

Minimum Requirement for a Standard LCA Assessment and Report (Moderate risk)

Report Element	Standard Requirements	Completed
1. Introduction and Background	Report summary/ executive summary.	<input type="checkbox"/>
	Confirmation of Sensitivity Rating.	<input type="checkbox"/>
	Confirmation of any relevant sensitivity overlays (e.g. landslip) as per communications with Council.	<input type="checkbox"/>
	Confirmation that property/parcel(s) meets minimum lot size criteria for COS Planning Scheme Zone.	<input type="checkbox"/>
	Current land use and development overview (including occupancy); single property/parcel, increase in building entitlements (subdivision) or non-domestic development.	<input type="checkbox"/>
	Name, contact details and qualifications (insurances) of LCA assessor (author).	<input type="checkbox"/>
	Site location (including address and property/parcel details) and owner.	<input type="checkbox"/>
	Property/parcel area.	<input type="checkbox"/>
	Proposed/existing water supply.	<input type="checkbox"/>
	Availability of sewer.	<input type="checkbox"/>
	Locality map showing the site in relation to surrounding region.	<input type="checkbox"/>
2. Site Inspection and Field Investigations	Gather information on relevant Council, Water Corporation, Catchment Management Authority and State Government requirements, including restrictions and caveats on title, and planning/building/bushfire/flood controls, e.g. zones and overlays. Note Environmental Significant Overlays, potable water supply and DWSCs. Impose this information on a base map (or site plan) which shows their location with respect to title boundaries.	<input type="checkbox"/>
	Broad overview of locality and landscape characteristics that may pose a constraint to the sustainable application of wastewater on the site and adjacent land, e.g. climatic information, groundwater and bore water information. (Refer to stage 3 pp.34 EPA Code of Practice (2013)).	<input type="checkbox"/>
	Details of date, time and methodology of site inspection and field investigations.	<input type="checkbox"/>
	Site assessment that considers all of the parameters as per Table 1 of the Victorian LCA Framework (2014). Detailed explanation of the level of constraint with regards to DWM and recommended mitigation measures to overcome these constraints.	<input type="checkbox"/>
	Minimum of two soil test pits or auger holes within the identified available effluent management area(s), with additional test pits required for more than one soil type (multiple soil landscapes or facets) as per the current EPA Code of Practice.	<input type="checkbox"/>
	Soil assessment that considers the following parameters from Table 2 of the Victorian LCA Framework (2014): <ul style="list-style-type: none"> • colour and mottling; • electrical conductivity; • Emerson Aggregate Class; • permeability and design loading rate (using soil texture); • pH; • rock fragments; • soil depth; • soil texture (field textural analysis); and • depth to watertable (if required). Detailed explanation of the level of constraint with regards to DWM and recommended mitigation measures to overcome these constraints.	<input type="checkbox"/>

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3. Available Area and Setback Distances	Calculation of available effluent management area and location on the Site Plan.	<input type="checkbox"/>
	Discussion regarding the achievability of the applicable setback distances (Table 5 of the EPA Code of Practice (2013)). Justification required.	<input type="checkbox"/>
4. LCA Confirmation	Confirm the results from Stages 1-3 of the LCA checklist with Council to assess the final Sensitivity Rating for the site to confirm LCA requirements for system selection and design. Provide a Site Plan showing the available effluent management area(s) and completed Sensitivity Pro-forma Checklist.	<input type="checkbox"/>
5. Cumulative Impacts	Using the desktop and site assessment information for the site, comment on any possible cumulative detrimental impacts that the development may have on beneficial uses of the surrounding land, surface water and groundwater.	<input type="checkbox"/>
6. System Selection and Design*	Design maximum wastewater load (generation rates) and organic load for the proposed development.	<input type="checkbox"/>
	Description of existing system (if applicable).	<input type="checkbox"/>
	Target effluent treatment quality.	<input type="checkbox"/>
	Description and location of applicable DWM treatment system options (refer to relevant Locality Report and EPA website for list of currently approved systems).	<input type="checkbox"/>
	List of effluent land application options and detailed description of preferred option and location (as per relevant Locality Report). Sizing of land application area as per the system Sizing Tables detailed in the Technical Document.	<input type="checkbox"/>
7. Mitigation Measures	Detailed discussion of mitigation measures to overcome any site or soil constraints posed to the sustainable treatment and application of wastewater on-site. This may include the following: <ul style="list-style-type: none"> • Storm water management • Soil amelioration; and • Vegetation establishment and management. 	<input type="checkbox"/>
8. Site Management Plan	Description of ways to improve wastewater and DWM system performance for residents' reference.	<input type="checkbox"/>
	Operation and Management Plan.	<input type="checkbox"/>
9. Conclusion	Conclusion summarising all the important design, sizing and mitigation requirements to ensure sustainable on-site DWM.	<input type="checkbox"/>
10. Site Plan Requirements	Site address, including property/parcel number and street number.	<input type="checkbox"/>
	All title boundaries.	<input type="checkbox"/>
	All relevant zones and overlays and/or restrictions (e.g. Council zoning and overlays, including Environmental Significant Overlays and DWSCs).	<input type="checkbox"/>
	Type of catchment (e.g. potable or other special water supply catchment).	<input type="checkbox"/>
	North arrow.	<input type="checkbox"/>
	Location of groundwater bores.	<input type="checkbox"/>
	Contour lines (at maximum 1 in 10m intervals), direction of slope and grade.	<input type="checkbox"/>
	Location of soil test pits or auger holes.	<input type="checkbox"/>
	Location of any significant site features e.g. rock outcrops or waterlogged regions.	<input type="checkbox"/>
	Location of intermittent and permanent surface waterways (dams, creeks, reservoirs and springs).	<input type="checkbox"/>
	Location of 1% and 5% Annual Exceedance Probability flood level	<input type="checkbox"/>

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	contours lines (if applicable).	
	Location, depth and specified use of groundwater bores on the site and adjacent properties from the register of the relevant Rural Water Corporation. Depth to groundwater table in winter (if less than 2.1m deep).	<input type="checkbox"/>
	Vegetation cover (can use aerial image as base map).	<input type="checkbox"/>
	Relevant setback distances as per Table 5 EPA Code of Practice (2013).	<input type="checkbox"/>
	Location of existing and proposed buildings, sheds, driveways, paths and any other improvements.	<input type="checkbox"/>
	Available effluent management area(s).	<input type="checkbox"/>
	Location of proposed land application area (sized to scale).	<input type="checkbox"/>
	Location of proposed stormwater cut-off drains adjacent to the land application area.	<input type="checkbox"/>
	Location of proposed DWM system (nominal).	<input type="checkbox"/>
	Location of reserve land application area (sized to scale).	<input type="checkbox"/>
11. Appendices	Figures	<input type="checkbox"/>
	Site Plan	<input type="checkbox"/>
	Soil bore logs for all test pits or auger holes	<input type="checkbox"/>
	Certificate of Title(s) for property/parcel (plan)	<input type="checkbox"/>
	Proposed building plans	<input type="checkbox"/>
	Planning Permit application (where applicable)	<input type="checkbox"/>
	Septic Tank Permit application	<input type="checkbox"/>
<p><i>* If site is located within Climate Zone 4, then site specific design is required and the Sizing Tables cannot be used. This is due to the higher rainfall and the need to utilise a water balance for design purposes. The LCA is to remain the same, except Stage 6 is to follow the requirements set out in the Detailed LCA Pro-forma.</i></p> <p><i>** Properties/parcels with a Low Sensitivity Rating that are located within a DWSC are required to complete this Standard LCA as per the current EPA Code of Practice requirements.</i></p>		

