

Environmental Impact Statement
Project Specific Guidelines
For
Seaton Waterfield/Compost Kings
Composting facility
Lovely Banks Road, Melton Mowbray,
Tasmania

December 2020



ENVIRONMENT PROTECTION AUTHORITY

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I. Information for the Proponent

Purpose

The *Environmental Management and Pollution Control Act 1994* (the EMPC Act) requires the Board of the Environment Protection Authority (the Board) to provide guidance to the proponent about what should be included in the case for assessment.

The Board assesses the environmental aspects of the proposal, while the relevant Planning Authority (Council) assesses planning aspects. The Board has authorised EPA Tasmania to undertake administrative tasks and establish the information base to inform decision making on its behalf.

These project specific guidelines have been prepared based on a permit application (DA 2020/60) for the proposed composting facility by Seaton Waterfield/Compost Kings Tasmania.

Instructions

- This document must be read in conjunction with the *General Guidelines for the preparation of an Environmental Impact Statement* (the General Guidelines).
- The General Guidelines provide detailed instructions on preparing the Environmental Impact Statement (EIS) as well as other information to be provided to the Board for its assessment. These Guidelines are available on the EPA website at <http://epa.tas.gov.au/assessment/assessment-process/guidance-documents>.
- Please ensure you refer to the latest version of the General Guidelines by downloading them directly from the EPA website link above.
- This project specific guidelines document:
 - identifies the key issues which must be addressed in the EIS;
 - the minimum survey requirements and studies required as part of the EIS for key issues; and
 - other information to be supplied for the purpose of the Board's assessment, in addition to that required by the General Guidelines, for both key issues and other issues.

The EIS should be prepared using a risk-based approach. Not all issues nominated in the guidelines will have the same degree of relevance to all proposed activities. Depending on the nature of the proposed activity and its location, some issues may be more relevant than others. **The level of detail provided on each issue should be appropriate to the level of significance of that environmental issue to the proposal.** Refer to the General Guidelines for further instructions on preparing the EIS.

The issue of guidelines should not be interpreted as excluding other matters that emerge as significant from environmental studies, public comments or otherwise during preparation of the EIS. The assessment process may also change the level of risk associated with some of the issues. The level of detail provided in the EIS may therefore change to reflect the level of significance of that environmental issue to the proposal.

NOTE: An assessment cannot proceed to public consultation until the Board has received an EIS that meets the requirements of the General and Project Specific Guidelines, and provides sufficient information to assess the proposed activity (subject to any additional information required in response to public consultation).

Further information on the Environmental Impact Assessment (EIA) process is provided in the *Guide to EIA* available on the EPA website at <http://epa.tas.gov.au/assessment/assessment-process/guidance-documents>.

2. Key Issues

The key issues identified for this proposal, which should be the focus of the EIS, are:

Key Issues	
1	<i>Potential effects of odour from proposed composting activities, particularly in relation receiving and processing fish waste.</i>
2	<i>Potential for contamination of surface and/or ground water with leachate or from other sources related to operation of the proposed compost facility.</i>

Please refer to the General Guidelines and Sections 3 and 4 below for the information requirements associated with these key issues.

3. Survey and Study Requirements for Key Issues

The following surveys and studies will be required as part of the EIS.

Key Issue	Surveys/Studies Required	Relevant Section(s) of General Guidelines
1. Odour	<ul style="list-style-type: none"> Independent odour modelling should be undertaken with regards to the type of waste being composted, proposed composting methodology and management actions, with particular focus on potential impacts on nearby residences (along transport routes and within 5 kilometres of the proposed site – in particular, those residences and other sensitive uses that are downwind of the compost site during prevailing wind conditions). 	6.1

4. Key Issue Information Requirements

The following information is required in addition to the requirements of the General Guidelines for key issues. Some of these requirements will support completion of the surveys and studies as detailed above.

The section numbers correspond to the relevant section of the General Guidelines.

5.1 Planning aspects

- The requirements under this section have been provided by Southern Midlands Council as the planning authority. There may be considerable crossover between Council and the EPA Board's requirements. It will assist Council in undertaking their planning assessment if the following information is provided in the EIS. This may be achieved by providing a separate planning report as an appendix to the EIS, or by tabulating the Council's requirements below and cross-referencing where each requirement has been addressed within the EIS.
- Southern Midlands Council, as the planning authority, requires the following information:
 - The application must include those mandatory requirements as outlined in Part 8.1.2 of the *Southern Midlands Interim Planning Scheme 2015*, that is:
 - Details of the location of the proposed use or development;

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- A copy of the current certificate of title for the site to which the permit sought is to relate, including the title plan and any schedule of easements;
 - A full description of the proposed use or development; and
 - A description of the manner in which the proposed use or development will operate.
- The application must also include a site analysis and site plan, at an appropriate scale, as outlined in Part 8.1.3 of the *Southern Midlands Interim Planning Scheme 2015*, that is:
 - The existing and proposed use(s) on the site;
 - The boundaries and dimensions of the site;
 - Topography including contours showing AHD levels and major site features;
 - Natural drainage lines, watercourses and wetlands on or adjacent to the site;
 - Soil type;
 - Vegetation types and distribution, and trees and vegetation to be removed;
 - The location and capacity of any existing services or easements on the site or connected to the site;
 - Existing pedestrian and vehicle access to the site;
 - The location of existing and proposed buildings on the site;
 - The location of existing adjoining properties, adjacent buildings, and their uses;
 - Any natural hazards that may affect use or development on the site;
 - Proposed roads, driveways, car parking areas and footpaths within the site;
 - Any proposed open space, communal space or facilities on the site;
 - Main utility service connection points and easements;
 - Any proposed subdivision lot boundaries, where applicable.
 - Where it is proposed to erect buildings, a plan of the proposed landscaping:
 - Planting concept;
 - Paving materials and drainage treatments and lighting for vehicle areas and footpaths; and
 - Plantings proposed for screening from adjacent sites or public places.
 - A Traffic Impact Assessment (TIA), prepared by a suitably qualified consultant, is required, incorporating road access design, internal access design, and internal parking layout.
 - The internal access design must demonstrate stormwater management through onsite management to avoid, as far as practicable, discharge of waters into the Council road reserve. Council would anticipate that the internal access would follow natural contours to avoid visual impacts and reduce concentration of stormwaters.
 - Written assessment against the relevant zone standards and code standards by a suitably qualified or competent person. This can be in the form of a 'planning assessment' report. The report must include assessment of land use in adjoining properties, and hours of operation (including vehicle movements).

- Assessment of the impact of the Standard Recommended Attenuation Distance (SRAD), that would be created by the facility per the Attenuation Code should a permit be granted, on land and land use within the area. A diagram demonstrating the full extent of the SRAD must be provided with the document. Council Officers accept that per Part E9.4(a) that Level 2 activities are exempt from the Code, however, use or development of land within the attenuation area will be subject to the Code should a permit be granted.
- Any pre-consultation with adjoining owners, especially those within the SRAD, is strongly encouraged by Council. Written confirmation/assessment of the outcomes of the pre-consultation should be included in the application. Council accept this is not a specific requirement of the planning scheme of the *Land Use Planning and Approvals Act 1993*, however, on merit such actions would further the objectives of the Resource Management and Planning System.

6.1 Air

- An area map showing the location of all potential sources of atmospheric emissions (i.e. materials, equipment and activities including transport, waste management and maintenance) from the proposed composting facility.
- A description of each potential emission source, including the likely composition (i.e. types of constituents), quantities and rates of emissions to the atmosphere.
- An assessment of the potential for emissions to air from the different stages of the composting process (from receipt of input material to removal of product) at the proposed facility. The assessment should cover a variety of conditions including “worst case” scenario and upset conditions, and it should contain information about time (of the day), duration, frequency and likely impact of the atmospheric emissions from the facility in order to establish suitable parameters for air dispersion modelling.
- The results of atmospheric dispersion modelling to assess the impacts of odour and other emissions from the proposed composting facility relative to the requirements of the *Environment Protection Policy (Air Quality) 2004*. Modelling should be conducted by a suitably qualified specialist and in accordance with the *Guidelines for Atmospheric Dispersion Modelling* which can be found at <https://epa.tas.gov.au/Documents/Atmospheric%20Dispersion%20Modelling%20Guidelines.pdf>. It is strongly recommended that the scope and method of atmospheric dispersion modelling be discussed with the EPA’s Air Modelling Officer prior to commencement of any modelling work.
- Discussion of measures to be implemented to avoid or mitigate any potential impacts that may cause environmental nuisance or environmental harm. Consideration should be given to management of potential impacts associated with supply and handling of the odorous raw material as well as potential impacts associated with malfunction of equipment used on the site or limited availability of carbon-rich material. Operation of the proposed facility in adverse weather conditions should also be considered.

6.2 Water Quality

- Details on the proposed hardstand to be constructed, and permeability of the surfaces on site which may be exposed to pollutants/leachate.
- Provide the results of a water balance model, which provides:
 - A basis for designing the capacity of the proposed leachate and stormwater pond(s).

- Confirmation that the proposed leachate and stormwater pond(s) will have enough capacity to hold the expected volume of leachate and stormwater generated at the site, including during high rainfall events.
- Confirmation, including details of proposed water sources, that enough water will be available at the site to support the composting operation.
- If applicable, details of the process for leachate recycling to compost windrows.
- if applicable, details of the irrigation required for disposal of excess leachate, including, the irrigation area, location, frequency, method and estimates of irrigation volumes.
- if there are any circumstances under which discharge of leachate may occur, indicate the nature of those circumstances and potential impacts to the receiving environment.
- It is recommended that water balance modelling be completed on a daily timestep using a relevant historical climate record. However, other modelling approaches may also be suitable. The water balance modelling should include a sensitivity analysis for relevant parameters, such as wet years and storm events, and should be supported by documentation of the modelling method and parameter selection.
- Description of how stormwater will be captured and managed, and how clean stormwater is to be prevented from mixing with contaminated water.
- Describe proposed monitoring and management actions for ensuring leachate does not contaminate surface and/or ground waters.
- Provide details of where vehicle and equipment washdown will be undertaken, the expected quantities of water to be used in washdown, and how this water will be collected, stored, and treated.

6.3 Groundwater

- Describe the seasonal variation in depth to groundwater and direction of groundwater flow.
- Identify risks in relation to leachate/wastewater potentially contaminating groundwater.
- Details of whether there are any groundwater users in the immediate catchment of the proposed composting facility, including a map showing the location of any groundwater bores in the immediate catchment of the proposed composting facility.

5. Other Information Required

The following information is required in addition to the requirements of the General Guidelines for issues, other than key issues.

The section numbers correspond to the relevant section of the General Guidelines.

2 Proposal description

- A clear, step-by-step description of the entire composting process proposed (including a description of the type of composting to be undertaken), from arrival of materials for composting at the site, through to use of final product. Diagrams and site plans should be used where appropriate. This should be discussed in the context of the requirements of the Australian Standard AS4454 – 2012 *Composts, soil conditioners and mulches*.
- Specific design details of the hardstand (materials used, construction methods, permeability standards, etc).

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- Location, dimensions, and capacity of any water supply tanks/dams, settlement ponds, leachate ponds, etc, to be located on site, including details of liquid waste storage requirements at the site to provide for storage of liquid waste when windrow moisture, or climatic conditions, do not allow for immediate incorporation of liquid waste into the windrows.
 - Details of the liquid waste mixing pit, if proposed, including capacity and construction details.
 - Details of vehicle and equipment washdown processes and facilities.
 - Details of quantities, types and origins of fish and other waste to be received at the compost facility, on a daily, seasonal, and annual basis, and any biosecurity risks associated with the use of fish waste for compost.
 - Details of the expected worst-case scenario in terms of fish waste quantities/types, taking into account issues such as normal seasonal patterns of fish mortalities, as well as possible peaks in the number of mortalities (provide details of the causes of these peaks in mortalities, and likelihood/frequency of occurrence).
 - Confirmation and details regarding a reliable source of wood/green waste to incorporate into windrows with fish waste, and proposed alternative options should local wood waste not be available.
 - Details of how materials to be composted will be stored on site until they can begin the composting process.
 - An outline of the expected transportation requirements for the operation of the site (size of trucks, number of trucks per day, routes, etc).

3 Project Alternatives

- An outline of alternative composting techniques, in particular for fish waste, and justification for the chosen method of composting from an environmental performance point-of-view, particularly given that best practice for fish waste composting is generally considered to be in-vessel rather than aerobic windrow composting.
- A description of the site selection process, including details on site selection criteria, alternative sites considered, and an assessment of those alternatives. The assessment should compare alternatives according to clearly defined environmental, social, economic and technical criteria, and provide a justification for the preferred site. Any community consultation undertaken and the effect it had on the selection process should also be detailed.

6.4 Noise emissions

- An indication of the types and sizes of machinery and noise-generating equipment to be used on site, the proposed operating days and hours, and the expected levels of noise to be generated from onsite operations.
- Details regarding number and types/sizes of vehicles to be travelling to and from the site and the potential for noise impacts on residences along transport routes.

6.7 Biodiversity and Natural Values

- There is no requirement for a natural values survey of the proposal site.
- Although there are no eagle nests within 1 kilometre of the site, there are a number of known wedge-tailed eagle nests in the surrounding region. There is the potential for scavenging eagles and other raptors to be attracted to odours from a fish waste composting facility. There is also the potential for vermin to be attracted to the site which are prey for raptors and other

predators, which in turn will increase the risk of eagles, goshawks, masked owls, and other raptors, as well as quolls and Tasmanian devils to be attracted to the site.

- The EIS should outline the potential for the proposed compost facility to attract scavengers, vermin and predator animals to the site, and potential for the resulting increase in roadkill on the nearby access road, and outline measures to mitigate against these risks.
- Details of weeds occurring in the area, and proposed management of declared weeds on site.

7 Monitoring and review

- A plan for testing and monitoring of quality of input materials, including parameters for testing and testing regimes, and management actions which could occur following analysis of results.
- A clearly defined monitoring regime for compost windrows (depending on method of composting to be used), including parameters to be monitored and the frequency of monitoring. A description of the conditions that would trigger specific management actions (to ensure compost quality is maintained and avoidance/minimisation of odour emissions) should also be provided.
- A description of plans for ongoing odour emission monitoring once the compost facility is operational.
- A description of how leachate/wastewater flow, leachate dam level and irrigation volumes (if applicable) will be monitored and recorded.
- Confirmation of which compost product(s), as defined in Australian Standard *AS4454 – 2012 Composts, soil conditioners and mulches*, will be produced at the site, including details of the testing program to demonstrate compliance with the Australian Standard.



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