COUNCIL ASSESSMENT REPORT

Panel Reference	REF: 2018WES018
DA Number	2018/41
LGA	Forbes Shire Council
Proposed Development	Expansion of the existing waste or resource management facility to the west of the existing facility, this will include: 1. Staging the construction of the expanded section of the waste management facility through using a cellular system, 2. Gradually closing and capping the existing waste management facility, 3. Site entrance that is positioned at the location of the existing, 4. A waste receivable station, 5. An internal road network, 6. An integrated surface water management system, and 7. Vegetated buffers along the southern, western and northern extents of the landfill area. Proposed operation of the expansion of the waste or resource management facility will: 1. The hours of operation will be 7 days per a week from 8.30am to 5pm (same as existing), 2. Receive municipal solid waste, commercial and industrial solid waste, building and construction solid waste, contaminated soil, recyclables waste (which would be separated), special wastes and liquid wastes, 3. The existing landfill will continue to receive 19,000m^3/year until capacity is reached in 5 years or the height limitation has been reached (RL 280.50m), 4. The proposed expansion will receive up to 16,000m^3/year with a design capacity of 980,000m^3 which equates to approximately 800,000 tonne of waste (at a density of 0.82 t/m^3), and 5. The proposed expansion of the waste or resource management facility will extend the life of the waste management facility by 50 years.
Street Address	151 and 341 Daroobalgie Road, Forbes (Lot 37 DP 1242538 and Lot 7008 DP 1020396)
Applicant/Owner	Forbes Shire Council/Robert Hoswell and Forbes Shire Council
Date of DA lodgement	16 of April 2018
Number of Submissions	No submissions received
Recommendation	That the development application be approved subject to conditions of development consent.

Regional Development Criteria (Schedule 7 of the SEPP (State and Regional Development) 2011	Schedule 7 Clause 3 Council related development over $5 million The proposed expansion of the existing waste management facility will be carried out by the have a capital investment value of $5 million. Forbes Shire Council is the applicant for the development consent, in the process of becoming the owner of the land and the development will be carried out by Council.
List of all relevant s4.15(1)(a) matters	Forbes Local Environmental Plan 2013 State Environmental Planning Policy (Infrastructure) 2007 State Environmental Planning Policy (State and Regional Development) 2011 State Environmental Planning Policy No.44-Koala Habitat Protection Schedule 3 Designated Development- Environmental Planning and Assessment Regulations 2000 (Part 2- Clause 35 and Clause 36) Section 4.46 Integrated Development- Environmental Planning and Assessment Act 1979 State Environmental Planning Policy No. 33- Hazardous and Offensive Development
List all documents submitted with this report for the Panel's consideration	Statement of Environmental Effects- Daroobalgie Waste Depot Expansion- Dated September 2018 GEOLYSE response to additional information requested by the EPA- Dated 8 March 2019 RMS response to referral for DA 2018/41: Waste Management Facility- Dated 30 October 2018 General Terms of Approval Issued by EPA- Dated 17 May 2019
Report prepared by	Alexandra Power- Town Planner
Report date	7 of June 2019

Summary of s4.15 matters

Have all recommendations in relation to relevant s4.15 matters been summarised in the Executive Summary of the assessment report?	**Yes**

Legislative clauses requiring consent authority satisfaction

Have relevant clauses in all applicable environmental planning instruments where the consent authority must be satisfied about a particular matter been listed, and relevant recommendations summarized, in the Executive Summary of the assessment report? *e.g. Clause 7 of SEPP 55 - Remediation of Land, Clause 4.6(4) of the relevant LEP*	**Yes**

Clause 4.6 Exceptions to development standards

If a written request for a contravention to a development standard (clause 4.6 of the LEP) has been received, has it been attached to the assessment report?	**Not Applicable**

Special Infrastructure Contributions	
Does the DA require Special Infrastructure Contributions conditions (S7.24)? *Note: Certain DAs in the Western Sydney Growth Areas Special Contributions Area may require specific Special Infrastructure Contributions (SIC) conditions*	**Not Applicable**
Conditions	
Have draft conditions been provided to the applicant for comment? *Note: in order to reduce delays in determinations, the Panel prefer that draft conditions, notwithstanding Council's recommendation, be provided to the applicant to enable any comments to be considered as part of the assessment report*	**Yes**

1.0 Executive Summary

Council is in receipt of a development application for the expansion of the existing waste management facility known as the Daroobalgie Waste Management Facility (DWD). The current site of the existing DWD is located at 341 Daroobalgie Road (Lot 7008 DP 1020396). The proposed area for the expansion will be located to the west of the existing waste management facility at 151 Daroobalgie Road, Forbes (Lot 37 DP 1020396). The expanded site will be connected to the existing site through proposed roads and infrastructure that will occur in line with the staging of the expansion to the waste management facility.

The proposal seeks development consent to provide for the expansion of the waste management facility for a further 52 years, in a staged cellular approach which will include the closure of the existing facility as the waste management facility expands further west. The proposed expansion will have a capacity to accommodate 16,000 tonne of waste per an annum. The overall design capacity of the waste management facility is approximately 980,000m^3 which equates to 800,000 tonne of waste (at a density of 0.82t/m^3 of landfill airspace). Based on the 2017-2018 waste data, the landfill is expected to receive 170,000 tonnes of putrescible waste and 630,000 tonnes of inert waste over the life of the facility.

Expansion of the existing waste or resource management facility to the west of the existing facility, this will include:

1. Staging the construction of the expanded section of the waste management facility through using a six stage cellular system,
2. Gradually closing and capping the existing waste management facility,
3. Site entrance that is positioned at the location of the existing,
4. A waste receivable station,
5. An internal road network,
6. An integrated surface water management system, and
7. Vegetated buffers along the southern, western and northern extents of the landfill area.

Proposed operation of the expansion of the waste or resource management facility

1. The hours of operation will be 7 days per a week from 8.30am to 5pm (same as existing),

2. Receive municipal solid waste, commercial and industrial solid waste, building and construction solid waste, contaminated soil, recyclables waste (which would be separated), special wastes and liquid wastes,
3. The existing landfill will continue to receive 19,000m^3/year until capacity is reached in 5 years or the height limitation has been reached (RL 280.50m),
4. The proposed expansion will receive up to 16,000m^3/year with a design capacity of 980,000m^3 which equates to approximately 800,000 tonne of waste (at a density of 0.82 t/m^3), and
5. The proposed expansion of the waste or resource management facility will extend the life of the waste management facility by 50 years.

Under the Forbes Local Environmental Plan (Forbes LEP) the subject site is zoned RU1-Primary Production. The proposal is defined as a 'waste management facility', which is prohibited within the RU1- Primary Production zone. Notwithstanding this, the development relies on the provisions under Clause 121 of State Environmental Planning Policy (Infrastructure) 2007 for permissibility. In accordance with Clause 8 of State Environmental Planning Policy (Infrastructure) 2007, the state policy prevails to the extent of the inconsistency with local provisions, and therefore, the proposal is a permissible land use in the zone.

The subject development is not considered Designated Development under Schedule 3 of the *Environmental Planning and Assessment Regulation 2000*, as the expansion of the waste management facility is considered under Part 2 Are alterations or additions designated development? As Clause 35 and 36 have been satisfied within this assessment report.

The application is Integrated Development under Section 4.46 of the Environmental Planning and Assessment Act 1979, requiring approval under the Protection of the Environment Operations Act 1997. Accordingly, the application was referred to the NSW Environmental Protection Authority (EPA). The General Terms of Approval were issued on the 17 of May 2019, and advised that a separate application for a variation to the existing Environmental Protection Licence will need to be made to the EPA.

In accordance with the requirements of the Clause 104 of State Environmental Planning Policy (Infrastructure) 2007, the application was referred to the Roads and Maritime Services (RMS) for review, and in response comments were received on the 30 October 2018, raising no objection to the proposal, subject to recommended conditions.

The application has been advertised and notified to adjoining properties, and the public exhibition occurred between the 12th October 2018 and the 26th of October 2018. It was then readvertised and notified to adjoining properties between the 29th of March 2019 to the 29th of April 2019, to ensure compliance with *Section 89 of the Environmental Planning and Assessment Regulations 2000*, which require an exhibition period of 28 days.

The Western Regional Planning Panel (RPP) is the relevant consent authority for the application, as the expansion of the waste or resource management facility is regionally significant development as it meets the criteria specified within *clause 3 of*

Schedule 7 of the *State Environmental Planning Policy (State and Regional Development) 2011.*

The proposed expansion meets this criteria as the development:

1. has a capital investment value of over $5 million,
2. Council is the applicant for the development consent, 3. Council is the process of becoming the owner of the land, and
4. Council will carry out the development.

Section 4.5 (b) of the Environmental Planning and Assessment Act 1979 (EP and A Act 1979) designates the consent authority for regionally significant development to the regional planning panel for the area in which the development is to be carried out. In this case the Western Regional Planning Panel is the relevant consent authority for this development application.

2.1 The site

The existing Daroobalgie waste management facility is located 9.5km north of Forbes on the Daroobalgie Road and occupies an area of approximately 7.7ha within Lots 7008 and 7009 DP 1020396. The site and surrounding land is zoned RU1 Primary Production under the *Forbes Local Environmental Plan 2013*.

The proposed lateral expansion is immediately to the west of the existing Daroobalgie waste management facility. The proposed expansion will be situated on part of Lot 1472 DP 750158 and Lot 1 DP 120710, this equates to 10.32ha. Forbes Shire Council is in the process of acquiring this portion of land and a subdivision has been approved (currently unregistered) to formalise the acquisition of the land.

The land adjoining the existing Daroobalgie Waste Management Facility to the north and east consist of woodland vegetation. To the east and south of the existing facility is predominantly agricultural land used for grazing and cropping.

The closest residential zoned land is approximately 1.7km west and the closest industrial zoned land is 600m east.

There are a total of 13 receptors within a 1km radius, with the closets receptor located approximately 320m east of the existing waste management facility.

The site is accessed via Daroobalgie Road and consists of existing internal roads, offices, water, power and telecommunications that service the site.

Figure 1: Surrounding Receptors

2.6 Key assessment issues

Assessment of whether the development is considered designated development as per *Clause 35 and 36 of the Environmental Planning and Assessment Regulations 2000*.

3.0 Statutory Assessment

3.1 Environmental Planning and Assessment Act 1979

The following provisions of the EP and A Act 1979 are relevant to this development:

a) Section 1.3-Objects of the Act,
b) Section 2.15 (2)- Provisions relating to Sydney district or regional planning panels,
c) Section 4.2- Development that needs consent,
d) Section 4.10- Designated development-Schedule 3 Designated Development (EP and A Reg. 2000)
e) Section 4.15- Matters for consideration,
f) Section 4.46- What is “integrated development”.

Section 1.3- Objects of the Act, The objects of the Act are:

(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State’s natural and other resources,

(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,
(c) to promote the orderly and economic use and development of land,
(d) to promote the delivery and maintenance of affordable housing,
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),
(g) to promote good design and amenity of the built environment,
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,
(j) to provide increased opportunity for community participation in environmental planning and assessment.

The proposed development is considered to be generally consistent with the objects of the Act, the location of the proposed expansion of the existing waste management facility is in a location that is considerate of the social and economic welfare of the community and environment. The proposed expansion of the waste management facility will be an orderly and economic use and development of the land, the environmental impacts associated with the use will be managed, monitored and regulated in accordance with the Environmental Protection Licence issued under the *Protection of the Environment Operations Act 1997.*

Section 2.15- Functions of Sydney district and regional planning panels

Section 2.15(a) of the Act specifies that a regional planning panel has the *"functions of the consent authority under Part 4 for regionally significant development that are (subject to this Act) conferred on it under this Act". As the development is defined within Schedule 7 Clause 3 of the State Environmental Planning Policy (State and Regional Development) 2011, the functions of Council are conferred to the Joint Regional Planning Panel.*

For reference:

The expansion of the waste management facility is defined as regionally significant development within Schedule 7 Clause 3 Council related development over $5 million, as the proposed expansion of the existing waste management facility will be carried out by the Council and will have a capital investment value of $7 million.

Forbes Shire Council is the applicant for the development consent, buying the land and the development will be carried out by Council.

Section 4.2- Development that needs consent

Section 4.2 of the EP&A Act states that development consent is required by virtue of *Clause 120 and 121 of the State Environmental Planning Policy (Infrastructure) 2009.*

Section 4.10- Designated development-Schedule 3 Designated Development (EP and A Reg. 2000)

The proposed development is for the expansion of the existing waste or resource management facility to the west of the existing facility. The defined term in accordance with the *Forbes Local Environmental Plan 2013* is a waste or resource management facility.

A waste or resource management facility is considered *designated development, as defined by section 4.10 of the Environmental Planning and Assessment Act 1979 and identified within Schedule 3 Designated Development of the Environmental Planning Assessment Regulation 2000 (EP and A Regs)* as a *waste management facilities or works (clause 32).* The proposal exceeds the 200 tonnes per a year of other waste material threshold and will be located within 100m of an ephemeral, unnamed, Strahler Order 2 watercourse and is therefore considered designated development pursuant to this clause.

However, as this development application is for the expansion of the existing waste management facility *Clause 35, Schedule 3 of the Environmental Planning and Assessment Regulation 2000* is applicable:

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

The consent authority is satisfied that the proposed expansion to the existing waste management facility is not considered designated development as Clause 35 and Clause 36 of the EP and A Regs 2000 have been satisfactorily addressed for this development. An assessment of Clause 35 and Clause 36 has occurred below:

An assessment against the criteria of Clause 35 and 36

Clause 36 Factors to be taken into consideration when assessing Clause 35 specifies the following:

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

(a) the impact of the existing development having regard to factors including:
(i) previous environmental management performance, including compliance with the conditions of any consents, licences, leases or authorisations by a public authority and compliance with any relevant codes of practice, and
(ii) rehabilitation or restoration of any disturbed land, and
(iii) the number and nature of all past changes and their cumulative effects, and

Comment:

Regulatory licence complaints

The Environmental Protection Licence requires an Annual Return comprising a Statement of Compliance and a summary of monitoring be submitted to the EPA annually. Since the initial annual return in 2000, three non-compliances have been recorded over its 17 year licenced history, the last non-compliance was 10 years ago.

Table 4.1 – EPL Annual Returns

Reporting Period	Nature of Non-Compliance	Recorded EPA Action
2006-2007	Failed to undertake all monitoring required by licence due to absence of water to sample.	S.58 notice being negotiated to change licence conditions(s)
2005-2006	Failed to undertake all sampling associated with monitoring point 1.	Appropriate Action taken by licensee
2000-2001	Compliance audit was carried out and the site auditor was not satisfied that daily cover was being applied over all exposed landfilled waste at the ceasing of operations each day.	N/A
	One parameter (TSS) was only monitored on 1 occasion, when the licence required 4 samples	N/A

In all instances action was taken to address the non-compliances and there has not been a non-compliance recorded in the last 10 years. The management of the waste management facility is therefore been consistently compliant with the conditions of the facilities EPA licence.

Public complaints

Since becoming a licensed premises in 2000, FSC has been required to keep a record of any complaint made in relation to the operation of the waste management facility. The complaint was related to a protracted wet period in August 2016. The nature of the complaint was related to the odour generated from the facility. The cause of the odour was the inability for the contractor to provide cover over deposited waste because of the weather. Once weather permitted the cover was provided and the odour eliminated. The complaints recording and investigation process specified in the Landfill Environmental Management Plan was followed by FSC and the issues resolved. The procedure for complaints have been followed correctly and the issues have been resolved in a timely manner.

Rehabilitation or restoration

The existing waste management facility will be gradually capped in line with the cellular staging on the expanded waste management facility. The excavated material from the cellular staging of the expanded facility will be used to cap the existing facility using a phytocap system. The capping of the facility will occur as per the requirements of the EPA licence which will be obtained separately.

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

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

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

Comment:

(i) Scale, character or nature of the proposed development

Character and nature of the development

The proposed development will be constructed as a cellular system comprising of four excavated cells to enable the gradual development of the expanded area of the waste management facility. The cell construction will be filled below ground level and once it reaches natural ground level filling will continue above natural ground level to create a mound that will mirror the height of the existing landfill (RL 280.5m). The staging of the cells will be as follows:

Stage	Excavation Volume m^3	Waste Volume m^3	Capping Volume m^3	Capacity (years)
Existing Landfill Cap	-	-	57,000	-
4A1	54,000	60,000	5,000	3
4A2	48,000	128,000	10,000	7
4B	65,000	224,000	18,000	12
4C	64,000	296,000	24,000	16
4D	-	170,000	14,000	9
4E		104,000	8,000	5
Final Cap	-	-	95,000	
Total	231,000	982,000	231,000	52

The initial landfill cell (Stage 4A1) would be constructed in the south-eastern section of the expansion site and would involve construction of the following components:

- The stormwater management system (drains and surface water management pond);
- A gravel access road around the landfill area;
- The vegetation screening along the southern, western and northern extents of the landfill expansion area; and
- The Stage 4A1 landfill cell including the lining and leachate management system.

Excavated material from the Stage 4A1 cell construction would be used to cap finished areas of the existing landfill.

Upon nearing completion of Stage 4A1, the Stage 4A2 landfill cell would be constructed with excavated material used for capping finished areas of Stage 4A1 and the remainder of the existing landfill area.

Any excess excavated material that is not required for capping would be temporarily stockpiled within the waste management expansion area and within the controlled drainage area. This material would be used for operational purposes (daily and intermediate cover). Based on the conceptual design earthwork volumes, and quantity of VENM received at the facility, there would be no need to import additional soil to the site for landfill purposes.

The landfill would be constructed using a cellular system to enable the gradual development of the landfill site, minimising the active footprint of the landfill and consequently minimising any potential impacts on the environment and allowing progressive rehabilitation throughout the life of the landfill.

The character and nature of the development as a waste management facility is consistent with the existing development as it will be used for the same purpose as the existing, will have an eventual height that mirrors the existing mound system and will be located adjacent to the existing development.

The departure to the existing is that the approach to the expansion has been methodically planned through the staged cellular system that will incorporate best practice environmental management through the leachate linears, stormwater management, ground water monitoring and environmental management, auditing and monitoring. The proposed expansion incorporates additional measures to divert and separate waste through the provision of:

- A covered area for general waste drop-off- waste would either be dropped into skip bins or into a push pit for removal to the landfill,
- Dedicated storage areas for green waste, clean fill, scrap steel and tyres,
- A community recycling centre,
- A waste oil drop off facility (self bunded 3kL tanks), and
- A resource recovery centre/shop.

The proposed development in comparison to the existing waste management facility will be a systematic, orderly and logical approach to the construction and environmental management of the waste management facility which will be provide improved environmental management outcomes in comparison to the existing waste management facility that was constructed prior to the *Protection of the Environment Operations Act 1997 and retrofitted measures to provide environmental management.*

Scale

The existing waste management facility has been constructed and filled above the natural ground surface and over the operation of the waste management facility it has reached a height of 276m, which is 12 to 16m above the natural ground surface. This has created a dominant mound landform with an imposing scale within the relatively flat rural landscape.

The proposed expansion to the waste management facility will cap the height of the existing waste management facility at RL 280.5m and will be rehabilitated to reduce the scale, bulk and appearance of the mound landform within the rural landscape.

The proposed expansion of the waste management facility will have in-ground cells that will gradually in a staged approach reach the same scale of the mound of the existing waste management facility. The scale will not be reduced by the proposed expansion to the waste management facility, however this will be a gradual increase to the scale over a period of 52 years.

The overall visual impact of the scale of the cumulative mounds will be lessened/ reduced over time within the immediate rural landscape through the staged rehabilitation and phytocapping of the existing WMD and the proposed expansion to the WMD. The phytocapping incorporates 1m revegetation layer, landscaping and deep-rooted tree species. The phytocapping system prevent the percolation of rainwater into the mounds, as per the EPA requirements.

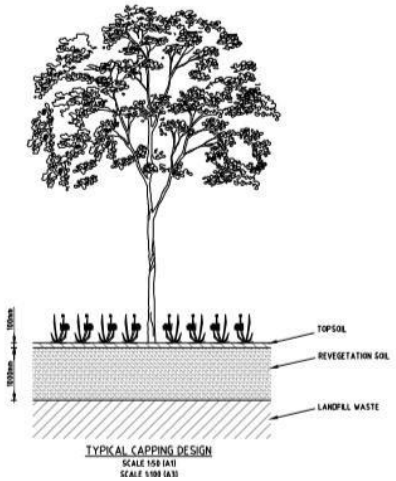

Image 1: Typical phytocap design

The scale of the mounds from Daroobalgie Road is minimised in terms of its prominence within the landscape due to the woodland vegetation to the north within the existing TSR and the proposed landscaping around the expanded landfill.

Response in relation to (ii) existing vegetation, air, noise and water quality
Scenic environment

The proposed expansion will occur in a staged cellular manner and does not move activities significantly closer to any residential area, and the closest receptor to the west is the landowner who has entered into an agreement with FSC for the sale of this land for the purposes of the landfill expansion. The scale of the proposed expansion will be less intrusive then the existing waste management facility. There will be minimal impacts to the amenity of the scenic environment.

Existing Vegetation (biodiversity)
An ecological assessment of the development has been undertaken in accordance key biodiversity legislation and government policy, including:
- *Environment Protection and Biodiversity Conservation Act 1999;*
- *Environmental Planning and Assessment Act 1979;*
- *Biodiversity Conservation Act 2017;*
- *Fisheries Management Act 1994, and*
- *Biosecurity Act 2015.*

The ecological assessment was undertaken to consider the impacts of the development and:
- assess the characteristics and ecological condition of the vegetation communities

and habitat within the study area; determine occurrence, or likelihood of
- occurrence, of threatened species,
populations and
threatened ecological communities (TECs) listed under the *Biodiversity Conservation Act 2016* and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*; and describe and quantify impacts on biodiversity
- resulting from the development.

The site assessment identified that the majority of the study area is heavily disturbed due to past land use for grazing and cropping. A small area of PCT 76 *Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregion* was mapped between the existing DWD and the proposed expansion area. PCT 76 represents *Inland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Peneplain, Nandewar and Brigalow Belt South Bioregions*, an Endangered Ecological Community (EEC) listed under the *Biodiversity Conservation Act 2016* and *Grey Box (Eucalyptus microcarpa) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia*, an EEC under the *Environment Protection and Biodiversity Conservation Act 1999*. The impact of the proposed development will be limited to removal of 1ha of this moderate quality woodland.

Assessments of significance under the BC Act concluded no significant impact, therefore the project does not need any further assessment under the Biodiversity Offset Scheme, nor does it require offsets. Significant impact criteria assessments under the EPBC Act concluded no significant impact; therefore referral to the Commonwealth is not required for the project.

The proposed expansion will not pose a significant impact to the biodiversity values of the vegetation within close proximity to the development or from the removal of the vegetation.

In addition to the above assessment the existing vegetation to the north is within a TSR(Travelling Stock Reserve) which is under the management of Local Land Services. The woodland vegetation acts as a natural buffer to the north that mitigates the environmental impacts from the existing WMD to the residents to the north. A further landscape buffer that is to be maintained will be provided along the periphery of the expanded WMD to the west. This will aide in mitigating the environmental impacts associated with the expanded WMD to the closest residential receptor to the west situated 1.7km from the western expansion.

Air

Air pollution can be considered in relation to the waste management facility in terms of dust, litter, debris and fire prevention. The proposed expansion of the waste management facility will improve the air quality through changing the management measures, providing landscaping barriers and continuing litter and debris management as per the air quality management requirements set out within the existing Landfill Environmental Management Plan. An assessment to this effect is provided below:

Dust

The excavation of the new cell will provide cover material for the current operating cell and provide a phytocap capping. The vegetation installed as part of the phytocap capping would assist in limiting dust.

A 20 m wide landscape buffer is proposed to the southern, western and northern boundaries of the expansion. Significant vegetation exists to the existing TSR to the north and east of the existing landfill. The proposed and existing vegetation barrier will assist as a windbreak around the entire perimeter of the facility.

Sealed or gravel roads will be constructed as part of the internal road network. Residents bringing self –haul waste will no longer need to dispose of the waste at the tipping face as this will now be disposed in the receival shed and transported in bulk to the tipping face and covered. This will result in a significant reduction in vehicles travelling to the tipping face and therefore reducing the creation of dust from the current practice.

The current site has a 10 km speed limit this will continue to the expanded section of the site.

A water cart is currently used for dust suppression as required. It is expected that the need for a watercart for dust suppression will be reduced due to the elimination of self - haul vehicular movements to the tipping face and the provision of sealed or gravel roads as part of the internal road network.

Litter & Debris Control

Regular covering and compaction will occur at the tipping face to minimize and control litter.

Residents bringing self –haul waste will no longer need to dispose of the waste at the tipping face as this will now be disposed in the receival shed and transported in bulk to the tipping face and covered immediately therefore reducing the incidence of windblown litter.

A 1.8m fence surrounds the existing landfill. A 1.8m security fence is proposed to be constructed along the boundaries of the new site linking with the existing fence. This fencing will assist with the capture of windblown litter.

The current contract and LEMP requires the contractor to collect any windblown litter on a daily basis. Future contracts for the site would require a similar responsibility.

A litter management plan has been developed for the existing site. This plan will be expanded upon once the new site is operational.

Fire Prevention

A Pollution Incident Reporting Management Plan has been developed for the site. Annual testing of the plan is undertaken with the contractor and staff. Since the introduction of the PRIMP a variety of scenario’s have been tested including the outbreak of fire at the existing site. This practice will continue with the operation of the expansion to the facility.

A fire management Plan has been developed for the site detailing action to be taken in the event of a fire. This plan will be expanded on to incorporate the buildings to be included as part of the expansion and fire services to the extended site.

A 1.8m security fence will be constructed around the expanded area and link with the existing 1.8m fence to the current site to deter unauthorized entry.

Signage will be installed to inform the general public that flammable liquids are not permitted on site. An emergency contact list is provided in the PRIMP.

A green waste stockpile area has been identified on the receival area concept layout plans. This is located on unfilled land away from the tipping face. The current practice is to divide mulched green waste into windrows so that should they self-combust that burning material can be separated from other fuel.

A contractor's yard has been identified in the concept layout plan. This would allow an area for fuels and flammable solvents for operational use to be stored in an identified area on unfilled land. The current practice is to store flammable liquids in a bunded area that has a capacity of 110% of the capacity of the flammable liquid volume.

The current EPL 6118 restricts the stockpiling of tyres to less than 50 Tonnes at any one time. A stockpile area is identified on the receival area concept layout plans. The storage of tyres within this area will be addressed as a part of the variation to the EPL.
A road as identified in the overall landfill expansion concept layout plan is proposed around the perimeter of the filled area and would act as a fire break. The perimeter road to the current site will remain until fill stage 4E is constructed in year 47. At this time the road between stage 3 and 4 will be filled. A road or fire break is proposed between all filled areas, buildings and stockpile areas.

The current site is connected to the town water supply. A fire service is currently provided to the area of the existing cells. The fire service will be expanded to the extended area.

Noise
The DWD has operated for the past 35 years without receiving a single complaint relating to excessive noise.

The landfill will continue to operate 7 days a week from 830am to 5pm. Landfill operations are permitted by the EPL 6118 to occur from 7am to 8pm Monday to Saturday and 8am to 8pm Sundays and public holidays.

The existing cell will provide a physical buffer to rural dwellings to the east of the site. Calarie - Daroobalgie Road and the vegetated TSR provide a buffer to the rural dwellings to the south of the site. Land immediately to the north and west are occupied by the landowner who has entered into an agreement with FSC for the sale of the land for the purpose of a landfill expansion.

With the elimination of self-haul vehicular movements to the tipping face the ongoing covering of self-haul waste will be removed and undertaken on a less frequent basis as the bulk waste from the recieval area is delivered for covering and compacting. This will result in a reduction of the operating hours of the compactor.

Traffic volumes are expected to remain the same as what is currently being experienced along the Calarie- Daroobalgie Road and waste volumes and visitation are not expected to increase. Therefore there should not be any additional noise impacts from traffic movements to and from the site.

As part of the preliminary investigations a test pit was excavated by machinery currently in use at the existing landfill. Given the material excavated and excavations undertaken at the current site it is not expected that blasting will need to be undertaken to construct the new cells.

All plant and equipment installed at the premises is required to be maintained in a proper and efficient condition and operated in a proper and efficient manner in accordance with Condition O2.1 of the EPL.

Water quality

Groundwater

The existing Environmental Protection Licence requires the groundwater and leachate monitoring to occur on annually with inspections occurring every six months. The groundwater monitoring network comprises of four piezometers as marked on the map below and further detailed within the table below:

Groundwater monitoring has occurred on a biannual basis since October/November 2000. The annual report provides a detailed analysis of the findings from the reporting as per the requirements of the EPL.

The groundwater monitoring is required to monitor:

- Alkalinity (as calcium carbonate)
- Aluminium,
- Ammonia,
- Bicarbonate,
- Calcium,
- Chloride,
- Conductivity,
- Copper,
- Fluoride,
- Iron,
- Magnesium,
- Manganese,
- Nitrate,
- pH,

- Phosphorus (total),
- Potassium,
- Sodium,
- Sulfate,
- TOC
- Total Phenolics,
- Pesticides, and
- Total Petroleum Hydrocarbons (TPH)

A summary table of groundwater and leachate findings based on the biannual reporting is provided below:

Groundwater

Monitored Chemical/or the like	*Provisional limit*	*Findings*
Alkalinity (as calcium carbonate)	*No provisional limit identified in LEMP*	*Available data indicates groundwater alkalinity is generally higher than the guidelines harness value of potential fouling of waters (350mg/L) at all monitoring locations.*
Aluminium	*No provisional limit identified in LEMP*	*Aluminium concentrations in groundwater below long term irrigation guideline concentration of 5 mg/L.*
Ammonia	*LEMP sets a provisional limit of 1mg/L*	*Ammonia concentrations below limit except for the exceedance observed at BH1 in 2016-17. They have since reverted to below provisional limit. The reason for the exceedance was due to above average rainfall and BH1 being hydraulically downgradient of the existing waste management facility.*
Bicarbonate	*LEMP sets not provisional limit*	*Higher bicarbonate concentrations generally recorded at BH1. This trend has been apparent since monitoring commenced.*
Calcium	*LEMP sets no provisional limit*	*Higher calcium concentration recorded at BH3. This trend has been apparent since monitoring commenced.*
Chloride	*LEMP sets no provisional limit*	*Higher chloride concentrations recorded at BH3.This trend has been apparent since monitoring commenced.*

Conductivity	*Table 3.5.1 of the LEMP sets a provisional limit. The provisional limit for conductivity is a deviation from the established control range.*	*Higher conductivity is generally recorded at BH3. This trend has been apparent since monitoring commenced.* *The groundwater beneath the site is extremely saline and is unsuitable for human use. The groundwater has limited use for stock and agricultural purposes.*

Copper	*LEMP sets no provisional limit*	*Copper concentrations are generally consistently low at all monitoring wells. Copper concentrations recorded in recent monitoring events were lower than long-term irrigation guideline concentration of 0.2 mg/L.*
Fluoride	*LEMP sets no provisional limit.*	*Fluoride concentrations are generally consistently low at all monitoring wells.*
Iron	*LEMP sets no provisional limit*	*Iron concentrations are generally consistently low at all monitoring wells. Iron concentrations recorded in recent monitoring events were lower than the long term irrigation guideline concentration of 0.2 mg/L.*
Magnesium	*LEMP sets no provisional limit.*	*Higher magnesium concentrations to generally be recorded at BH3. This trend has been apparent since monitoring commenced.*
Manganese	*LEMP sets no provisional limit*	*Higher magnesium concentrations have generally recorded at BH4. This trend has been apparent since monitoring commenced.*
Nitrate	*LEMP sets a provisional limit of 10mgN/L*	
pH	*LEMP sets a provisional limit for pH which is a deviation from the established control range.*	*Data indicates little variation in pH concentrate between upgradient monitoring locations and downgradient monitoring locations.*
Phosphorus (total)	*LEMP sets no provisional limit*	*Total phosphorus concentrations are consistently low at all monitoring wells.* *It is noted that phosphorus Limit of Detection*

		(LOD) value samples collected from Feb 2014Feb 2015 is 5mg/L, an order of magnitude higher than other sampling rounds.
Potassium	*LEMP sets no provisional limit.*	*Higher potassium concentrations are generally recorded at BH4. This trend is apparent since monitoring commenced in 2000.*
Sodium	*LEMP sets no provisional limit*	*Higher sodium concentrations have been generally recorded at BH3. This trend is apparent since monitoring commenced in 2000.*
Sulfate	*LEMP sets no provisional limit*	*Considerable degree of fluctuation in groundwater sulfate concentrations.*
TOC	*LEMP sets no provisional limit*	*TOC concentrates at all monitoring wells to generally be consistently low since 2003.*
Total Phenolics	*LEMP sets no provisional limit*	*Available date indicates a considerable degree of fluctuation in groundwater sulfate concentrations.*
Pesticides	*LEMP sets no provisional limit*	*Monitoring data for organochlorine pesticides (OCPs) and organophosphorus pesticides (OPPs).*
Total Petroleum Hydrocarbons	*LEMP sets no provisional limit*	*TPH monitoring has occurred since 2012 and all results have been below the LOD.*

Based on the findings within the summarised table the groundwater monitoring at the waste management facility, the groundwater impacts have not been identified that may be conclusively attributable to operations at the existing facility.

The highest concentrations of ammonia and bicarbonate were recorded at BH1 which is downgradient of the existing facility, however the highest concentrations of calcium, chloride, magnesium, manganese, potassium and sodium were recorded at BH3 and BH4 which are upgradient of the existing facility. Further ammonia concentrations have reverted to below the provisional limit at BH1, and minimal variations of groundwater bicarbonate concentrations are apparent across all monitoring wells.

The existing waste management facility is consistent with the existing licence issued by the EPA. Despite the findings there have been no issues raised from the EPA in regards to the higher levels of calcium, chloride, magnesium, manganese, potassium and sodium. The proposed expansion to the waste management facility will not increase the concentrations of these elements within the groundwater at this location. The capping of the waste management facility will effectively mean that the impacts on the groundwater at this location will stabilise overtime.

Leachate

Leachate is any liquid that in the course of passing through matter, extracts soluble or suspended solids or any other components of the material through which it is passed. Surface water quality monitoring program has been in operation since September 2000. This forms a part of the groundwater monitoring. The piezometers used to monitor groundwater are used to monitor the leachate. The leachate monitoring is required to monitor:

- Alkalinity (as calcium carbonate)
- Ammonia,
- Biochemical Oxygen Demand (BOD),
- Conductivity,
- Nitrate, and
- pH

Monitored chemical or condition	Provisional limit	Findings
Alkalinity (as calcium carbonate)	LEMP sets no provisional limit	Alkalinity levels have fluctuated since monitoring commenced. There is no discernible
		increasing/decreasing trend
Ammonia	LEMP sets a provisional limit of 1 mg/L	Ammonia concentrations have been fluctuating since monitoring commenced. There is no discernible increasing/decreasing trend
Biochemical Oxygen Demand (BOD)	LEMP sets a provisional limit of 10 mg/L	BOD concentrations appear to be low. However, there have been some elevated concentrations exceeding the provisional level have been recorded.
Conductivity	LEMP sets a provisional limit for pH which is a deviation from the established control range.	Fluctuating groundwater conductivity have been noted throughout the monitoring period. There is no discernible increasing/decreasing trend
Nitrate	LEMP sets a provisional limit for nitrate at 10 mgN/L	Nitrate concentrations are generally low throughout the monitoring period, and below the provisional limit.

pH	LEMP sets a provisional limit for pH which is a deviation from the established control range.	Groundwater pH is slightly alkaline, averaging a range of 8 to 8.5.

Leachate monitoring results recorded at the existing waste management facility (DWD) are indicative of oxygen-depleted conditions within the landfill, as evidenced by low nitrate concentrations in comparisons to relatively higher (albeit fluctuating) ammonia concentrations. As the pH of the leachate has consistently been recorded within the alkaline range, further breakdown of organic wastes is to be expected until low pH values (i.e acidic conditions) limit biodegradation processes.

The existing waste management facility is consistent with the existing licence issued by the EPA. Despite the findings there have been no issues raised from the EPA in regards to the oxygen depletion and higher pH values. The proposed expansion to the waste management facility will not increase the oxygen depletion or the concentrations of these elements within the groundwater at the current location. The capping of the waste management facility will effectively mean that the impacts on the groundwater at this location will stabilise overtime.
Leachate management systems will be required as a part of the expanded waste management facility.

(iii) the degree to which the potential environmental impacts can be predicted with adequate certainty, and
(iv) the capacity of the receiving environment to accommodate changes in environmental impacts, and

Predictability of potential environmental impacts

Waste management facilities are a common land use that operates within the majority of Local Government Areas within Australia. The common nature of waste management facilities has meant that this land use has been rigorously studied in terms of their environmental impacts by various government agencies and organisations. To the point in NSW where the Environmental Protection Agency have produced Environmental Guidelines for Solid Waste Landfills, which accounts for all of the environmental impacts that could occur and mitigated throughout the construction and operation of the waste management facility.

The existing waste management facility has been operating for 35 years and the proposed expansion will be a continuation on the existing operation. The environmental impacts that have been identified, monitored and managed as a part of the existing operation will likely be the same/consistent for the proposed expansion as it is a continuation of the same land use. The management of the environmental impacts will continue to monitored, managed and responded to through the Landfill Environmental Management Plan (LEMP) which will be amended to account for the expanded waste management facility. The LEMP has identified the following environmental impacts, management and monitoring:

- *Landfill staging,*

- *Waste receival and management,*
- *Surface water management,*
- *Groundwater management,*
- *Air quality management,*
- *Noise control,*
- *Litter control,*
- *Pest, vermin and noxious weed control, and*
- *Fire management.*

Given the common and highly regulated nature of waste management facilities there is adequate certainty that the potential environment impacts have been predicted and accounted for within the LEMP for the existing and proposed waste management facility.

Capacity of the receiving environment to accommodate the changes in environmental impacts

The staging of the proposed expanded WMD allows for area to receive and accommodate changes to environmental impacts that may become apparent or identified during the operation of the WMD.

(c) any proposals:
(i) to mitigate the environmental impacts and manage any residual risk, and
(ii) to facilitate compliance with relevant standards, codes of practice or guidelines published by the Department or other public authorities.

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

Comment: *The licence variation to be issued by the EPA in accordance with the PoEO Act will ensure that the environmental impacts are managed, monitored, audited and reported annually as per the licence conditions and per the amended Landfill Environmental Management Plan for the WMD.*

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

Comment: *The relevant guidelines to the proposed expansion to the WMD is the Environmental Guidelines Solid Waste Landfills (The guidelines) the existing LEMP and variation to the EPA licence will ensure compliance with these guidelines. The guidelines have been satisfactorily addressed within the assessment above.*

Summary of the Clause 35 and 36 assessment above

Based on the assessment of Clause 35 and 36 of the EP and A Regulations 2000 it can be summarised that the development is not designated development as the proposed alterations or additions do not significantly increase the environmental impacts of the total development compared to the existing or approved development. In fact the proposed development will improve the environmental management practices through the orderly sequencing of the cells, diversion of waste and proposed rehabilitation of the WMD overtime.

Section 4.15 of the Act- Evaluation and Matters for consideration- general In determining a development application, a consent authority is to take into consideration the following matters as are of relevance to the development the subject of the development application:

(a) the provisions of:

(i) any environmental planning instrument, and

*(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the **consent authority** (unless the Planning Secretary has notified the **consent authority** that the making of the proposed instrument has been deferred indefinitely or has not been approved), and*

(iii) any development control plan, and

(iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and

(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph),

(v) (Repealed)

that apply to the land to which the development application relates,

(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,

(c) the suitability of the site for the development,

(d) any submissions made in accordance with this Act or the regulations, (e) the public interest.

The assessment against the provisions of 4.15 are discussed in Section 4 to 7 of this report.

Section 4.46 of the Act- What is Integrated development?

The proposed expansion to the existing waste management facility is classed as integrated development (as per 4.46 of the EP and A Act 1979), as approval in the form of an Environmental Protection Licence variation is required to be issued from the Environmental Protection Authority, as prescribed within *Clause 48 of the Protection of the Environment Operations Act 1997*, as the expansion of the existing waste management facility is classed as scheduled activity (premise based).

The Environmental Protection Authority (EPA) issued the General Terms of Approval on the 17 May 2019 within the response the EPA stated the following:

“The EPA has reviewed the information provided and has determined that it is able to issue a variation to the Daroobalgie waste disposal depot licence (environment protection licence 6118) for the proposal, subject to a number of conditions. The applicant will need to make a separate application to EPA to obtain this licence variation.

The general terms of approval are provided within Attachment A. In preparing, these terms, the EPA has assessed the proposal against the minimum standards given in

the Environmental Guidelines: Solid Waste Landfills (EPA, April 2016; the landfill guidelines) and makes the following comments:

- ***Quality assurance**: the EPA relies on specifications for construction materials, construction quality assurance (CQA) plans and post-construction CQA reports to assess landfill design and construction. Without the required technical detail, the EPA cannot yet approve the proposed new landfill cells.*
- ***Leachate liner:** the landfill guidelines permit geosynthetic liners but these must be genuine composite liners, with a geosynthetic liner accompanied by another type of geosynthetic liner or by a compacted clay liner (engineered compacted clay or geosynthetic clay). The "compacted soil" proposed with the geomembrane appears to be a bedding layer, rather than an impermeable engineered clay liner.*
- ***Protection geotextile:** the landfill guidelines require a protection geotextile above all geomembranes, not just "where required" (as described in the proposal on drawing C031 "Typical Liner Details").*
- ***Leachate storage:** the landfill guidelines require a dam (or tanks) to store leachate. A dam facilitates leachate collection and evaporation, and facilitates sustainable leachate irrigation and re-injection.*
- ***Cell 4E (piggyback cell):** the landfill guidelines require a specially-prepared "piggyback" liner when landfilling over a closed landfill cell. The EPA recommends that approval of Cell 4E, which is a piggyback cell proposed for construction approximately 45 years from now, is postponed.*
- ***Final capping (phytocap**): the EPA agrees that the Forbes climate is likely to be suitable for a phytocap. However withoit the required technical detail, the EPA cannot yet approve the phytocap."*

Based on the above assessment from the EPA further details in terms of the construction, leachate liners, leachate storage, Cell 4E and final capping are required to be provided before approving a variation to the EPL 6118. The EPL is required to be issued prior to any works being commenced on Stage 4 cells this will form a condition of the development consent.

4.0 Section 4.15 Evaluation and Matters for consideration

The application has been assessed against the relevant matters for consideration under *Section 4.15 of the Environmental Planning and Assessment Act, 1979* as amended. The assessment is as follows:

S4.15 Evaluation
(1) Matters for consideration- general
In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:
(a) the provisions of:
(i) any environmental planning instrument,

(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and
(iii) any development control plan, and *(iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under sec*
(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph), *(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,*
(c) the suitability of the site for the development, *(d) any submissions made in accordance with this Act or the regulations,* *(e) the public interest*

S4.15 (1) (a) (i) any environmental planning instrument:

State Environmental Planning Policy No. 33- Hazardous and Offensive Development

SEPP 33 has provisions that identify development that may be classified as either 'potentially hazardous' or 'potentially offensive'. As a result of the definition it is considered that the proposed development may be classified as potentially offensive as:-

potentially offensive industry means a development for the purposes of an industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would emit a polluting discharge (including for example, noise) in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land, and includes an offensive industry and an offensive storage establishment.

Clause 13 of the SEPP sets out the matters for consideration by consent authorities when determining an application to carry out development to which Part 3 of the SEPP applies. The consent authority must consider (in addition to any other matters specified in the Act or in an environmental planning instrument applying to the development):

(a) current circulars or guidelines published by the Department of Planning relating to hazardous or offensive development, and

comment: The relevant Guideline to this application is "Hazardous and Offensive Development Application Guidelines – Applying SEPP 33". These Guidelines predominantly relate to the consideration of SEPP 33, for potentially hazardous development. The Guideline identifies matters that should be considered by the consent authority when assessing potentially offensive development. Under the guidelines, a development may be considered not to be offensive if the EPA are

satisfied that compliance with licence conditions, if issued, are enough to prevent the development causing offence.

(b) whether any public authority should be consulted concerning any environmental and land use safety requirements with which the development should comply, and

comment: The proposed development is integrated development and as such require referral to the NSW Environmental Protection Authority and RMS as the development is considered traffic generating development.

(c) in the case of development for the purpose of a potentially hazardous industry—a preliminary hazard analysis prepared by or on behalf of the applicant, and

comment: The proposal is not considered a potentially hazardous industry and therefore a preliminary hazard analysis was not required to be prepared for the proposed development.

(d) any feasible alternatives to the carrying out of the development and the reasons for choosing the development the subject of the application (including any feasible alternatives for the location of the development and the reasons for choosing the location the subject of the application), and

comment: The lateral expansion of the development footprint to the west of the existing waste management facility into part Lot 1472 of DP 750158 and Lot 1 DP 120710 provides a logical location for the expansion of the footprint to the waste management facility, without requiring the relocation of the waste management facility to increase the longevity of the waste management facility.

The expansion to the west of the existing facility into existing agricultural land was the only feasible location to provide a logical lateral expansion of the existing waste management facility. The land to the north on the existing lot is heavily vegetated with Endangered Ecological Communities and the removal of this vegetation would require offsetting and extensive work removing the vegetation to achieve the same footprint as the expansion to the west. For this reason the northern lateral expansion of the existing waste management facility was not viable.

The lateral western expansion will also provide efficient management of both the existing waste management facility during the five year transition from the existing facility to the proposed lateral western expansion. This will be a crucial period as it will be the time when the western cellular staged system will be developed and the capping and rehabilitation of the existing facility will occur.

The site of the existing waste management facility is currently accessed from Daroobalgie Road and is currently serviced by water and electricity. These services will be extended to the western lateral expansion of the existing waste management facility.

The location of the waste management facility is within an RU1 Primary Production Zone and is surrounded by predominantly extensive agricultural land uses (i.e cropping and grazing). The closest residential zone is located 1.7km from the subject site. Land uses permitted within the RU1 Primary Production zone are compatible with the existing waste management facility.

The environmental management of the existing waste management facility and proposed expanded facility is mitigated through the EPA licence requirements which in place to mitigate impacts to the surrounding land and to the environment generally. Since the issuing of the licence the existing facility has complied with the conditions of the licence and monitoring requirements.

(e) any likely future use of the land surrounding the development.

Comment: The land surrounding the existing and proposed waste management facility consists of land zoned RU1 Primary Production to the west which is currently consists of extensive agricultural land uses in the form of grazing and cropping. To the east of the subject site consists of woodland vegetation and Daroobalgie Road. There are no proposals currently or within the foreseeable future to remove this vegetation or change the zoning designation within the area surrounding the existing and future expansion of the waste management facility. The RU1 Primary Production zone permits land uses which are compatible with the waste management facility and dwelling houses could not be erected on the neighbouring land as the minimum lot size prohibits the erection of a dwelling house on the neighbouring lots.

The proposed expanded waste management facility will provide a landscape buffer along the western boundary adjoining the neighbouring property, this will provide a level of mitigation of the visual amenity to the neighbouring property. Which will provide a level of protection of the amenity into the future for this property.

At this time there are no known development applications or planning proposals with Forbes Shire Council or approved by Forbes Shire Council/ Department of Planning and Industry that will be detrimentally impacted by expansion of the waste management facility.

State Environmental Planning Policy (State and Regional Development) 2011
The expansion of the waste or resource management facility is regionally significant development as it meets the criteria specified within *clause 3 of Schedule 7* of the *State Environmental Planning Policy (State and Regional Development) 2011.*

Clause 3 Council related development over $5 million

Development that has a capital investment value of more than $5 million if:

(a) a council for the area in which the development is to be carried out is the applicant for development consent, or
(b) the council is the owner of any land on which the development is to be carried out, or
(c) the development is to be carried out by the council, or

(d) the council is a party to any agreement or arrangement relating to the development (other than any agreement or arrangement entered into under the Act or for the purposes of the payment of contributions by a person other than the council).

The proposed expansion meets this criteria as the development:

5. has a capital investment value of over $5 million,
6. Council is the applicant for the development consent,
7. Council is the owner of the land, and 8. Council will carry out the development.

Section 4.5 (b) of the Environmental Planning and Assessment Act 1979 (EP and A Act 1979) designates the consent authority for regionally significant development to the regional planning panel for the area in which the development is to be carried out. In this case the Western Regional Planning Panel is the relevant consent authority for this development application.

State Environmental Planning Policy (Infrastructure) 2007

The following clauses are applicable to the proposed development and have been addressed below:

Clause 104 Traffic-generating development

The proposed expansion of the waste management facility is listed within *Column 1 of the Table within Schedule 3 of the SEPP (Infrastructure) 2007* which specifies "any size or capacity" and is therefore is classed as traffic generating development. The application was referred to RMS as per the requirements of *Clause 104 of SEPP (Infrastructure) 2007*. The RMS did not object to the development and raised no additional comments. The proposed development satisfies the requirements of Clause 104 Traffic- generating development.

Division 23 Waste or resource management facilities

Clause 121 Development permitted with consent

Comment: *Subclause (1) of Clause 121* specifies that *"development for the purpose of a waste or resource management facilities may be carried out by any person with consent on land in a prescribed zone".* The subject site is zoned RU1 Primary Production which is a defined prescribed zone. The expansion of the waste management facility is therefore permissible with development consent pursuant to Clause 121.

Waste Management or resource management facilities are prohibited in the *Forbes Local Environmental Plan 2013* within the RU1 Primary Production zone*. Clause 121* prevails to the extent of the inconsistency between the Environmental Planning Instruments.

Clause 123 Determination of development applications

Pursuant to Clause 123 of the SEPP (Infrastructure) 2007, in determining a development application for the purpose of the construction, operation or maintenance of a landfill for the disposal of waste including putrescible waste, the

consent authority must take the following matters into consideration. The assessment of this clause has occurred below:

(a) whether there is a suitable level of recovery of waste, such as by using alternative waste treatment or the composting of food and garden waste, so that the amount of waste is minimised before it is placed in the landfill, and

Comment: *The proposed expansion of the waste management facility will include the continuation of the putrescible waste stream.*

Since 2016, Forbes Shire Council commenced the three bin collection system, one bin for the collection of municipal food garden organics, one bin for the collection of recyclables and one bin for the collection general domestic waste that could not be captured within the other two bins. The collection of municipal waste and recyclables occurs on a fortnightly basis with the food and garden organics collection of the general domestic waste occurring on a weekly basis. Data collected since the commencement of the three bin system states that on average 54% of the domestic waste stream is being diverted from landfill (34% organics and 20% recyclables).

The three bin system has and will continue to minimise the waste that is sent to the waste management facility (landfill) and therefore satisfies subclause (a).

(b) whether the development:
(i) adopts best practice landfill design and operation, and

Comment: The proposed landfill expansion has been conceptually designed to be consistent *with the Environmental Guidelines: Solid Waste Landfill (The Landfill Guidelines) (EPA, 2016)* which are the best practice guidelines for NSW.

The design incorporates appropriate liner, leachate and surface water management systems consistent with the Landfill Guidelines. The current landfill operates under an Environmental Protection Licence and a Landfill Environmental Management Plan (LEMP) which would be updated to include operational practices for the landfill expansion.

(ii) reduces the long term impacts of the disposal of waste, such as greenhouse gas emissions or the offsite impact of odours, by maximising landfill gas capture and energy recovery, and

Comment: The diversion of organics form the municipal waste stream will reduce greenhouse gas emissions from the landfill. An assessment of greenhouse gas emissions shows that the potential methane generation is relatively low and not sufficient for commercially viable recovery and energy (electricity) generation.

(c) if the development relates to a new or expanded landfill:
(i) whether the land on which the development is located is degraded land such as a disused mine site, and

Comment: the site of the proposed expansion is not degraded land or a disused mine site. As previously discussed the land for the proposed expansion is currently used for extensive agriculture.

(ii) whether the development is located so as to avoid land use conflicts, including whether it is consistent with any regional planning strategies or locational principles included in the publication EIS Guideline: Landfilling (Department of Planning, 1996), as in force from time to time, and

Comment: The development site is not located near an area of significant conservation value identified under legislation or planning instruments; within 250 m of a residential zone or a dwelling not associated with the development; within 40m of a permanent or intermittent waterbody; in an area overlying an aquifer which contains drinking water quality groundwater which is vulnerable to pollution; within a karst region; at a site with substrata prone to landslip or subsidence or within a floodway which may be subject to washout during a major flood event.

(d) whether transport links to the landfill are optimised to reduce the environmental and social impacts associated with transporting waste to the landfill.

Comment: The transport link to the existing and proposed landfill is via the upgraded Northern Bypass, this road has recently been upgraded to accommodate road trains and B- Double heavy rigid vehicles. The road is therefore sufficient to accommodate the vehicles and heavy rigid vehicles that will be entering and exiting the waste management facility, therefore there are no social and environmental impacts associated with the transport links to the expanded waste management facility.

State Environmental Planning Policy No. 44 - Koala Habitat Protection
Forbes Local Government area is defined within Schedule 1 Local Government Areas of the State Environmental Planning Policy No. 44 Koala Habitat Protection and therefore this SEPP is applicable to the subject site.

An Ecological Assessment was prepared by EMMCONSULTING which included an assessment of the trees pursuant to the requirements of Part 2 Development control of koala habitats Clause 6-9 of the Koala SEPP.

The assessment concluded that the trees on the development site were not Koala feed tree species, as defined within Schedule 2 of the SEPP and therefore are not considered potential Koala habitats as defined within the SEPP. The requirements of Part 2 Development control of koala habitats have been satisfied.

Regional Environmental Plans

Central West Orana Regional Plan 2036, applies to the Forbes Local Government Area. The proposed development complies with the directions and actions specified within this plan.

Local Environmental Plans

The proposed development has been assessed in accordance with the relevant requirements of the *Forbes Local Environmental Plan 2013* and no relevant draft LEPs apply to the land. A summary is provided as follows:

Forbes Local Environmental Plan 2013	**COMPLIES (Yes/No)**
Part 1 Preliminary	
Clause 1.2 Aims of Plan	
The particulars of the Plan to the proposed development are as follows: *(a) to encourage and manage ecologically sustainable development in Forbes,* *(b) to reinforce the existing urban character of Forbes as the urban focus,* *(c) to reinforce the rural character of Forbes while promoting sustainable development,* *(d) to protect the agricultural land of Forbes for continued agricultural production while allowing for planned expansion at the urban fringe,* *(e) to promote Forbes as a premier tourist-destination building on its unique heritage and environmental attributes as well as sporting and leisure facilities,* *(f) to protect, enhance and conserve the natural environment, including the Lachlan River, Lake Forbes, wetlands, native vegetation, environmentally sensitive land and other natural features that provide habitat for fauna and flora, provide scenic amenity and that may prevent or mitigate land degradation,* *(g) to provide a range and variety of housing choices to cater for the different needs and lifestyles of residents.*	Yes
Forbes Local Environmental Plan 2013	**COMPLIES (Yes/No)**

The proposed expansion to the existing waste management facility will provide a further 40 years of municipal waste disposal that will cater for the existing and future residents of Forbes and therefore is consistent with (b), (c) and (e) of Clause 1.2. The location of the expansion of the waste management facility to the east is considerate of the natural environment to the north which consists of endangered ecological woodland communities. Therefore the logical and orderly expansion is to the east within existing dryland cropping/extensive agricultural land use. This land was part of a larger agricultural land holding and the proposed expansion of the landfill will not impact on the "right to farm" of the agricultural land surrounding the landfill, as the impacts associated with the landfill will be kept to the boundaries of the lot and monitored through the Environmental Protection License issued by the EPA. The surrounding agricultural land uses have been considered and will not impact on the agricultural production of the surrounding land. The expansion to the existing waste management facility is consistent with Clause 1.2 Aims of Plan.	
Clause 1.4 Definitions	
The proposed development is defined as waste management or resource facility, which is defined as: ***waste or resource management facility*** means any of the following: a resource recovery facility, a waste disposal facility, a waste or resource transfer station, a building or place that is a combination of any of the things referred to in paragraphs (a)–(c). ***waste or resource transfer station*** means a building or place used for the collection and transfer of waste material or resources, including the receipt, sorting, compacting, temporary storage and distribution of waste or resources and the loading or unloading of waste or resources onto or from road or rail transport. **Note.** Waste or resource transfer stations are a type of ***waste or resource management facility***—see the definition of that term in this Dictionary.	Yes
Clause 1.9A Suspension of Covenants, Agreements and Instruments	
No covenants, agreements and instruments restricting the development have been identified.	Not applicable

Part 2 Permitted or Prohibited Development

Clause 2.1 and 2.3 Zone Objectives and Land Use Tables	
The objectives of the RU1 Primary Production zone are: • *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.* • *To encourage diversity in primary industry enterprises and systems appropriate for the area.* • *To minimise the fragmentation and alienation of resource lands.* • *To minimise conflict between land uses within this zone and land uses within adjoining zones.* • *To provide opportunities for intensive and extensive agriculture in appropriate locations consistent with the environmental capability of the land.* It is considered that the proposed development generally satisfies the objectives of the zone	Yes
Clause 2.7 Demolition requires development consent	
The proposal does not involve demolition of an existing structure.	Not applicable
Clause 4.3 Height of buildings	
The maximum building height permitted on the subject site is 10m. The proposed maximum height is 8.5m and therefore complies with the 10m maximum building height.	Yes
Part 7 Additional Local Provisions	
Clause 7.1 Earthworks	
Earthworks associated with the development are proposed and form part of this application. The proposed earthworks will have an excavation volume of: 1. 4A1-54,000m^3, 2. 4A2-48,000m^3, 3. 4B- 65,000m^{3,}, and 4. 4C-64,000m^3. The earthworks will be managed within the confines of the site and will form a part of the capping or will be stockpiled prior to be capped. The earthworks will be staged over 52 years to manage the environmental impacts, soil stability and drainage associated with the earthworks. The management of the earthworks will be covered as a part of the EPL and associated documents such as the LEMP. A condition will be placed on the development consent to require erosion and sediment controls for the stockpiling and during construction of the cells. The proposed earthworks will not have a detrimental impact on drainage patterns and soil stability or the existing and likely amenity of adjoining properties. The development application will be	Yes-condition

condition to mitigate the potential impact of soil erosion and the like during construction.	

Clause 7.2 Flood Planning	
The site is not identified as being located within the 'flood planning area'. This clause is not applicable to this development application.	Not applicable.
Clause 7.3 Terrestrial biodiversity	
This clause is applicable to the subject site and an assessment of the biodiversity has occurred within this assessment above. The proposed expansion of the waste management facility will not pose any impact or risk to the Endangered Ecological Communities *Grassy Woodlands and Derived Native Grasslands of South-eastern Australia*, an EEC under the *Environment Protection and Biodiversity Conservation Act 1999* identified on the subject land.	Yes
Clause 7.4 Riparian land and watercourses	
This clause is not considered relevant to the proposed development as the site is not identified as "Watercourse" on the Riparian Land and Watercourses Map". applicable	Not
Clause 7.5 Ground water vulnerability	
This clause is not considered relevant to the proposed development as the site is not identified as "Groundwater vulnerable"on the "Groundwater Vulnerability Map".	Not applicable.
Clause 7.6 Wetlands	
The clause is not considered relevant to the proposed development as the site is not identified as "Wetland"on the "Wetlands Map"".	Not applicable
Clause 7.7 Salinity	

This clause is considered relevant to the proposed development and mitigation measures will be incorporated into the design of the building i.e subsoil drainage and ensuring landscaping is placed away from the walls of the proposed built form.	Yes
Clause 7.9 Essential services	
Development consent must not be granted to development unless the consent authority is satisfied that any of the following services that are essential for the development are available or that adequate arrangements have been made to make them available when required: *(a) the supply of water,* *(b) the supply of electricity,* *(c) the disposal and management of sewage, (d) stormwater drainage or on-site conservation, (e) suitable vehicular access.* Council's Development Engineer has assessed the proposed development and confirmed that adequate services are available or can be made available to the proposed development. This assessment has been further discussed under the Engineering Referral comments within this report.	Yes- subject to conditions

Clause 4.15 (1) (iii) any development control plan

The *Forbes Development Control Plan 2013* applies in particular *clause 9.20 NonAgricultural Development* and *14.5 Requirements for all buildings which relates to salinity*. An assessment of the clauses has occurred below:

9.20 Non-Agricultural Development
Objectives
. To permit non-agricultural development within the rural area where it will not adversely impact potential agricultural production nor impact upon adjoining properties.
Standards
1. Developments which have the potential to generate traffic should consider the likely traffic generation and the condition and capacity of the road system.
2. Any necessary road upgrades to cater for the proposed development will be the responsibility of the applicant.

3. Applications for development likely to generate noise, odour or other environmental nuisance shall be accompanied by an assessment report prepared by a suitably qualified practitioner considering the environmental standards of the Department of Environment and Conservation. Consideration should be given to amelioration techniques and the location of existing surrounding rural dwellings in regard to prevailing winds.
Comment:
The development complies with the standards above as:
- The expansion of the waste management facility was identified as traffic generating development and referred to the RMS. The RMS assessed that the development can accommodate the traffic demands and did not have any comments or conditions for the development.
- The road has been recently upgraded and is known as the Northern Bypass. No further upgrades to the road are required for this development.
- The expansion of the waste management facility will generate noise, odour and other environmental impacts and therefore requires a variation to the existing licence issued by the EPA in accordance with the PoE Act. The General Terms of Approval have been issued and a variation to the licence is required to be applied for separately. A condition has been placed on the consent to this effect.

14.5 Requirements for All Buildings
Objectives
. To minimise the potential for salt to enter a new building thus reducing the potential for salt damage.
Standards
1. Once installed the damp proof course must not be breached by any later works or additions such as steps, verandahs, walls, rendering, bagging, pointing, paving or landscaping.
2. Appropriate subsoil drainage must be installed for all slabs, footings, retaining, walls and driveways.
3. The dwelling must be designed to suit the topography. The installation of the damp course proofing must be above finished ground level.
4. Landscaping and garden designs should not be placed against walls of the building.
Comment:
The development complies with the standards above:
- As the development will be constructed to provide adequate subsoil drainage for the slabs, footings, retaining walls and driveways, and
- No landscaping will be placed against the walls of the building.

These methods will reduce the potential for salt damage to the new buildings proposed within this application.

Clause 4.15 (1) (iv) The provisions of any matters prescribed by the EP & A Regulations

Comment: *There are no matters prescribed within the EP and A Regulations that apply to this development.*

Clause 4.15 (1) (b)-The likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality

Comment: *The assessment of the likely impacts of the development has occurred within the above sections of this report.*

The variation to the Environmental Protection Licence to be issued by the EPA will provide ongoing monitoring, reporting and mitigation measures to manage the environmental impacts on the natural environment associated with the expanded WMD.

The social impacts have been assessed from the scale, service and amenity issues associated with the development. In terms of scale, the scale of the development within the natural environment will be reduced over time through the phytocapping layer that will form a part of the staged rehabilitation of the existing and proposed expansion.

The expansion of the existing waste management facility will expand the life of the facility to function and provide a waste disposal service for the Forbes LGA for a further 52 years. The continuation of this service is vital for the social and economic functioning of the Forbes LGA.

The amenity and interface with neighbouring properties/land uses has been mitigated through the provision of a landscaping corridor 20m wide along the western boundary and the existing landscape buffer to the north. The landscape buffer mitigates the impacts of odour, wind and noise to neighbouring properties along the western and northern boundaries.

A stock dam and erosion gully exists on the neighbouring property adjoining the western boundary of the proposed expansion. The location of the dam is in close proximity to the waste management facility, in particular the surface water pond and Stage 4C. To prevent stormwater run-off flowing from the proposed cells into the neighbouring dam a bund will be required around the perimeter of each staged cell.

The variation to the EPL to be issued by the EPA will provide further environmental mitigation measures that will provide another level of mitigation to neighbouring properties.

Clause 4.15 (1)(c) the suitability of the site for the development

Comment: The suitability of the site has been previously assessed within this report. The site is suitable as it is a continuation of the existing waste management facility, is located 1.7km away from sensitive residential receptors, the scale will be reduced over time through the use of the phytocapping for the rehabilitation (landscaping with deep rooted trees), a natural landscape buffer is provided to the north through the TSR and a further landscape buffer will be provided along the western perimeter of the proposed expansion.

The neighbouring land use is used for extensive agriculture which will be compatible with the proposed expansion to the WMD.

The environmental impacts of the development will be managed, monitored and mitigated by the EPA through the variation to the EPL. The environmental impacts and management will be managed to minimise the impacts to the immediate environment and to the environment of Forbes.

Clause 4.15 (1)(d) any submissions made in accordance with this Act or the regulations

Comment: A submission was made from the EPA as per the concurrence requirements as the development is classed as integrated development in accordance with the Environmental Planning and Assessment Act 1979. The General Terms of Approval form a part of the conditions of development consent.

Clause 4.15 (1)(e) the public interest

Comment: The public interest has been considered and will be protected through conditions of development consent, the EPL and the monitoring and management practices required by the EPL.

The proposed development is in the public interest as it will provide for the continuation of waste services for the Forbes LGA, in a logical location that is considerate of the surrounding environment.

INTERNAL REFERRALS

Building Surveyor
There appears to be no building issues associated with the expansion of the existing WMD. Standard conditions requiring compliance with the BCA and the Environmental Planning and Assessment Act 1979, will be placed on the development consent.
Development Engineer

The existing site access point will need to be upgraded to accommodate B double access to the site as per the turning path plans submitted with the SOEE. Access will need to be widened and drainage installed (culvert). It is also preferable that any new gates installed are indented and provide enough storage space to hold a B double (26m) clear of the travel lane on Daroobalgie Road.
Plans showing construction specifications and detailed design for all internal roads are to be submitted. Plans should include typical cross-sections for both sealed and unsealed roads.
Further information and detailed design plans surrounding the waste recieval station shall be submitted. Further detail is required regarding traffic movements to, from and within the recieval station and what size vehicle the station will accommodate. The same will need to be provided for the proposed weighbridge. Concept plans show vehicles operating within close proximity to a vertical opening at the waste recieval station. Further detail in regards to any edge protection and waste dumping procedures at the waste recieval station shall be provided. The internal road layout submitted with the SOEE appears to be sufficient to cater for all traffic movements on site. Details of all proposed road rules, signage, speed limits, shared zones etc will need to be submitted, showing how traffic and pedestrian movements are to be managed on site. A line marking proposal shall also be submitted – Line marking will need to be included for car parking (showing dimensions), traffic direction arrows, pedestrian access areas etc. Pedestrian access from the proposed car parking area to the recycling centre needs to be addressed. Separate car parking for employees may also be required? The provision of disability car parking shall also be addressed.

CONCLUSION

The application has been assessed having regard to Section 4.15 of the Environmental Planning and Assessment Act 1979, the Environmental Planning and Assessment Regulations 2000, State Environmental Planning Policy No. 55 – Remediation of Land; State Environmental Planning Policy (Infrastructure) 2007; State Environmental Planning Policy No. 33- Hazardous and Offensive Development, State Environmental Planning Policy (State and Regional Development) 2011, State Environmental Planning Policy No 44- Koala Habitat Protection, Forbes Local Environmental Plan 2013; and Forbes Development Control Plan 2013 and is considered to be satisfactory for approval, subject to the recommended conditions of consent.

RECOMMENDATION

The Development Application 2018/41 for the expansion of the existing waste management facility at 151- 341 Daroobalgie Road, Forbes NSW be approved subject to the conditions contained in Appendix A and the General Terms of Approval issued by the Environmental Protection Authority.