development consent when it has been finalised to Manager Waste Operations, PO Box A290, Sydney South NSW 1232.

If you have any questions in relation to this letter, please do not hesitate to contact Deanne Pitts on (02) 9995 5739.

Yours sincerely

ww 30/3/11

JULIE CURREY Unit Head Waste Operations Environment Protection and Regulation