



Mr Peter Francis
Director
Ardlethan Environmental Solutions
Level 2, 53 Berry Street
North Sydney NSW 2059

Dear Mr Francis

**Secretary's Environmental Assessment Requirements
Ardlethan Solid Waste Landfill Project (SSD - 6967)**

Thank you for your request for the Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) for the above mentioned development proposal. I have attached a copy of these requirements.

The attached SEARs have been prepared in consultation with the relevant government authorities and Coolamon Shire Council (see **Attachment 2**) and are based on the information you have provided to date. Please note that the Secretary may alter these SEARs at any time and that you must consult further with the Secretary if you do not lodge a development application and EIS for the development within two years of the date of issue of these SEARs. The Department of Planning and Environment (the Department) will review the EIS for the development carefully before publicly exhibiting it, and will require you to submit an amended EIS if it does not adequately address the SEARs.

The Department notes that the proposed landfill would have capacity to operate for 65 years at the proposed rate of waste input. This time frame raises some issues about whether such capacity may slow or discourage continued development of waste recovery so that the amount of landfilling of waste is minimised.

Both waste recovery and best practice landfill design and operation are matters for consideration under clause 123 of the *State Environmental Planning Policy (Infrastructure) 2007*. Consequently, these matters will require comprehensive analysis in the EIS. The proposed development of the landfill must be justifiable against the NSW Government's waste policy. Consideration should be given to a staged approach to developing the landfill so that the design and operation of future components can be reviewed in-line with future community's expectations and best practice.

The EIS will also need to provide details in relation to the proposed transfer station in Sydney, including likely impacts associated with the transfer station and how it would support the proposed development.

When preparing the landfill proposal and justification, the Department would like to request that you consult extensively with both the EPA's Waste Strategy Team and the Department's Industry Assessment Team to ensure that the issues surrounding long term best practice and waste recovery are given robust consideration.

The Department wishes to emphasise the importance of effective and genuine community consultation and the need for proposals to proactively respond to the community's concerns. Accordingly, a comprehensive, detailed and genuine community consultation engagement process must be undertaken during the preparation of the EIS. This process must ensure that the community is both informed of the proposal and actively engaged in issues of concern to

them. Sufficient information must be provided to the community so it has a good understanding of what is proposed and any potential impacts.

If your development is likely to have a significant impact on matters of National Environmental Significance, it will require an approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This approval would be in addition to any approvals required under NSW legislation and it is your responsibility to contact the Department of Sustainability, Environment, Water, Population and Communities to determine if an approval under the EPBC Act is required (<http://www.environment.gov.au> or 6274 1111).

I would appreciate it if you would contact the Department at least two weeks before you propose to submit your EIS. This will enable the department to:

- confirm the applicable fee (see Division 1AA, Part 15 of the *Environmental Planning and Assessment Regulation 2000*); and
- determine the number of copies of the EIS that will be required for reviewing purposes.

Your contact officer, Emma Barnet, can be contacted on 9228 6412 or at emma.barnet@planning.nsw.gov.au. Please mark all correspondence regarding the proposal to the attention of the contact officer.

Yours sincerely



Chris Ritchie

Manager

Industry Assessments

as delegate of the Secretary

12/5/15.

Secretary's Environmental Assessment Requirements

Section 78A(8A) of the *Environmental Planning and Assessment Act*
 Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*

Application Number	SSD-6967
Proposal Name	<p>Ardlethan Landfill which includes:</p> <ul style="list-style-type: none"> • the development of a new landfill and associated infrastructure, including gas and leachate collection, within existing mine voids. The landfill would provide up to 23 million m³ of capacity which equates to approximately 65 years operational capacity and would accept waste from both the local area and Sydney; • a rail siding and associated works; • a haul road from the rail siding to the site; • upgrading existing haul roads on the site; • a weighbridge and wheelwash facility; • office and amenities for staff; • a small vehicle waste transfer station; • a soil-farming operation on the site to condition selected soils for use as topsoil on completed sections of landfill; • relocation of tailings; and • progressive rehabilitation of the landfill.
Location	<p>Tin Mine Road, Ardlethan Lot 12 Section 3 DP 759143, Lot 10 Section 3 DP 759143, Lot 3 Section 3 DP 759134, Lot 4 Section 3 DP 759143, Lot 5 DP 3 DP 759143, Lot 9 Section 3 DP 759143, Lot 2 Section 3 DP 759143, Lot 10 Section 2 DP 59143, Lot 11 Section 2 DP 759143, Lot 1 DP 135135, Lot 2 DP 135135, Lot 1 DP 187896, Lot 1 DP 245927, Lot 1 DP 499862, Lot 1 DP 516832, Lot 8 Section 2 DP 759143, Lot 9 Section 2 DP 759143, Lot 10 Section 2 DP 759143, Lot 4 DP 557974, Lot 2 DP 557976, Lot 77 DP 750860, Lot 1 DP 1092967, Lot 8 DP 1 DP 759143, Lot 6 Section 1 DP 759143, Lot 9 Section 1 DP 759143, Lot 5 Section 2 DP 759143, Lot 7 Section 2 DP 759143, Lot 8 Section 2 DP 759143</p>
Applicant	Ardlethan Environmental Solutions
Date of Issue	May 2015
General Requirements	<p>The Environmental Impact Statement (EIS) must meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>. The EIS must include:</p> <ul style="list-style-type: none"> • a detailed description of the development including: <ul style="list-style-type: none"> – need for the proposed development; – justification for the proposed development; – likely staging of the development; – likely interactions between the development and existing, approved and proposed developments within the site and in the vicinity; and – plans of any proposed works. • consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments;

	<ul style="list-style-type: none"> • risk assessment of the potential environmental impacts of the development; identifying key issues for further assessment; • detailed assessment, where relevant, of the key issues below, and any other potential significant issues identified in the risk assessment, must include: <ul style="list-style-type: none"> – a description of the existing environment, using adequate baseline data; – consideration of potential cumulative impacts due to other development in the vicinity; and – measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment. • consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS. <p>The EIS must also be accompanied by a report from a qualified quantity surveyor providing:</p> <ul style="list-style-type: none"> • a detailed calculation of the capital investment value (as defined in clause 3 of the <i>Environmental Planning and Assessment Regulation 2000</i>) of the proposal, including details of all assumptions and components from which the CIV calculation is derived; • an estimate of the jobs that will be created during the construction and operational phases of the proposed development; and • certification that the information provided is accurate at the date of preparation.
<p>Key issues</p>	<p>The EIS must address the following specific matters:</p> <ul style="list-style-type: none"> • Strategic Landuse Planning – including: <ul style="list-style-type: none"> – demonstration that the proposal is consistent with the aims and objectives of all relevant environmental planning instruments, policies and strategies including, but not limited to, <i>State Environmental Planning Policy (Infrastructure) 2007</i> (Infrastructure SEPP), the <i>NSW Waste Avoidance and Resource Recovery Strategy 2014-2021</i>, <i>NSW State Plan 2021 – Goal 23</i>, the <i>Waste Avoidance and Recovery Act 2001</i>, the <i>National Waste Policy</i> and relevant Development Control Plans; – justification for any inconsistency between the proposed development and these plans; – consideration of the NSW government’s investment in new technologies and infrastructure to drive recycling and reuse under the Waste Less, Recycle More Initiative; and – details on the suitability of the site for the proposed development. • Waste Management – including: <ul style="list-style-type: none"> – accurate estimates of the quantity, classification and likely sources of the waste stream that would be handled/stored/disposed of at the facility; – a description of how this waste would be treated, stored, used, disposed, handled on site and transported to the site, including filling plans; – details and a description of the proposed Sydney transfer station including likely impacts associated with the transfer station and how it would support the proposed development;

	<ul style="list-style-type: none"> - details of the landfill cell design and integrity, including details of the proposed liner, in accordance with best practice industry standard guidelines such as the EPA's <i>Environmental Guidelines: Solid Waste Landfills</i>; - an analysis of whether the development is consistent with Clause 123 of the Infrastructure SEPP; - a description of the proposed landfilling operation, including any proposed staging of landfill activities to ensure that the design and operation of future components can be reviewed in-line with future community's expectations and best practice at the time; - an assessment of the proposed gas capture systems and any proposed disposal or use of the gas; - waste cover composition, suitability and source; and - litter and feral animal control. <ul style="list-style-type: none"> • Biosecurity, pests and vermin – including comprehensive details of the proposed transportation and onsite management of waste to prevent the escape of pests and diseases including the Queensland Fruit Fly and Grapevine Phylloxera. • Soil, Water and Leachate – including: <ul style="list-style-type: none"> - the proposed erosion and sediment controls during construction and operation; - consideration of potential acid sulfate soils, salinity, soil contamination and flooding impacts (including assessment of the 1 in 200 and 1 in 500 year flood events as a consideration of climate change) of the proposal; - a detailed site water balance, including identification of water requirements for the life of the project, measures that would be implemented to ensure an adequate and secure water supply is available for the proposal (including an assessment of any licensing requirements) and a detailed description of the measures to minimise the water use at the site; - the proposed stormwater management system; - potential impacts on groundwater including a detailed hydrogeological assessment that documents local and regional groundwater features, including calculation of potential groundwater inflow and seepage and an assessment of whether the water contained within the Ardwest/Wild Cherry open cut pits includes any intercepted groundwater, and includes a description of measures that will be implemented to protect groundwater; - details of how the water in the Ardwest/Wild Cherry open cut pits would be managed; - consideration of the Water Sharing Plan (WSP) for the <i>NSW Murray Darling Basin Fractured Rock Groundwater Sources</i> and the WSP for the <i>Murrumbidgee Unregulated and Alluvial Water Sources</i>; - potential impacts on watercourses, including on those within the Mirrool Creek catchment; and - the proposed leachate management and contaminated stormwater collection systems including a demonstration that surface and groundwater will be protected. • Mineral Resources – including <ul style="list-style-type: none"> - a demonstration that the tin resource potential of the mining lease and surrounding exploration licences have been
--	---

	<p>effectively assessed and documented using modern exploration methods; and</p> <ul style="list-style-type: none"> – a demonstration that the proposal would not affect access to tin resources that remain in the subject area including in any stockpiles, tailings dams and underground. <ul style="list-style-type: none"> • Mine Subsidence – including a demonstration that the landfill can be designed and constructed so that there is no risk of damage from any uncontrolled material placed within the void and it will remain safe and serviceable for the life of the development. • Traffic and Transport – including: <ul style="list-style-type: none"> – details of all traffic types (including rail) and volumes likely to be generated during construction and operation, including a description of haul routes; – the EIS is also to consider the current status of the Tin Mine Road and Kamarah Tank Road as outlined in Council’s letter in Attachment 2; – the proposed train operating plan including likely freight origin locations/routes, train size and configuration, service frequency, path times and expected ramp up times; – an assessment of the predicted impacts of this traffic on safety and the capacity of the road and rail network, including the Burley Griffin Way, the Newell Highway and rail level crossings and including consideration of cumulative traffic impacts from other developments, using SIDRA or similar traffic model; – a description of the measures that would be implemented to upgrade and/or maintain the surrounding road and rail network; – plans of any road upgrade or new roads required for the development; and – detailed description of and plans of the proposed rail siding and associated works. • Air Quality and Odour – including: <ul style="list-style-type: none"> – a quantitative assessment of the potential air quality and odour impacts of the development on surrounding landowners; and – a details of all proposed mitigation, management and monitoring measures. • Noise and Vibration – including: <ul style="list-style-type: none"> – quantitative assessment of potential construction, operational and transport (including rail) noise and vibration impacts, including potential impacts on nearby sensitive receivers; and – details of the proposed noise management and monitoring measures. • Rehabilitation – including: <ul style="list-style-type: none"> – a detailed description of how the site would be progressively rehabilitated, revegetated, and integrated into the surrounding landscape, including measures to ensure that the final landform is free draining; – a justification for the proposed final landform and use, taking into consideration any relevant strategic land use planning or resource management plans or policies; and – a detailed description of the measures that would be put in place to ensure sufficient resources are available to implement the proposed rehabilitation measures, and the ongoing management of the site following the cessation of landfilling activities.
--	---

	<ul style="list-style-type: none"> • Flora and Fauna – including: <ul style="list-style-type: none"> – an assessment of the proposal under the <i>Framework for Biodiversity Assessment (Oct 2014)</i> including an assessment of any potential impacts on riparian vegetation and groundwater dependant ecosystems. • Greenhouse Gas – including: <ul style="list-style-type: none"> – a quantitative assessment of any potential greenhouse gas emissions of the project; and – a description of the measures that would be implemented to minimise the energy use of the project including landfill gas capture and electricity generation. • Visual – including an assessment of the potential visual impacts of the project on the amenity of the surrounding area. • Hazards and Risk – including emergency and fire management and site security. • Social and economic; • Heritage – including an Aboriginal heritage assessment.
Plans and Documents	<p>The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the <i>Environmental Planning and Assessment Regulation 2000</i>. These documents should be included as part of the EIS rather than as separate documents.</p>
Consultation	<p>During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners.</p> <p>In particular you must consult with:</p> <ul style="list-style-type: none"> • NSW Environment Protection Authority; • Office of Environment and Heritage; • Coolamon Shire Council • Department of Primary Industries; • Department of Trade and Investment; • NSW Roads and Maritime Services; • Mine Subsidence Board; • Transport for NSW; • Rail network owners/operators including: <ul style="list-style-type: none"> – NSW Trains; – John Holland Rail; – Australian Rail Track Corporation; and – Sydney Trains; and • surrounding landowners/occupiers that may be affected by the proposal. <p>The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.</p>
Further consultation after 2 years	<p>If you do not lodge an EIS for the development within 2 years of the issue date of these SEARs, you must consult with the Secretary in relation to the requirements for lodgement.</p>
References	<p>The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, the following attachment contains a list of some of the guidelines, policies, and plans that may be relevant to the</p>

ATTACHMENT 1 Technical and Policy Guidelines

The following guidelines may assist in the preparation of the Environmental Impact Statement. This list is not exhaustive and not all of these guidelines may be relevant to your proposal.

Many of these documents can be found on the following websites:

<http://www.planning.nsw.gov.au>

<http://www.bookshop.nsw.gov.au>

<http://www.publications.gov.au>

Policies, Guidelines & Plans

Plans and Documents

The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. Provide these as part of the EIS rather than as separate documents.

In addition, the EIS must include the following:

1. An existing site survey plan drawn at an appropriate scale illustrating:
 - the location of the land, boundary measurements, area (sq.m) and north point;
 - the existing levels of the land in relation to buildings and roads;
 - location and height of existing structures on the site;
 - location and height of adjacent buildings and private open space; and
 - all levels to be to Australian Height Datum (AHD).
2. A locality/context plan drawn at an appropriate scale should be submitted indicating:
 - watercourses including nearby rivers and creeks, and dams;
 - significant local features such as heritage items;
 - the location and uses of nearby buildings, shopping and employment areas, hospitals and schools; and
 - traffic and road patterns, pedestrian routes and public transport nodes.
3. An indication of the location of the site with respect to the relevant Land Zoning Map within the *Coolamon Local Environment Plan 2011*.
4. Drawings at an appropriate scale illustrating:
 - detailed plans, sections and elevations of the existing building, which clearly show all proposed internal and external alterations and additions.

Documents to be submitted

Documents to submit include:

- 1 hard copy and 1 electronic copy of all the documents and plans for review prior to exhibition; and
- Other copies as determined by the Department once the development application is lodged.

Policies, Guidelines and Plans

Aspect	Policy /Methodology	
Waste	Waste Avoidance and Resource Recovery Strategy 2007 (DECC)	
	Waste Classification Guidelines (DECC)	
	Environmental Guidelines: Assessment Classification and Management of Non-Liquid and Liquid Waste (NSW EPA)	
	Environmental guidelines: Composting and Related Organics Processing Facilities (DEC)	
	Environmental guidelines: Use and Disposal of Biosolid Products (NSW EPA)	
	Composts, soil conditioners and mulches (Standards Australia, AS 4454)	
	EPA's Environmental Guidelines: Solid Waste Landfills	
	State Environmental Planning Policy (Infrastructure) 2007	
Soil and Water	National Water Quality Management Strategy: Water quality management - an outline of the policies (ANZECC/ARMCANZ)	
	National Water Quality Management Strategy: Policies and principles - a reference document (ANZECC/ARMCANZ)	
	National Water Quality Management Strategy: Implementation guidelines (ANZECC/ARMCANZ)	
	National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)	
	National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ)	
	Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC)	
	State Water Management Outcomes Plan	
	NSW Government Water Quality and River Flow Environmental Objectives (DECC)	
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC)	
	Managing Urban Stormwater: Soils & Construction (Landcom)	
	Managing Urban Stormwater: Treatment Techniques (DECC)	
	Managing Urban Stormwater: Source Control (DECC)	
	Technical Guidelines: Bunding & Spill Management (DECC)	
	Floodplain Development Manual (DIPNR)	
	Floodplain Risk Management Guideline (DECC)	
	A Rehabilitation Manual for Australian Streams (LWRRDC and CRCCH)	
	Technical Guidelines: Bunding & Spill Management (DECC)	
Environmental Guidelines: Use of Effluent by Irrigation (DECC)		
<i>Surface Water</i>	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)	
	NSW State Groundwater Policy Framework Document (DLWC)	
	NSW State Groundwater Quality Protection Policy (DLWC)	
	NSW State Groundwater Quantity Management Policy (DLWC) Draft	
	The NSW State Groundwater Dependent Ecosystem Policy (DLWC)	
	Guidelines for the Assessment and Management of Groundwater Contamination (DECC) Draft	
	NSW Aquifer Interference Policy (NOW)	
	<i>Groundwater</i>	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC & NHMRC)
	<i>Soil</i>	

	National Environment Protection (Assessment of Site Contamination) Measure 1999 (NEPC)
	Draft Guidelines for the Assessment & Management of Groundwater Contamination (DECC)
	State Environmental Planning Policy No. 55 – Remediation of Land
	Managing Land Contamination – Planning Guidelines SEPP 55 – Remediation of Land (DOP)
	Rural Land Capability Map
Transport	
	Guide to Traffic Generating Development (RTA)
	Road Design Guide (RTA)
Air Quality	
	Protection of the Environment Operations (Clean Air) Regulation 2010
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC)
	TRC (2011), Generic Guidance and Optimum Model Settings for the CALPUFF Modelling System for Inclusion into the 'Approved Methods for the Modelling and Assessment of Air Pollutants in NSW, Australia'
Odour	
	Technical Framework: Assessment and Management of Odour from Stationary Sources in NSW (DEC)
	Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW (DEC)
Noise and Vibration	
	Assessing Vibration: a technical guide (DEC)
	NSW Industrial Noise Policy (DECC)
	Environmental Criteria for Road Traffic Noise (NSW EPA)
	Rail Infrastructure Noise Guidelines (EPA)
	Environmental Noise Control Manual (DECC)
	Interim Construction Noise Guideline (DECC)
	Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC)
Biodiversity	
	NSW Biodiversity Offsets Policy for Major Projects (2014) and the Framework for Biodiversity Assessment
Greenhouse Gas	
	AGO Factors and Methods Workbook (AGO)
	Guidelines for Energy Savings Action Plans (DEUS, 2005)
Visual	
	Control of Obtrusive Effects of Outdoor Lighting (Standards Australia, AS 4282)
	State Environmental Planning Policy No 64 - Advertising and Signage
Hazard and Risk	
	AS/NZS 4360:2004 Risk Management
	HB 203:2006 Environmental Risk Management – Principals and Process
	State Environmental Planning Policy No 33 – Hazardous and Offensive Development (SEPP 33)
	Planning Advisory Paper No. 6 – Guidelines for Hazardous Analysis (DUAP)
	Planning Advisory Paper No. 4 – Risk Criteria for Land Use Safety Planning (DUAP)
Land use	
	Agricultural Issues for Landfill Developments

ATTACHMENT 2
Public Authority Responses to Request for Key Issues
