Wastewater management guidance for proponents of state significant renewable energy developments and infrastructure

This guidance provides proponents with information about options and expectations for managing wastewater.

Proponents, local water utilities and NSW Government all have a role to play in managing wastewater. This guidance will support proponents of state significant development (SSD) and state significant infrastructure (SSI) to avoid costly delays by navigating pathways for wastewater management as early as possible. Projects can be declared state significant under the *Environmental Planning and Assessment Act 1979* if they are important to the state for economic, environmental or social reasons.

Provide information as early as possible

The development approval process for SSD/SSI projects has 2 key steps requiring consideration of wastewater issues:

- issuing of Secretary's Environmental Assessment Requirements (SEARs)
- preparation and submission of Environmental Impact Statement (EIS).

Each step requires consideration of the proposed project, its expected wastewater management requirements and potential impacts.

Early identification of the wastewater types, loads, and preferred options for managing them can enable projects to progress smoothly through assessment. Recognising potential issues early in the process, before submitting an EIS, can help avoid costly delays.

Quantify wastewater loads by type

Proponents should quantify the different types of wastewater that a project will produce. Types of wastewater may include:

- domestic wastewater (sewage) from site amenities, this may include waste from food preparation and other activities

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- residuals from on-site treatment (septage, waste sludge and effluent)
- liquid waste from construction activities. This is not suitable for disposal to a municipal sewerage system and must be managed separately.

All projects must estimate wastewater loads as early as possible, in the EIS stage. This should include quantification of all water inputs and outputs and the proponent should use this as the basis for its water and wastewater management plan.

At a minimum, and in addition to requirements of the SEARs, information provided in an EIS should:

- identify expected peak and average wastewater loads for the construction and operational phases, including expected volumes, types and timing (design references such as the Water Services Association of Australia's sewerage codes are available for this purpose)
- describe the workforce population and accommodation arrangements (existing accommodation or temporary accommodation camps) for domestic wastewater
- identify if temporary accommodation will be located within an existing sewerage network
- describe any planned on-site wastewater systems, including effluent recycling.

Identifying solutions for wastewater management

Wastewater can be managed by using existing municipal sewerage systems, with on-site treatment, or a combination of both. Choosing the right solution will depend on several factors including:

- loading over the life of the project, including establishment, construction and operation
- viability of on-site treatment options for partial or full treatment
- proximity and availability of a municipal sewerage scheme for direct connection or tankered treatment of waste or treatment residuals
- cumulative load impacts in the region from multiple projects.

Connecting to an existing treatment system will usually be the most cost-effective solution. The primary consideration when choosing a pathway for wastewater management is the capacity of a local sewage treatment system to manage additional loads.

Transferring wastewater to a local sewage treatment facility or connecting to sewer

Proponents planning to treat wastewater at an existing sewage treatment facility should contact the relevant local water utility as early as possible, prior to EIS submission, to discuss:

- whether there will be a direct connection to a local water utility's sewer network (if the source of waste is located within, or close to, a network)

- the connection details within the sewer reticulation network
- the planned transfer details (for example, tanker volumes, frequency and location of discharge)
- expected loads and types of waste, including volumes and quality (for example, sewage, treated effluent, treated residuals or trade waste)
- project timing (commencement dates and expected duration).

The proponent is responsible for engaging with the relevant local water utilities to seek agreement on wastewater management. However, there is no guarantee that a local water utility will be able to accept the volume or type of wastewater produced. The proponent should identify preferred and alternative management methods in the EIS.

Treating wastewater on-site

For many proponents, treating and disposing of effluent on-site will be the most viable solution. This avoids additional truck movements and other factors that may affect the capacity of municipal sewage treatment facilities to accept wastewater. Proponents will need to design, construct and operate plants in line with relevant regulations and guidelines. Package wastewater treatment plants that meet relevant standards are widely available and can be purchased or rented for installation on site.

Local councils are likely to have conditions and policies relating to the use and operation of on-site sewage management and disposal systems, so proponents need to engage early if planning to treat wastewater on-site. This includes management of any residuals following treatment of wastewater with a package plant.

Who can help?

Several agencies assess and manage different aspects of wastewater management for SSD/SSI:

- Local councils regulate wastewater management for private developments unless the development meets certain requirements for licensing. See the Environmental Protection Authority's website on Environment protection licensing for more information.
- The Water Group in the NSW Department of Climate Change, Energy, the Environment and Water assesses applications made through the SSD/SSI process and provides formal advice to the NSW Department of Planning, Housing and Infrastructure to inform project determination and conditions of approval. The Water Group also assesses new or upgraded water and wastewater infrastructure that is owned or operated by local councils under

section 60 of the *Local Government Act 1993*. More information is available on the department's website.

- The department's water enquiries team can help with information and questions:
  - Phone: 1300 081 047 (Monday to Friday 9 am to 5 pm)
  - Email: water.enquiries@dcceew.nsw.gov.au