

DIRECTOR SUSTAINABLE DEVELOPMENT SERVICES SUPPLEMENTARY REPORT

10th May 2005

DSDS9 (SUPP)	ORGANIC COMPOSTING AND FERTILIZER FACILITY
	FILE: T6-05-147 GGL

SUMMARY:

Reporting that Council has received an application to erect an organic composting and fertilizer facility at Toorooka for which five (5) objections have been received. The application is considered incomplete, however, the applicant has requested that it be reported to Council at the first opportunity.

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Applicant: David Thurgood
Subject Property: Lot 67 DP 752431 Warbro Brook Road,
Toorooka
Zone: 1 (a1)(Rural "A1" Zone)

Proposal:

An application has been received by Council on 7 April 2005 to erect and operate an organic composting and fertilizer facility. The proposal includes transporting liquid animal waste from Frederickton abattoirs, mixing the animal waste with grass clippings taken from the subject land and sawdust supplied by the applicant to make an organic compost. The compost will be stored on site and used as a fertilizer and spread over subject land. [\(Appendix Y\)](#)

Matters for Consideration

The proposal has been examined having regard for the Matters for Consideration identified under Section 79C (1) of the Environmental Planning and Assessment Act with the following matters considered to be of particular relevance to the proposal.

Relevant Environmental Planning Policies

Kempsey Local Environmental Plan 1987 (KLEP 1987)

The land is Zoned 1 (a1)(RURAL "A1"ZONE) under KLEP 1987. Clause 9 provides that the proposed development is prohibited unless Council is satisfied that the proposal is consistent with the objectives of the Zone.

The objectives of the 1(a) zone are:

- (a) Predominately to provide for agricultural uses;
- (b) To preserve the visual amenity of the land, and
- (c) To provide for compatible tourist and industrial uses.

It is considered that the proposed development is consistent with the 1(a) zone's objectives as the composting and fertilizer facility provide for agricultural use. However, the information provided does not adequately address the operation of the facility and possible environmental implications.

Composting facilities are listed as a "designated development" under the Environmental Planning and Assessment Regulation 2000 (Schedule 3). However, facilities are only designated development, if they process more than 5,000 tonnes per year of organic materials, or are located within 100 metres of a natural waterbody, in an area of high water table, on a floodplain or within 250 metres of a dwelling. The proposal is therefore not designated development, as a composting facility.

Department of Environment and Conservation (EPA) Guidelines

The Department of Environment and Conservation (EPA) have environmental management guidelines in place for this type of waste composting and related organic processing facilities. The following matters have particular relevance to the proposal.

Description of Composting Works

The applicant proposes to produce compost from animal organic waste, mix with green waste and sawdust, however the applicant has requested the recipe and different component parts remain secret and have not been provided to Council for assessment. No adequate assessment of the nutrient balance can be assessed without this information. Furthermore, it is not known if the composting mix has a suitability and capability for the land that will receive the compost. No soil type analysis of the land has been undertaken.

The compost analysis report does not specify how it will interact with fauna and flora and is not supported with documentation.

Odour

No emissions of offensive odours outside the boundaries of the premises are permitted under the Protection of the Environment Operations Act (POEO Act). The applicant's submissions states that odours will not occur

from the proposed development, "as plastic sheeting will cover the compost". The application is not supported by an odour assessment. It is not known what the effect covering the compost with plastic sheeting will have on the amenity of the Toorooka area.

Water Quality

The applicant proposes to line the storage area with a clay base of 300mm of clay and 200mm of road base. The minimum requirement to prevent leachate is 600mm with an additional concrete or asphalt cement pad of a thickness of at least 100mm, designed to withstand the loads from vehicles and equipment that are required to operate the facility. The DEC (EPA) indicate a comprehensive hydrological investigation or a geotechnical report of both underneath the site and the surrounding area to identify any groundwater flow pathways. The application does not make reference to any leachate barrier system to prevent pollution of subsoils, groundwater and surface water bodies and no geotechnical or hydrological information has been provided.

Access

It is proposed to access the site twice (2) weekly for a period of sixteen (16) weeks per annum. Based on the information submitted the applicant will be required to pay a road contribution fee of \$15,961 for Warbro Brook Road and Toorooka Road. Heavy vehicle movements to and from the site have the potential to result in additional impacts from dust.

Cumulative Impact on Amenity

The proposal has the potential to have a cumulative impact on the amenity of the area by reason of odour, water pollution and increased traffic movements. Further written justifications of the proposal would be necessary to determine the extent of possible impacts to the area.

Visual

The proposed composting site is to be setback 115 metres from Warbro Brook Road. The contours of the land indicate that views of the composting facility may be evident from the road way. However, the size and scale of facility is not expected to adversely impact on the scenic attributes of the area.

Applicant Submission

The applicant states that the composting facility will not exceed 200 tonnes of animal waste per annum and will not require an EPA licence. The applicant also states that the nitrogen levels are "fantastic for the intended application" for fertilizing the 2000 acre farm. The application states that no air pollution or odours will emit from the stockpiling of the compost as the plastic sheet will cover the material. The nearest house is estimated at approximately 400 metres away, is owned by the applicant

and is not expected to be affected by the proposal. The applicant explains the composting process as simple, and no different in methodology to that adopted by suburban house holders. [\(Appendix Z, Part 1, Part 2, Part 3, Part 4\)](#)

Planning Comment

The proposed erection and operation of a composting facility is permissible on the subject allotment. The scale of the composting is based on a calculated amount of 199 tonnes of animal waste mixed with grass and sawdust. The DEC (EPA) requires a licence for the composting of animal waste for amounts in excess of 200 tonnes. The applicant's submission is less than this threshold. Council has limited knowledge or expertise in assessing such proposals. The application has been submitted to the DEC (EPA) for comment to assist Council in assessing the application.

It is likely that the proposal has potential environmental impacts. No detail has been submitted on odour, the effect the proposal will have on native fauna and flora and possible attraction of vermin. The applicant states that there will be "no additional vermin other than what exists in the natural environment", however, there is no information to substantiate this claim. Nutrient levels and soil types have not been addressed with the make up of the compost fertilizer, which the applicant has held as a secret. The construction of the stockpile area is not in accordance with the DEC (EPA) guidelines and it is not known if leachate will affect groundwater tables or subsoils.

Public Exhibition

The proposal was advertised in accordance with Council's Policy with five (5) objections having been received, which are summarised as follows: [\(Appendix A1, Part 1, Part 2\)](#)

Objection	Planning Comment
<p>1 I live next door to the proposal, which will have the following native environmental impacts. Odour, visual, not known what will happen native animals, use water from the Warbro Brook Creek and the road is not suitable for trucks.</p>	<p>1 The applicant has provided no odour assessment. Impacts on flora and fauna are not expected to be significant, however, indirect impacts from water pollution, vermin and land application of the compost may result. Traffic on the road will have an impact requiring a substantial road contribution for the development.</p>
<p>2 Proximity to the creek, contamination of ground</p>	<p>Is not known if the facility will contaminate ground water. It is expected that flies would be attracted to the facility.</p>

<p>water. Increase flies attracted by the blood, extra truck movements in the area and depreciation of land values.</p>	
<p>3 The prevailing winds will force odours onto our property. Wind will blow bacteria and dirt from the site into our drinking water. The proposal will destroy the amenity of the area.</p>	<p>3 Prevailing winds and odours may adversely impact on adjoining properties, with consequent amenity impacts.</p>
<p>4 No Environmental Impact Study to support the proposal. Impact on wildlife. Toxic bi-product are unknown. The road will not handle heavy truck movements. What if the plant gets bigger in size. What health impacts will result from the proposal. Foul smells from the production of fertilizer.</p>	<p>4 An Environmental Impact Study is not required for this scale of development. There may be adverse bi-products when applied to the land. The applicant is required to pay a road contribution for road works. The plant can not increase in size without prior consent of Council. Odours from the fertilizer are not known.</p>
<p>5 Extra water use will effect Warbro Brook Creek. Spillage would result in environmental damage. How is methane gas disposed of. No odour study has been carried out. Not suitable to rural zone. How will toxic additives be stored and used.</p>	<p>5 No water is required to run the facility. Methane gases and other odours emitting from the site are not known. Facility is suitable to a rural zone. Toxicity of additives are not known.</p>

Report Implications:

- ***Environmental***

There are no significant fauna and flora species associated with the location of the proposed development, however there may be indirect impacts from groundwater pollution, vermin and land application of compost. However, the minimum design

requirements for the facility will include a DEC licence and a leachate barrier. Odours are expected to emit from the site.

- ***Social***

The proposed composting and fertilizer facility may impact on the amenity of the neighbourhood.

Economic (Financial)

The proposal provides an interim option for the abattoir to dispose of waste which will enable it to continue operation. The abattoir provides employment and economic benefits to the area.

- ***Policy or Statutory***

The application as submitted has been assessed under Section 79 (c) of the Environmental Planning and Assessment Act 1979. However, inadequate information has been submitted to enable a complete assessment. Council has received advice that the proposal may require a licence under the Protection of the Environment Operations Act, as a waste facility, unless the applicant can satisfy Council the application of the compost on the land will maintain or improve its productivity and will not result in deterioration of the land.

RECOMMENDATION:

- A That the applicant be advised that prior to determination of the application, it will be necessary to provide the following additional information:**
- (a) detailed plans providing for minimum design requirements for the composting stockpiling area, in relation to lining, load bearing capacity, hydrological capacity and geotechnical assessment.**
 - (b) written advice by a suitably qualified person demonstrating that the nutrient load in the fertiliser is compatible with soil type of the land and will maintain or improve the productive quality of the land, and will not result in the deterioration of the land into the future.**
 - (c) an odour assessment prepared by a suitably qualified person demonstrating compliance with**

relevant guidelines and pollution control legislation will be achieved.

- (d) details of how it is proposed to control potential vermin so as not to cause potential risks to human health having regard to relevant guidelines.
- (e) advised that road contributions for the proposal have been calculated to be \$15,961.

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R B Pitt
DIRECTOR SUSTAINABLE DEVELOPMENT SERVICES