

2016

ANNUAL ENVIRONMENT REVIEW

**Genesis Xero Waste Recycling & Landfilling Facility
(Off Honeycomb Drive, Eastern Creek)**

Annual Environment Review prepared by:

Genesis Xero Waste Recycling & Landfill Facility

Head Office Address:

84-88 Burrows Road, St Peters, NSW 2044

Proponent:

ThaQuarry Pty Ltd & ACN 114 842 453 Pty Ltd

In respect of:

Project Approval 06_0139 (as modified)

Project site & location:

Genesis Xero Waste Recycling and Landfill Facility (off Honeycomb Drive, Eastern Creek).

Lot & DP:

Lot1 in DP 1145808 and Pt 8 in DP 1200048

For and on behalf of ThaQuarry Pty Ltd and ACN 114 842 453 Pty Ltd, the undersigned certifies that the information contained within this report is neither false nor misleading.

First Draft

Approved:



Signed:

Date:

24/1/17

DRAFT

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Report Scope

This consolidated Annual Environmental Review (**AER**) has been prepared to satisfy the Project Approval Condition 3 (of Schedule 5) of MP 06_0139 (as modified) granted by the NSW Minister for Planning on 22 November 2009.

This will be the third Annual Environmental Review prepared for the Genesis Facility.

Condition 3 of Schedule 5 states:

By the end of December 2010, and annually thereafter, the Proponent shall review the environmental performance of the project to the satisfaction of the Director-General. This review must:

- a) *Describe the works that were carried out in the past year, and the works that are proposed to be carried out over the next year;*
- b) *Include a comprehensive review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the:*
 - *the relevant statutory requirements, limits or performance measures/criteria;*
 - *the monitoring results of previous years; and*
 - *the relevant prediction in the EA;*
- c) *Identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;*
- d) *Identify any trends in the monitoring data over the life of the project;*
- e) *Identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and*
- f) *Describe what measure will be implemented over the next year to improve the environmental performance of the project.*

The following Environmental Plans and Strategies are currently addressed and accessible via the Genesis website at <http://www.dadi.com.au>

Aboriginal Heritage
Transport and Traffic Code of Conduct
Green Waste Management
Air Quality Odour and Greenhouse Gas Management
Noise Monitoring Program
Landscape and Vegetation Management
Amenity Berms
Fencing and Security Management Plan
Pests Vermin and Weeds
Soil Water and Leachate Management
Conveyor and Chute
Leachate Collection Conveyance and Management System
Environment Waste Management Plan

This review is conducted by reference to each subject matter and the criteria required by Planning Condition 3.

In summary, the following activities were approved under Part 3A of the *Environmental Planning and Assessment Act 1979 (EP&A Act)*:

- capacity to receive up to two million tonnes of waste per annum, including inert and solid wastes from construction and demolition (C&D), commercial and industrial (C&I) waste streams complying with acceptable waste for general solid waste (non-putrescible) facilities, green waste clean ups, and metallurgical furnace slag and ash.

- on-site waste processing including sorting, screening, sieving, crushing, grinding, shredding and/or chipping, and composting of green waste;
- testing and on-site storage/stockpiling of finished recycled products prior to resale from stockpiles, predominantly to the building, construction and landscaping sectors and potentially the domestic market;
- quarantine and transfer of unacceptable wastes to an appropriate off-site facility for disposal;
- Segregated hardfill materials such as rock, sand soil, brick or concrete are also received at the Segregated Materials Area [SMA] within the Facility. These materials are crushed and screened for testing and sale for beneficial re-use;
- construction and operation of associated infrastructure, plant and equipment, including upgrade of the internal road network and reshaping of earthen amenity berms; and
- retention and conservation of a significant area on adjacent land beyond the north-west corner of the site, incorporating a remnant endangered ecological community (EEC) of Cumberland Plain Woodland (CPW).

Independent Environmental Audit

Schedule 5, Condition 7 of the Planning Approval Conditions is extracted below:

Within 6 months of the commencement of operation, and every 2 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:

- be conducted by a suitably qualified, experienced and independent team of experts (including an odour expert), whose appointment has been endorsed by the Director-General;*
 - include consultation with the relevant agencies;*
 - include a full odour audit of the project, taking into consideration the relevant technical guidelines and any odour complaints made since the previous audit;*
 - assess the environmental performance of the project and assess whether it is complying with the relevant requirements in this approval and any relevant EPL (including any assessment, plan or program required under these approvals);*
 - review the adequacy of strategies, plans or programs required under these approvals; and, if appropriate; and*
 - recommend measures or actions to improve the environmental performance of the project, and/or any assessment, plan or program required under these approvals.*
- Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Director-General.*

Cardno has been repeatedly engaged to undertake the Independent Environmental Audit to satisfy Schedule 5, Condition 7 of Project Approval 06_0139 (as modified). The initial audit was carried out on or about 7 December 2013.

The most recent independent environmental audit was initiated on or around April 2015. The findings and recommendations are contained in a report dated 21 August 2015 and an addendum dated 12 April 2016 (already provided to the Department and available online).

The Environmental Audit is designed to assess compliance with Project Approval 06_0139 (as modified), Environmental Protection Licences (EPL's) 20121 and 13426. The results of the supplementary audit process (which produced the addendum dated 12 April 2016) deemed that the Licensee was compliant with 93% of EPL 20121 and 96% of EPL 13426, 96% of the project consent conditions and 94% of the commitments made by the Environmental Assessment and 94% for the management plans.

The audit included:

- ☐ Consultation with relevant agencies;
- ☐ Desktop review of appropriate supporting documentation;
- ☐ A site inspection incorporating an audit of compliance with the relevant project approval and Environmental Protection Licence documentation;
- ☐ Follow up review of supplementary documentation;
- ☐ Follow up meeting to discuss draft audit findings and corrective actions taken with DADI; and
- ☐ Revision and issue of the audit.

The next Environmental Audit is due to take place in 2017.

Response to Audit Recommendations

Taking into account the initial and secondary phases of the 2015 Audit, the proponents was on average 94.6% compliant with all its Environmental Protection Licenses, Management Plans, Environmental Assessments, Statement of Commitments and Agency Consultation Requirements.

DADI has followed the recommendations made in the most recent audit report to ensure the Project maintains a continued high level of Environmental Performance. Works undertaken in accordance with the recommendation include:

1.) Bund surrounding leachate collection tanks – Condition O7.2 of License 20121 and Condition 06 0139 3.20 of the Project Consent & Bund surrounding chemical and oil storage area in the workshop – Condition O7.2 of License 20121

The licence relevant licence conditions are extracted below:

O7 Other operating conditions

Bunding Requirements

O7.1 Bunding must be maintained for the leachate storage tanks that:

- is impervious to the fluids contained; and
- has sufficient capacity to contain 110% of the of the largest vessel; and
- will contain all pressurised leaks or spills.

O7.2 The licensee shall store all chemicals, fuels and oils used on site in an appropriately designed impervious banded area that contains 110 percent of the largest container contained within the bund. These bunds shall be designed and installed in accordance with the requirements of all relevant Australian standards, and/or EPA's Environment Protection Manual Technical Bulletin Bunding and Spill Management.

The proponent was unable to locate any documentation to evidence that the bund surrounding each of the areas set out above were capable of containing 110% of the volume of the tanks/largest container within the bund in the event of a failure. It is also unclear whether the bunding would contain any pressurised leaks.

Action Taken by the proponent

The proponent engaged EnvironConsulting Services (ECS) to arrange, review and inspect specialist liquid proofing works conducted in two separate spill containment systems within Genesis landfill facility, known as Timber Leachate Containment Area (TLCA) and the Workshop Chemical and Oil Storage Area (WCOSA).

Based on the works & tests conducted, and independent certification given by a waterproofing specialist, ECS concluded that the bund areas, comply with the relevant licence conditions as extracted above.

2) Odour Management – Condition M7.2 of License 20121 and Condition M7.1 of License 13426

Condition M7.2 of License 20121 and condition M7.1 of License 13426 states that the proponent must provide an annual audit of the design, operation and odour management practices of the operation with the primary aim of identifying improvements that lead to attainment of best practice in regard to minimising odour emitted from the premises.

Action Taken by the proponent

An Odour assessment was performed in March 2016 by Stephenson Environmental. There were no recommendations suggested on the report, which indicates that current operations onsite are sufficient to minimise odour emissions.

The Odour management plan was updated in October 2016, incorporating minor changes to reflect the recommendations in the *Solid Landfill Guidelines 2016*.

3) Preventative measures undertaken to avoid potential pollution in an emergency – Condition E3.2 of License 13426

It had been suggested that it was unclear what preventative measures would be undertaken to avoid potential pollution in an emergency. Cardno suggested that the proponent have a procedure to prepare the site in the event of an impending or ongoing emergency (e.g. earthquake, storm, fire, flood) to prevent pollution.

Action Taken by the proponent

In March 2016, DADI revised its existing Pollution Incident Response Management Plan (PIRMP) to reflect Cardno's recommendations. In February 2016 DADI engaged with First 5 Emergency Consultants to revise the Emergency Evacuation Management Manual in accordance with Condition E3.2 of License 20121. The PIRMP and the Manual are made publically available on the DADI website.

4) Closure and rehabilitation plan – Condition 06 0139 4.2 of the Project Consent

The LEMP, Section 6.5 - Proposed Approach to Site Closure and Rehabilitation - sets out planning measures for site closure and rehabilitation. It has been deemed not clear if the LEMP has been submitted to the EPA or Council for consultation.

Action Taken by the proponent

The Proponent has received an opinion dated 16 February 2016 from an independent consultant (Consulting Earth Scientists) to the effect that given the potential for legislative changes in the intervening period before closure of the landfill and that current and proposed EPA guidelines require a Closure Plan to be prepared close to or on actual completion of a landfill's waste receipt Operations, it would be untimely and impracticable to prepare an adequate rehabilitation/Closure Plan for the site at the current time.

The proponent made the DOP aware of this outcome in its response to audit recommendations, submitted under cover email from Nadia Janisz dated 13 May 2016, however no response has been received from the DOP to date.

5) Develop an inventory of emissions to monitor greenhouse gas emissions of the project.

It is not clear whether an inventory of emissions has been developed.

Action Taken by the proponent

The emissions inventory relates to the landfill greenhouse gases being produced. Currently the Proponent monitors for methane, CO₂, Nitrogen, Oxygen, and H₂S. The monitoring records for these gases comprise the greenhouse gas emissions inventory for the site.

6) Prepare a groundwater monitoring report for submission to the EPA.

It is not clear if a groundwater monitoring report has been prepared since the monitoring was initiated.

Action Taken by the proponent

The Proponent engaged EnvironConsulting Services to prepare a groundwater monitoring report for submission to the EPA. A copy of this report is provided as Appendix 1.

Environmental Performance

Senior management conduct regular environmental inspections of the Facility.

These inspections are needed to determine, in conjunction with the routine environmental monitoring and incident/complaint reporting procedures, whether there is on-site compliance with the approved EMS. Any non-conformances are recorded on inspection forms and the cause of any non-conformances are investigated by the site operations manager.

Site Security & Signage

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| Salient Matters | Nil |
| Works that were carried out in the past year | Continued maintenance and repair of the site's fencing and lockable security gates for security and public safety |
| Works that are proposed to be carried out over the next year, | Continued maintenance and repair of the site's fencing for security and public safety. |
| Review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the relevant statutory requirements, limits or performance measures/criteria; <ul style="list-style-type: none">• the monitoring results of previous years;• the relevant predictions in the EA; | No Monitoring Applicable. Complaints Records: Nil. |
| Any non-compliance over the last year | Nil |
| Describe what actions were (or are being) taken to ensure compliance; | Continuation of active inspection, maintenance and upkeep. |
| Identify any trends in the monitoring data over the life of the project; | Not Applicable |
| Any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; | Not Applicable |
| Describe what measure will be implemented over the next year to improve the environmental performance of the project. | Not Applicable |


Amenity Berms

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| Salient Matters | Nil |
| Works that were carried out in the past year | <p>Preliminary Earthworks as part of development for construction of a pre-sort enclosure on the premises which will optimise recycling at the facility in accordance with Mod 5 dated 15 March 2016.</p> <p>Ongoing, inspections, maintenance and reshaping of the amenity berms has been required to maintain the required height of the berms, ensure stability of the berms and prevent damage from erosion.</p>  <p><i>Aerial photo identifying amenity berms</i></p> |
| Works that are proposed to be carried out over the next year, | <p>Continuing maintenance of amenity berms, with particular emphasis on reducing weeds and allowing native grasses and plants to grow, reducing erosion and increasing the stability of the berms, in line with the Landscape and Vegetation Management Plan.</p> <p>A proposed MOD 8 is expected to be submitted to DOP by the end of in early 2017, which will seek (inter alia) the relocation of the Western amenity berm closer to the proposed Archbold Rd, in accordance with a site boundary re-alignment.</p> |
| <p>Review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the relevant statutory requirements, limits or performance measures/criteria;</p> <ul style="list-style-type: none"> • the monitoring results of previous years; • the relevant predictions in the EA; | <p>No Monitoring Applicable.</p> <p>Complaints Records- Nil.</p> |
| Any non-compliance over the last year | Nil. |
| Describe what actions were (or are being) taken to ensure compliance; | Continuation of active inspection maintenance and upkeep of the berms ensuring height, shape and appropriate vegetation. |
| Identify any trends in the monitoring data over the life of the project; | Amenity berms continue to be effective in providing a visual screen around the site, noise attenuation |

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| | and a shield against airborne particulate generation. |
| Any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; | Nil. |
| Describe what measure will be implemented over the next year to improve the environmental performance of the project. | To improve the environmental performance of the project, particular emphasis will be placed on increasing weeding activities and where applicable planting on amenity berms, in line with Landscaping and Vegetation and Amenity Berms Management Plans. |

Odour Management

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| Salient Matters | Leachate Management. Green Waste Management. |
| Works that were carried out in the past year | <p>Installation of new, more efficient pumps (and aerators) in the leachate tanks which have increased leachate treatment efficiency and reduced foam generation.</p> <p>Ongoing maintenance and repair (as required) of the leachate tanks, to minimise odour generation.</p> <p>Implementation and update of the landfill gas management plan.</p> |
| Works that are proposed to be carried out over the next year, | Continued maintenance and repair of the leachate tanks to minimise odour generation. |
| <p>Review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the relevant statutory requirements, limits or performance measures/criteria;</p> <ul style="list-style-type: none"> the monitoring results of previous years; the relevant predictions in the EA; | <p>Monitoring Results</p> <p>Stephenson Environmental Management Australia (SEMA) conducted a boundary field odour assessment Survey at the Genesis Facility on 29 February 2016, SEMA concluded that based on the results of the odour assessment, the site was compliant with the EPA NSW Impact Assessment Criteria for boundary odour. The report confirmed that current work practices implemented by DADI minimise any adverse odour impact.</p> <p>The aerial photograph below shows various monitoring locations for The odour assessment conducted by SEMA</p> |

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| |  <p>Key:</p> <ul style="list-style-type: none"> █ Location of boundary FAOA monitoring ● Weighbridge ● MPC ● Hand unload ● Green and timber ● Product pickup ● Segregated waste ● Leachate Tanks ● Landfill <p>Complaints A telephone complaint was received by EPA on 24 August 2016 alleging that at approximately 10:30am there was a sewer like odour in Minchinbury. The Licence-holder investigated practices at the site and confirmed (to the EPA) that the offensive odour in the area did not originate from the Genesis facility. Enquiries were also made at a neighbouring site whether any odour had been detected, however the staff on site at the neighbouring property confirmed that there was no odour emanating from the Genesis site.</p> <p>A detailed register of complaints and subsequent investigation and action taken is maintained on the website.</p> |
| Any non-compliance over the last year | Nil |
| Describe what actions were (or are being) taken to ensure compliance; | Continuation of existing work practices within the site, including daily covering of the active tipping face, ensuring all green waste received at the MPC is unloaded and separated inside the building and promptly transported from site. Optimal operation of the leachate management system is also maintained, to minimise odour generation. |
| Identify any trends in the monitoring data over the life of the project; | The review of the Odour Assessment, odour monitoring results and complaint records over |

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| | the life of the project show that the Genesis Facility is complying with statutory requirements. |
| Any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; | <p>The actual odour impact of the project has been less than predicted as Genesis does not stockpile green waste (only wood waste). Approval was originally granted for this activity and it was predicted that this would cause significant odour, however as yet the proponent has decided not to undertake this activity onsite.</p> <p>All green waste is transported off site before degradation begins.</p> |
| Describe what measure will be implemented over the next year to improve the environmental performance of the project. | Continuation of all existing systems. |

Operating Hours & Noise

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| Salient Matters | Nil |
| Works that were carried out in the past year | Continued implementation of the Noise Monitoring Program, repair and maintenance of plant and equipment and amenity berms onsite to minimise noise generation. |
| Works that are proposed to be carried out over the next year, | <p>Continued implementation of the Noise Monitoring Program and maintenance and report of plant and equipment and amenity berms.</p> <p>A proposed MOD 6 has been submitted to the DOP to extend operating hours as follows:</p> <p>MPC- hours extended to 24 hours (Monday-Sunday) for receipt of materials, maintenance and operations.</p> <p>SMA- hours extended to 24 hours (Monday to Sunday) for receipt of materials and 6.00am to 6.00pm (Monday to Sunday) for crushing and screening.</p> <p>Landfill- hours extended to 24 hours for maintenance 5am to 9pm Monday to Sunday) for receipt of materials (excluding the chute), and 5am to midnight (Monday to Sunday) for operations.</p> <p>SEARs have been issued for this proposed modification and the proponent has engaged Consulting Earth Scientists Pty Ltd to undertake the requisite environmental testing/modelling.</p> <p>Proposed MODs 7 & 8 may also require some additional noise monitoring.</p> |

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| <p>Review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the relevant statutory requirements, limits or performance measures/criteria;</p> <ul style="list-style-type: none"> • the monitoring results of previous years; • the relevant predictions in the EA; | <p>Monitoring Results</p> <p>Consulting Earth Scientists Pty Ltd (CES) conducted noise compliance assessments for the Genesis Facility in September 2016 the results of the noise monitoring investigation at monitoring locations A1 and A2 indicated that background noise environment in the vicinity of the facility was dominated by road traffic noise from the M4, with no audible noise being generated from the Genesis Landfill and Recycling Centre.</p> <p>Complaints Records</p> <p>Nil.</p> |
| Any non-compliance over the last year | Nil |
| Describe what actions were (or are being) taken to ensure compliance; | <p>Continuation of existing work practices including Noise Monitoring Programs carried out by a qualified Environmental Consultant.</p> <p>All on-site operating plant machinery is well maintained and noise muffled; no rock breaking to occur except at lower levels on the site or behind earthen bunds to act as noise baffles, monitoring and mitigating noisy behaviours of trucks entering the premises.</p> |
| Identify any trends in the monitoring data over the life of the project; | The continued review of noise monitoring results over the life of the project, and the lack of noise complaints since construction of the project concluded and partial operations commenced in 2012, show that the Genesis Facility continues to comply with statutory requirements and EPL noise limits. |
| Any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; | <p>The predicted noise modelling undertaken in the Environmental Assessment by ERM showed that the cumulative industrial noise impacts were predicted to be negligible, with noise levels remaining below the amenity noise goals during all modelled weather conditions.</p> <p>The NSW Department of Planning approved extended operating hours for the MPC in December 2013 and there have been no identified additional noise impacts from this change.</p> |
| Describe what measure will be implemented over the next year to improve the environmental performance of the project. | Continuation of all existing systems. |

Air Quality

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| Salient Matters | Dust Deposition Landfill gas |
| Works that were carried out in the past year | Dust Deposition Dust deposition monitoring gauges maintained at the positions shown in the Air Quality Management Plan. A Dustrak live realtime |

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| | <p>monitor is located at 93 Minchin Drive, Minchinbury. Both of these systems are monitored by qualified, independent environmental consultants with remote warning systems in the case of exceedance recorded by the Dustrak monitor.</p> <p>Ongoing maintenance and repair to paved roads to ensure good quality surfaces which minimise airborne particulates.</p> <p>Maintenance and repair of water sprays and sprinklers throughout the facility and on facility paved roads to minimise airborne particulates.</p> <p>A new Beta Attenuation Monitor (BAM) was purchased and installed by the proponent as a replacement of the BAM initially installed in a neighbouring property in Minchinbury. The unit was replaced to ensure compliance as the old unit was presenting regular faults.</p> <p>Landfill Gas</p> <p>Update and continued operation of the landfill gas monitoring program with monthly surface and accumulated gas monitoring undertaken by EnvironConsulting Services and quarterly sub-surface landfill gas monitoring undertaken by qualified consultants.</p> <p>Regularly update the relevant greenhouse gas emission inventory for the site.</p> |
| Works that are proposed to be carried out over the next year, | <p>Continuous review of Dustrak monitoring technology to ensure optimum monitoring and compliance with relevant standards of air quality.</p> <p>Continued implementation of the Landfill Gas Monitoring program and regular updating of gas emissions data.</p> |
| <p>Review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the relevant statutory requirements, limits or performance measures/criteria;</p> <ul style="list-style-type: none"> • the monitoring results of previous years; • the relevant predictions in the EA; | <p>Monitoring Results</p> <p>Dust Deposition</p> <p>Dust monitoring was undertaken monthly by Pacific Environment Pty Ltd from January to September 2016 and from October 2016 onwards the monitoring was undertaken by Thomson Environmental. Despite Genesis recording high deposited dust levels for one month in 2016 (February) the EPL annual average limit of 4 g/m²/month was not exceeded, as mitigation measures were put in place and have continued to be effective.</p> <p>There were no occasions where the 24-hour average PM₁₀ concentration was above the impact assessment criteria of 50 µg/m³.</p> <p>2015-2016 results were below the EPL average limit of 4g/m²/month.</p> <p>Landfill Gas</p> <p>Landfill Gas (LFG) Monitoring program was created and submitted to the EPA on 16 May 2016.</p> |

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| | <p>Continued engagement of environmental monitoring experts to conduct regular landfill gas monitoring.</p> <p>In 2016 it was found that all landfill gas concentrations were below the target thresholds described in the Landfill Gas Management Plan for the surface, sub surface and accumulation LFG monitoring.</p> <p>There were no exceedances of the defined trigger concentration detectable in any boreholes.</p> <p>Landfill gas monitoring found that results did not exceed the thresholds specified in the Landfill Gas Monitoring Plan, during the monthly surface and accumulated gas monitoring and quarterly sub-surface landfill gas monitoring.</p> <p>Complaint Records. Nil.</p> |
| Any non-compliance over the last year | Nil |
| Describe what actions were (or are being) taken to ensure compliance; | <p>Maintenance of stockpile heights within the SMA to remain below the height of the amenity berms.</p> <p>Continuous enhancement of automated water sprays and sprinklers in the SMA and on facility paved roads to minimise airborne particulates.</p> <p>Continuation of dust suppression measures including wetting down stock piles, ensuring trucks cover their loads, limiting the speed of vehicles on site and requiring all trucks leaving the site to pass through a truck wheel wash before returning to sealed roads within the Facility.</p> <p>Within the MPC there has been a continuous improvement program to enhance air quality within the building. This is a necessary requirement for optimum workplace health and safety. It has involved the identification of individual and specific dust generating points from the recycling plant with enclosure of same and extraction points before the airborne particulates become unmanageable within the building.</p> <p>Continued compliance with all air quality monitoring requirements.</p> |
| Identify any trends in the monitoring data over the life of the project; | <p>Dust Deposition</p> <p>24-hour averaging and annual averaging PM10 deposition monitored at a nearby residential receptor generally decreased in 2014 and have consistently remained under the threshold during the following years.</p> <p>Dust deposition monitored at the gauges along the site boundary have also been relatively stable</p> |

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| | <p>below the 4 g/m²/month limit across the life of the project, with the two spikes in 2015 and one spike in 2016 not having a significant impact on the annual average.</p> <p>Landfill Gas</p> <p>Landfill gas monitoring completed in 2016 has found that methane concentration is below the target thresholds described in the Landfill Management Plan, with 0% v/v methane found in the sub-surface and accumulated gas monitoring locations. Tests undertaken by Pacific Environment Ltd and ECS found that concentrations of methane recorded over the landfill surface were all below the thresholds established on the LFGMP during the monitoring events conducted monthly and reported quarterly during 2016.</p> |
| Any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; | The use of a chute from the MPC to the landfill has reduced the number of trucks using the partially unpaved road down to and up from the landfill, and continues to reduce predicted dust generation levels on site. |
| Describe what measure will be implemented over the next year to improve the environmental performance of the project. | Continuation of all existing systems on site and air quality monitoring. |

Stormwater Quality

| Salient Matters | Landfill fill rate |
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| Works that were carried out in the past year | <p>Inspection, maintenance and repair of draining system, hardstand areas, GPT's roads and detention dams, to ensure continued segregation of 'clean' and 'dirty' water, sediment control and water quality.</p> <p>Landfilling is continuing to take place in accordance with the Landfill Environment Management Plan. Because of the inverted conical shape of the quarry, progressively the same incoming quantity of landfill material could be expected to spread and filled over a larger and larger surface area. The result is that the fill rate per year slows for the same given quantity of waste. In turn this prolongs the useable life of the stormwater collection pond and the time required before each replacement becomes longer.</p> <p>A site water balance was carried out by Consulting Earth Scientists Pty Ltd, this is discussed in the leachate section below.</p> |

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| Works that are proposed to be carried out over the next year, | <p>Continued inspection, maintenance and repair of drainage system, hardstand areas, roads and detention dams.</p> <p>A proposed MOD 8 will be submitted in early 2017, which will include a revised Stormwater Management Plan which will be developed in conjunction with Blacktown City Council.</p> |
| <p>Review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the relevant statutory requirements, limits or performance measures/criteria;</p> <ul style="list-style-type: none"> • the monitoring results of previous years; • the relevant predictions in the EA; | <p>Monitoring Results</p> <p>Water quality monitoring at the two stormwater retention dams on site (EPA monitoring points 2 & 3) was conducted quarterly by EnvironConsulting Services in 2016. A review of the monitoring results found that:</p> <ul style="list-style-type: none"> • Ammonia levels have increased slightly during the third quarter of 2016, however on the last monitoring round conducted in November 2016 the concentrations of ammonia have returned to their background levels from previous years. • pH levels slightly increased from below 8.5 in previous years, to above 8.5 in 2016. • Total suspended solids results greatly improved to below 10 mg/L in 2016. • Heavy metal concentrations have remained with low concentrations in 2016. <p>The northwest dam discharged due to overflow twice in June and July 2016. The discharged events are attributed to torrential rain in those months. Laboratory analysis of contaminants of potential concern as set out by the EPA on license 13426 returned concentrations below the threshold criteria for the set contaminants.</p> <p>Complaints records</p> <p>Nil</p> |
| Any non-compliance over the last year | <p>The Licensee remains compliant with its existing licence conditions.</p> <p>We note that the EPA has recently suggested that it wishes to increase testing requirements for the stormwater in the retention dams, however no variation to the Licence has been implemented.</p> |
| Describe what actions were (or are being) taken to ensure compliance; | <p>Site area separation and gradation to separate 'clean' and 'dirty' water.</p> <p>Maintenance of site drainage gross pollutant sumps and traps to reduce sediment levels and pollution of stormwater.</p> <p>Maintenance of roads to reduce erosion and sedimentation.</p> <p>Protection of stormwater drains</p> <p>Daily litter collection and sweeping of paved roads.</p> <p>Regular inspection of surface water infrastructure and during storm events.</p> |
| Identify any trends in the monitoring data over the life of the project; | <p>Water quality of stormwater in the retention dams has remained at a high enough level over the life</p> |

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| | <p>of the project to be reused onsite. It has been noted that during the month of November 2016 the water stored on the dams was insufficient to supply the demand for the site needs, therefore town water was used.</p> <p>In extraordinary rain events, whilst the Suspended Solid rate of stormwater discharge tends to increase, the volume of water relative to the SS rate is generally considered acceptable.</p> |
| Any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; | <p>Increasing levels of water reuse onsite for dust suppression and other activities has reduced dam overflow events to 2 in 2016, minimising any potential impact on surrounding waterways.</p> <p>This indicated a need to revise the Site Water Balance to reflect the changing water storage capacity and uses on the site.</p> <p>In November 2016 DADI engaged Consulting Earth Scientists to revise the Site Water Balance to align current water usage at the site and identify additional measures for water capture and water use minimisation in accordance with Condition 22, Schedule 3.</p> <p>The Report amongst other features identified the source of all water collected or stored on the site, including rainfall, stormwater and groundwater and its use on site.</p> |
| Describe what measure will be implemented over the next year to improve the environmental performance of the project. | Continuation of all existing monitoring and safety systems. |

Landfill and Chute

Salient Matters:

- Northern Slip stability works
- Groundwater monitoring
- Leachate Collection
- Chute Maintenance and reduction

| Salient Matter | Northern Slip stability works |
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| Works that were carried out in the past year | Nil, regular inspections undertaken to ensure no further works are required. |
| Works that are proposed to be carried out over the next year, | Continuation of daily inspections to identify the potential for any slippages. No further works are anticipated at this stage, but it will be subject to the outcomes of the daily monitoring. |
| Review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the relevant statutory requirements, limits or performance measures/criteria; <ul style="list-style-type: none"> • the monitoring results of previous years; • the relevant predictions in the EA; | <p>No further slippages have so far been identified.</p> <p>Complaints Register Nil</p> |
| Any non-compliance over the last year | Nil. |

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| Describe what actions were (or are being) taken to ensure compliance; | Continuation of daily inspections and training of quarry staff to ensure safety awareness of potential slip area. |
| Identify any trends in the monitoring data over the life of the project; | No further slippages have so far been identified since stabilisation works were completed in 2013. |
| Any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; | Not Applicable. |
| Describe what measure will be implemented over the next year to improve the environmental performance of the project. | Continuation of all existing monitoring systems. |

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| Salient Matter | Groundwater monitoring |
| Works that were carried out in the past year | Continuous groundwater monitoring using the existing monitoring well network, regular maintenance to the dedicated pumps installed on a number of wells. |
| Works that are proposed to be carried out over the next year, | Nil. |
| review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the relevant statutory requirements, limits or performance measures/criteria; <ul style="list-style-type: none"> the monitoring results of previous years; the relevant predictions in the EA; | Monitoring Results Groundwater quality monitoring was conducted quarterly by EnvironConsulting Services in 2016 at EPA monitoring points 7-25. Groundwater quality has been maintained in 2016, when comparing monitoring results to previous years. Complaints Records Nil |
| Any non-compliance over the last year | Borehole number BH26d was obstructed during the August 2016 monitoring event, heavy machinery works were undertaken around the area of the well and the monitoring well was not sampled as the area was deemed unsafe for the scientist to sample. |
| Describe what actions were (or are being) taken to ensure compliance; | Continuous monitoring will continue to assess if leachate is leaving the site regardless of the inwards flow of groundwater towards the quarry. |
| Identify any trends in the monitoring data over the life of the project; | Ammonia concentration is the primary leachate indicating parameter and for the purposes of assessment of leachate contamination of groundwater wells on site. The concentration of ammonia measured in the monitoring wells during 2016 monitoring period are within the range encountered in the monitoring well network before landfilling activities commenced and indicate that groundwater on the site is not being impacted by leachate. |
| Any discrepancies between the predicted and actual impacts of the project, and analyse the | Measured levels of contaminants of concern suggest that the leachate is not impacting the groundwater quality of the site. |

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| potential cause of any significant discrepancies; | |
| Describe what measure will be implemented over the next year to improve the environmental performance of the project. | Continuation of all existing monitoring systems. |

| Salient Matter | Leachate Collection |
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| Works that were carried out in the past year | <p>Bunding and Waterproofing works on the Leachate tanks</p> <p>On 14th July 2016, the two polyethylene tanks were emptied, disconnected and subsequently removed to provide complete access to the floors of the containment area for the waterproofing contractor.</p> <p>On 15th July 2016 the contractor cleaned the area using a water blaster and removed all loose membrane from previous waterproofing works, once the ground was clean and dry, a coat of epoxy primer was applied to the area as well as a sealing agent on the surrounding walls to block any potential fractures present on the concrete walls.</p> <p>An additional coat of the epoxy primer was added to the area on 16th July 2016 and over the 17th and 18th July a waterproofing system was added to the area to complete the works.</p> <p>The polyethylene tanks have been equipped with high and low level float switches to control their discharge to the leachate treatment plant and protect the pumps used to transfer the liquid, this process is controlled by a Programmable Logic Controller (PLC) which has been programmed to maintain the polyethylene tanks at the lowest possible level at all times to prevent pressurised leaks in the unlikely event of tank failure.</p> <p>Installation of a 1.5m height colourbond panels on the top of the bundwall acting as a secondary measure to stop pressure leaks in the unlikely event that the tanks fail during a rain event.</p> <p>Consulting Earth Scientists Pty Ltd (CES) was commissioned by DADI to provide a Water Balance Report for Genesis for the period 1 October 2015 to 30 September 2016 (In accordance with clause 22 of Schedule 3 of Project Approval Application No 06_0139 as modified).</p> <p>The Water Balance Report found that the amount of leachate generated at the site indicated a net positive volume of water and/or available leachate within the landfill pit. The volume</p> |

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| | <p>generated is approximately 31,630 m³/year on the best case scenario assessed and approximately 51,912 m³/year for the worst case. Genesis has treated during the same period approximately 61,485 m³ of leachate and discharged them to sewer under trade waste agreement with Sydney Water.</p> <p>The results of the water balance indicate that the actual LTP treatment capacity is more than sufficient to cope with the amount of leachate being produced at the landfill with the current landfilling conditions.</p> |
| Works that are proposed to be carried out over the next year, | <p>A Leachate quality improvement program is to be investigated in 2017, to determine if the treatment of the leachate can achieve the quality of recycled water and be used as part of the facilities dust suppression program.</p> <p>Works will continue to regularly increase the height of the main leachate sump riser (Monitoring Point 26) as the level of filled waste rises.</p> |
| <p>Review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the relevant statutory requirements, limits or performance measures/criteria;</p> <ul style="list-style-type: none"> • the monitoring results of previous years; • the relevant predictions in the EA; | <p>Monitoring Results</p> <p>Leachate quality monitoring was conducted quarterly by EnvironConsulting Services at EPA monitoring point 26. Leachate levels were also monitored by EnvironConsulting Services at Monitoring Point 27.</p> <p>Chemicals monitored as part of the leachate quality monitoring program, have reported concentrations similar to those found on previous years with the exception of ammonia, which has increased its concentration levels. The concentrations of ammonia are expected to continue increasing as the landfill ages and the degradation process takes part within the waste mass.</p> <p>The leachate treatment plant operated by the licensee, has successfully managed the increased concentrations of ammonia during the year 2016 to levels below the trade waste agreement criteria that the licensee currently holds with Sydney Water.</p> <p>Complaints Records Nil</p> |
| Any non-compliance over the last year | Nil |
| Describe what actions were (or are being) taken to ensure compliance; | <p>Automated monitoring and dosing of treatment chemicals have been implemented with remote alarm and telephone warning systems in the case of an exceedance of any parameters.</p> <p>Continuation of active inspection maintenance and upkeep of the leachate sequence batch reactor and nitrifying bacterial.</p> |

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| | Additional samples are to be collected in the current monitoring year to mitigate any adverse effects of the non-compliance. |
| identify any trends in the monitoring data over the life of the project; | <p>A new trade waste agreement was signed between the proponent and Sydney Water in April 2016 which allows Genesis to discharge 650 KI/day at an increased rate of 14 l/s.</p> <p>There have been no long term changes in leachate quality with the exception of ammonia concentrations which have increased during 2016. The concentrations of ammonia are expected to continue increasing as the landfill ages and the degradation process takes part within the waste mass.</p> <p>Trade waste conditions continue to be satisfactorily met.</p> |
| any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; | <p>It had been speculated that in the initial stages of landfilling there may be insufficient material upon which the nitrifying bacteria of the SBR could operate.</p> <p>Currently, there is always enough suitable material present in the waste mass which is evidenced in the ammonia content of the leachate for the nitrifying bacteria of the SBR to operate.</p> |
| describe what measure will be implemented over the next year to improve the environmental performance of the project. | Leachate piping system will be maintained to ensure leachate tanks are filled at an optimum rate. |

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| Salient Matter | Chute Maintenance and reduction |
| Works that were carried out in the past year | <p>Reduction in chute length when required as the filled level of waste rises. No further chute reduction was required in 2016.</p> <p>The footings and structural integrity of the chute are inspected and monitored in the manner set out in the Chute Management and Maintenance Plan approved by the Department.</p> |
| Works that are proposed to be carried out over the next year, | Continued reduction in chute length as required. Continued inspection, maintenance and repair of the chute and conveyor system. |
| Review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the relevant statutory requirements, limits or performance measures/criteria; <ul style="list-style-type: none"> the monitoring results of previous years; the relevant predictions in the EA; | <p>No observations to suggest the occurrence of any adverse developments in the footing and structural integrity of the chute.</p> <p>Complaints Records Nil</p> |
| Any non-compliance over the last year | Nil |

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| Describe what actions were (or are being) taken to ensure compliance; | Regular maintenance of chute and the internal misting system. Visual inspections by appropriately trained staff. |
| Identify any trends in the monitoring data over the life of the project; | There have been no occurrences of any adverse developments in the footing and structural integrity of the chute since its construction. |
| Any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies. | Nil. |
| Describe what measure will be implemented over the next year to improve the environmental performance of the project. | Continued maintenance and inspection of chute. |

Waste Management Procedures.

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| Salient Matters | Material types accepted at the premises. Rejection of Loads Potential Asbestos Contaminated Loads |
| Works that were carried out in the past year | General operations. |
| Works that are proposed to be carried out over the next year, | A modification to the Project Approval (Mod 5) has been approved and as such a licence variation will be sought to modify the balance of tonnage received as between the landfill and the recycling facility in line with commercial demands tonnes and variety of wastestreams acceptable at the premises. The development will allow for a "pre-sort enclosure" installed on the premises which will increase the optimum recycling output of the Project. |
| Review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the relevant statutory requirements, limits or performance measures/criteria; <ul style="list-style-type: none"> the monitoring results of previous years; the relevant predictions in the EA; | No Monitoring Applicable Complaints Records Nil |
| Any non-compliance over the last year | The EPA completed an inspection on Tuesday 18 October 2016. During the inspection of the landfill an "unexpected find" of suspected ACM occurred in a load of material that had been previously tipped. DADI instigated a voluntary closure of the area of the landfill. VENM cover was applied to the relative area of the landfill. An independent hygienist was engaged to inspect the area and certified it as free from asbestos. The EPA and were notified upon completion of the works and the areas reopened. |

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| | <p>During the same inspection a piece of suspected ACM was identified in the SMA. This area was segregated, the piece of suspected ACM was sent to an external laboratory and an external hygienist engaged to inspect the area. The external laboratory identified that the material was not ACM and the hygienist certified the area as free from asbestos. The EPA and were notified upon completion of the works and the areas reopened.</p> <p>The EPA has since notified the Licensee that the sample it took from this area was ACM and the Licensee is preparing a response.</p> |
| Describe what actions were (or are being) taken to ensure compliance; | <p>Initial weighing and visual screening of waste entering site.</p> <p>MPC spotters employed to ensure recyclable waste is sorted correctly and no waste that is not permitted is allowed onsite.</p> <p>Tipping Face Spotter employed on site to ensure that vehicles are directed to the correct location to tip their waste and no waste that is not permitted is allowed on site.</p> <p>Rejected loads register is being continuously maintained by DADI.</p> |
| Identify any trends in the monitoring data over the life of the project; | Not Applicable |
| Any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; | Nil |
| Describe what measure will be implemented over the next year to improve the environmental performance of the project. | Modification to the Project Approval will see proposed changes to opening hours, location of the PSE, location and number of weighbridges, increased tonnages and ability to accept C&I waste which will increase the optimum recycling output of the Project. |

Cultural Heritage

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| Salient Matters | Salvage of Aboriginal Cultural Material Integrity of archeologically sensitive areas |
| Works that were carried out in the past year | <p>Inspection, maintenance and repair of fencing around the Conservation area to control access to classified archaeological sensitive land (Zone 1)</p> <p>Continued monitoring of Conservation Area.</p> <p>I</p> |

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| Works that are proposed to be carried out over the next year, | Continued maintenance of fencing around the Conservation area. |
| Review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the relevant statutory requirements, limits or performance measures/criteria; • the monitoring results of previous years; • the relevant predictions in the EA; | Since construction there has been no further discovery of any Aboriginal cultural materials. Cultural monitoring results are consistent with previous years and this is predicted to continue. Complaints records Nil |
| Any non-compliance over the last year | Nil |
| Describe what actions were (or are being) taken to ensure compliance; | Fencing and regular surveillance of site to control access to sensitive areas. |
| Identify any trends in the monitoring data over the life of the project; | There has been little change to site since initial construction, as such the project approval requirements which apply to these issues should be removed. |
| Any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; | N/A |
| Describe what measure will be implemented over the next year to improve the environmental performance of the project. | N/A |

Compliance

Relevant Statutory Monitoring Requirements

The monitoring requirements for dust and surface water are as set out in EPL 20121 conditions P1 and M1 to M7 inclusive. The monitoring requirements for groundwater, surface water and leachate are set out in EPL 13426 P1 and M1 to M7.

Additionally odour, landfill gas and noise assessments are regularly completed in line with the site's Air Quality, Odour and Greenhouse Gas Management Plan and Landfill Gas and Noise Monitoring Programs. The noise limits are set out in EPL 20121 condition L4 and EPL 13426 condition L4.

Environmental Protection Licence Potential Non-compliances

Under EPL 13426 (Quarry) the following compliances issues have been raised by the EPA in 2016:

1. Exposed fragments of fibrous cement containing asbestos located on the surface of the tip face and Hazardous Material Area that were not adequately covered and the Hazardous Material Area was not adequately sign posted.
2. Broken pieces of asbestos observed across the asbestos disposal area leading EPA Officers to believe that asbestos contaminated waste was being disposed of and managed in an inappropriate manner that was unsafe, inappropriate and inconsistent with requirements laid down in the POEO Act, the Regulations and the Licence. A reply has been made by the Licensee, awaiting EPA response.

3. The EPA believed that the Licensee breached section 64(1) of the POEO Act for the suspected non-compliances of Licence Conditions O1.1, O5.4 (a), E6.1 and E6.2 being the management of asbestos contaminated material on site. The Licensee provided a written submission addressing the alleged offences, and the EPA withdrew the allegations.

The EPA has since invited comment on alternative cover suggestions for ACM, as it concluded as a result of its investigations at a variety of facilities that the current cover requirements may not be adequate. The Licensee has made submissions in this respect and is awaiting a response from the EPA.

Under EPL 20121 (Recycling operations for MPC) nil non-compliances were reported in the Annual Return for the EPA for 2016.

Under Project Approval MP 06 0139 (the Approval) an official caution was issued for failing to comply with the following conditions:

- a) Schedule 3, Condition 45: requirement for the design and construction of the Precinct Plan Road by 22 November 2014; and
- b) Schedule 3, Condition 49: requirement to pay monetary contributions for "Quarry Link Road" by 22 November 2014.

During the investigation the licence holder co-operated with the Department of Planning and is currently in negotiations to construct the road with Hanson Construction Materials Pty Ltd, and had taken steps to begin the payment of the contributions by seeking the Department's approval of a quantity surveyor.

The Proponent has now received an invoice from Blacktown City Council for the contributions due and has paid same.

Incidents and Complaints

Complaints Records

One complaint was made during 2016 concerning the project:

A telephone complaint was received by EPA on 24 August 2016 alleging that at approximately 10:30am there was a sewer like odour in Minchinbury coming from Genesis Waste Facility. The Licence-holder investigated practices at the site and confirmed (to the EPA) that the offensive odour in the area did not originate from the Genesis facility. Due to wet weather over this period, normal activities of recycling and landfilling non-putrescible waste, in accordance with EPL conditions were being undertaken on site but at a reduced volume.

A detailed register of complaints and subsequent investigation and action taken is maintained on the website and available for the public viewing at:

<http://www.dadi.com.au/assets/Genesis%20Complaints%20Register%20Published.pdf>

Information about how to make a complaint is available on the Genesis website at:

<http://www.dadi.com.au/landfills-and-recycling-centres.html>.

Reportable Incidents

There have been no reportable incidents since the last Annual Review.

Additional Commitments

Public Safety

Since the Facility opened in mid-2012 a number of measures have been implemented to minimise the risks to the public and to ensure public safety:

- the site is fenced;
- speed signs and speed bumps erected at the end of DADI Drive entrance (approaching the Workshop);
- access points to the site are gated and locked after hours (with security patrols after hours);
- access points to the site have security and warning signs;
- all visitors (including consultants) must sign in & out of the visitors register located at the Administration Office;
- the site is under video surveillance; and
- restricted general access to potentially hazardous zones (e.g. inside the chute).

Changes to Development Approval and/or Environmental Protection Licences in 2016

MOD 5 was approved by the Department of Planning in March 2016.

A new MOD 6 (to adjust opening hours for the facility has been submitted to the DOP and SEAR's have been issued. A proposed MOD 7 has also been submitted to vary the tonnes of material taken to the landfill, however the DOP has requested more information and the Proponent is yet to submit same.

Initiatives for the Next 12 Months

Recently, DADI obtained a modification (MOD 5) of the Genesis Facility conditions of approval enabling it to process and remove part of the existing earthen berm. The purpose of this activity was to clear an area for the construction of the pre-sort enclosure (PSE).

It was intended that the PSE would separately house an automated mechanical sorting plant similar to the existing plant in the main MPC. The objective of the PSE is to optimise recycling on the facility and potentially increase the waste streams able to be recycled on the premises.

DADI is considering a review of the MOD 5 design to better facilitate traffic flow on site. It is thought the design can be more efficient if amended.

DADI's current view is that greater efficiency is able to be achieved if all processing plant is located within the one building [MPC] whilst the delivery vehicles discharge their loads in a separate building. A Masterplan to this effect is being prepared for discussion with the EPA and other regulators. DADI will conduct further investigation on this initiative and will consult with the Department of Planning to ensure all safety, efficiency and environmental considerations are met to the best of its capacity.

DADI is working with neighbouring landowners and Blacktown City Council to construct the new Precinct Road to meet its obligations under the Development Consent. With the new road will come an alternative access to DADI Drive with additional weighbridge facilities to ensure compliance with all record keeping and waste levy obligations.

Following the completion of a site wide stormwater management plan the Licensee will follow Blacktown City Councils recommendation to improve stormwater management on site. The Council has formed the view that stormwater detention basin should reside wholly within the boundary of the Genesis Facility. As such the Licensee will seek to expand the land title of the facility by boundary re-alignment and to substantially increase its stormwater retention capacity along its new western boundary.

These initiatives will be incorporated into a proposed MOD to be submitted to the DOP.

Environmental initiatives for the Facility also include the continued implementation (and/or revision) of the requirements and commitments from the Genesis Recycling & Landfill Environmental Monitoring Plan and Programs. In particular, DADI has engaged Independent consultants and introduced a Landfill Gas Monitoring inventory on site.

Strategic and Commercial Review

In concert with this operational environmental review the Corporate Group of the Licence holders has carried out a review against the commercial and policy imperatives which have occurred during the past twelve month period.

These include the ongoing phenomenon of the transportation of waste for landfilling interstate [notably Queensland] in order to advantage the lower levy.

The Licence holder has responded during the consultation period to a suite of regulations proposed by the NSW EPA mandating specific procedures which must be followed in relation to the Management of waste after it has been received into a licensed facility.

The Licence Holder has also made submissions to the NSW EPA regarding a proposed statutory response addressing the phenomenon of Waste to Queensland.

An initiative by the EPA in the form of a campaign to ensure that asbestos is appropriately managed and covered at landfills, has highlighted the shortfalls of using VENM as cover in compliance with Clause 80 of the Regulation. It is the Licensee's view that GSW should be used cover for asbestos materials and the Proponent has made submissions to the EPA on this point, in the hope that the cover requirements will be amended to allow for more substantial cover of asbestos.

The ongoing requirement to ensure that recycled products meet appropriate guidelines for safety and quality.

The Company has decided as a matter of policy to make these elements its core directives for the next following twelve month period.

These involve the following,

1. Seeking an extension of operating hours for delivery to and within the MPC in order to facilitate ongoing maintenance and repairs to the Genesis Plant, prolonged hours for its use and extended pre-sort procedures to accommodate enhanced procedures for removal of potential asbestos (or asbestos appearing) materials.
2. Enhancing the timber sorting processes in order to maximise opportunities for beneficial re-use and thereby lowering the volumes of timber required to be stored on site.

3. Seeking construction approval for the construction on site of an additional under cover facility to allow for redirection of and enhancing retrieval procedures for the Commercial and Industrial Waste streams.
4. The progression of "The Next Generation" [TNG] Energy from waste planning application.
5. The progression and construction of required elements of proposed MOD 8.

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Summary

| SCHEDULE 5 TO CONSENT (06_0139 MOD 4) | |
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| ENVIRONMENTAL MANAGEMENT, REPORTING & AUDITING | |
| ENVIRONMENTAL MANAGEMENT | |
| Environmental Management Strategy | |
| 1. The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. The Strategy must: | Complies |
| a) be submitted to the Director-General for approval prior to the commencement of construction; | Complies |
| b) provide the strategic framework for environmental management of the project; | Complies |
| c) identify the statutory approvals that apply to the project; | Complies |
| d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project; | Complies – Key Contact Personnel: Graeme Cunningham (Site Manager) - 0429 293 909 |
| e) describe the procedures that would be implemented to: | |
| <ul style="list-style-type: none"> keep the local community and relevant agencies informed about the operation and environmental performance of the project; | Complies DADs website contains links to up to date environmental performance of the project with monitoring results. |
| <ul style="list-style-type: none"> receive, handle, respond to, and record complaints; | Complies |
| <ul style="list-style-type: none"> resolve any disputes that may arise during the course of the project; | Complies |
| <ul style="list-style-type: none"> respond to any non-compliance; and | Complies |
| <ul style="list-style-type: none"> respond to emergencies; | Complies |
| f) include: | |
| <ul style="list-style-type: none"> copies of the various strategies, plans and programs that are required under the conditions of this approval once they have been approved; and | Complies |
| <ul style="list-style-type: none"> a clear plan depicting all the monitoring currently being carried out within the project area. | Complies |
| Management Plan Requirements | |
| 2. The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include: | |
| a) detailed baseline data; | Complies |
| b) a description of: | Complies |
| <ul style="list-style-type: none"> the relevant statutory requirements (including any relevant approval, licence or lease conditions); | Complies |
| <ul style="list-style-type: none"> any relevant limits or performance measures/criteria; | Complies |

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| | <ul style="list-style-type: none"> the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures; | Complies |
| c) | a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria; | Complies |
| d) | a program to monitor and report on the: | |
| | <ul style="list-style-type: none"> impacts and environmental performance of the project; | Complies |
| | <ul style="list-style-type: none"> effectiveness of any management measures (see c above); | Complies |
| e) | a contingency plan to manage any unpredicted impacts and their consequences; | Complies |
| f) | a program to investigate and implement ways to improve the environmental performance of the project over time; | Noted |
| g) | protocol for managing and reporting any: | |
| | <ul style="list-style-type: none"> incidents; | Complies |
| | <ul style="list-style-type: none"> complaints; | Complies |
| | <ul style="list-style-type: none"> non-compliances with statutory requirements; and | Complies |
| | <ul style="list-style-type: none"> exceedances of the impact assessment criteria and/or performance criteria; and | Complies |
| h) | a protocol for periodic review of the plan. | Complies |
| Annual Review | | |
| 3. | By the end of December 2010, and annually thereafter, the Proponent shall review the environmental performance of the project to the satisfaction of the Director-General. This review must: | <p>According to the definitions of the Project Consent, the "project" is the development described in the EA. The EA describes the project as a resource recovery facility and landfill facility.</p> <p>The Recycling Environment Protection Licence commenced in June 2012 and the Landfill Environment Protection Licence commenced in December 2012. As such, the first annual review of the environmental performance of the project was undertaken in December 2013, being the anniversary of when the landfill operations commenced in accordance with the Environmental Protection Licences.</p> <p>This coincided with the commencement of the Independent Environmental Audit required by Condition 7.</p> |
| a) | describe the works that were carried out in the past year, and the works that are proposed to be carried out over the next year; | Noted |
| b) | include a comprehensive review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the | Noted |
| | <ul style="list-style-type: none"> the relevant statutory requirements, limits or performance measures/criteria; | Noted |
| | <ul style="list-style-type: none"> the monitoring results of previous years; and | Noted |
| | <ul style="list-style-type: none"> the relevant predictions in the EA; | Noted |

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| c) | identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance; | Noted |
| d) | identify any trends in the monitoring data over the life of the project; | Noted |
| e) | identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and | Noted |
| f) | describe what measure will be implemented over the next year to improve the environmental performance of the project. | Noted |
| Revision of Strategies, Plans & Programs | | |
| 4. | Within 3 months of the submission of an: | |
| a) | audit under condition 7 of schedule 5; | The latest audit was initiated in or around April 2015. The initial report was with an addendum addressing additional licence conditions was completed by the end of March 2016. The next audit will take place in 2017 as per the project approval. Any revisions of the Project's Strategies Plans and Programs will be completed based on the results of the reaudit. |
| b) | incident report under condition 5 of schedule 5; and | Noted |
| c) | annual review under condition 3 of schedule 5, the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Director-General. | Noted |
| <i>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.</i> | | |
| REPORTING | | |
| Incident | | |
| 5. | The Proponent shall notify the Director-General and any other relevant agencies of any incident associated with the project as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of the date of the incident, the proponent shall provide the Director General and any relevant agencies with a detailed report on the incident. | Noted |
| Regular | | |
| 6. | The Proponent shall provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of | Complies |

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| this approval, and to the satisfaction of the Director-General. | |
| INDEPENDENT ENVIRONMENTAL AUDIT | |
| 7. | <p>Within 6 months of the commencement of operation, and every 2 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:</p> <p>The Initial Environmental Audit was carried out in 2013 by Cardno. The second Environmental Audit was commenced in April 2015 and the supplementary audit requested by DOP was finalised on 12 April 2016 and provided to the Proponent.</p> |
| a) | <p>be conducted by suitably qualified, experienced and independent team of experts (including an odour expert), whose appointment has been endorsed by the Director General;</p> <p>Noted</p> |
| b) | <p>include consultation with the relevant agencies;</p> <p>Noted</p> |
| c) | <p>include a full odour audit of the project, taking into consideration the relevant technical guidelines and any odour complaints made since the previous audit;</p> <p>A full odour audit of the project was completed by Cardno in 2015.</p> |
| d) | <p>assess the environmental performance of the project and assess whether it is complying with the relevant requirements in this approval and any relevant EPL (including any assessment, plan or program required under these approvals);</p> <p>Noted</p> |
| e) | <p>review the adequacy of strategies, plans or programs required under these approvals; and, if appropriate; and</p> <p>Noted</p> |
| f) | <p>recommend measures or actions to improve the environmental performance of the project, and/or any assessment, plan or program required under these approvals.</p> <p>Noted</p> |
| <i>Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Director-General.</i> | |
| 8. | <p>Within 6 weeks of the completing of this audit, or as otherwise agreed by the Director-General, the Proponent shall submit a copy of the audit report to the Director-General, together with its response to any recommendations contained in the audit report.</p> <p>The latest audit was initiated in or around April 2015 and submitted to DOP in September 2015. However, the DOP then asked for the audit to be revised to include all individual conditions. The re audit was provided by the Proponent to the Department on 28 April 2016.</p> |
| ACCESS TO INFORMATION | |
| 9. | <p>From the end of 2009, the Proponent shall make the following information publicly available on its website:</p> |
| a) | <p>a copy of all current statutory approvals;</p> <p>Complies</p> |
| b) | <p>a copy of the current environmental management strategy and associated plans and programs;</p> <p>Complies</p> |
| c) | <p>a summary of the monitoring results of the project, which have been reported in</p> <p>Complies</p> |

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| | accordance with the various plans and programs approved under the conditions of this approval; | |
| d) | complaints register, which is to be updated on a monthly basis; | Complies |
| e) | a copy of any Annual Reviews (over the last 5 years); | Complies |
| f) | a copy of any Independent Environmental Audit, and the Proponent's response to the recommendations in any audit; and | Complies |
| g) | any other matter required by the Director-General. | Noted |

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