Wastewater tankering

What is tankering?

Tankering is the removal of wastewater by carting trucks. Tankering may be negotiated to allow a subdivision to proceed in situations where the commissioning of wastewater infrastructure such as pumping stations or connecting link sewers aren't completed.

There are several risks associated with tankering wastewater such as:

- the risks of overflows to the environment
- impact on residents by frequent tanker movements
- financial liability and ongoing costs
 - this includes other sources of water entering the tankered system that has to be removed at the Developer's cost. For example: stormwater runoff from house slabs or ground water infiltration into the sewer system.
- possible conflicts between developers when a tankering point is shared.

Prior to seeking clearance of subdivision conditions: it is our preference that all necessary works be completed and the developer to make every endeavour to connect their new development to the existing wastewater scheme.

Please note: Tankering is only possible on gravity schemes (not vacuum) and only as a last resort. For residential tankering the maximum number of cleared lots allowable for a single tankering point shall be no more than 150. Industrial tankering will only be considered as part of the dependent wastewater infrastructure Contract Award.

Process

To be able to tanker wastewater from your development firstly, you need to provide us with information that allows us to make an assessment of whether your development is suitable for tankering (eligibility criteria).

Once your eligibility has been approved, you will need to provide a strategy containing the specific details of the proposed tankering arrangements.

Please note: You are required to have your eligibility approved before we will review your strategy.

Should your development be eligible and strategy acceptable, you then need to enter into a 'Tankering Performance Agreement'.



Eligibility

We require developers to demonstrate all other options have been considered (including constructing downstream outfall works) and that tankering is the only viable option.

To assess your tankering request, you need to provide the following information:

1. Detail of the works that connects the development to the existing wastewater scheme

For headworks assets, define:

- a) the project (WAPC and project number plus scope, i.e. type 40 WWPS, DN450 gravity sewer)
- b) Scoping report acceptance date, planned or actual
- c) Developer Constructed Works Agreement, planned or actual
- d) Planned project practical completion (PPC) date
- e) Engineering summary report/detailed design date, planned or actual
- f) Planned Project Practical completion (PPC) date
- g) Who is ultimately funding the works (Water Corporation or fully developer funded)

For reticulation works, define:

- Planset number (s)
- Length/diameter of pipe required
- Constraints preventing this pipe being designed and installed prior to desired subdivision clearance data that are beyond the developers control
- Planned Project Practical completion (PPC) date
- 2. This request is for
 - a) Stage number
 - b) Number of lots
 - c) Desired clearance date
 - d) Lots cleared to date
- 3. Number of weeks for desired subdivision clearance date to PPC date of dependant works
- 4. Detailed explanation of why tankering is a viable option and what are the ramifications for the developer if the tankering proposal is refused.
- 5. Detailed explanation of how the residents will not be impacted by tankering operations and how public safety will be maintained. Refer to the Environmental Protection Authority (EPA) guidelines, specifically Guidance Note 3. Developers are expected to have a thorough understanding of EPA guidelines in relation to Tankering of Wastewater. Has a preliminary assessment determined the ability to provide the 100m buffer to proposed lots and existing dwellings
- 6. Estimated tankering duration of actual flows (should not exceed 12 months)



- 7. If applicable, acknowledge from the Developer, they accept Water Corporation as its discretion may approve 3rd party/beneficiary lot connections ahead of dependant outfall works
- 8. Confirmation that the proposed tankering point is not located within a wellhead protection zone. No tankering will be considered within a wellhead protection zone.
- 9. Developer's design engineer or superintendent's assessment for the ability to temporarily cross-connect to a different outfall. Depending on the duration and expected volume of wastewater, the developer may be required to pursue those other options instead of tankering.
- 10. Developer's design engineer or superintendent's assessment for the ability to temporarily pump to a suitable discharge? Depending on the duration and expected volume of wastewater, the developer may be required to pursue those other options instead of tankering.
- 11. Developer details (including ABN and representative contact details)

If there are other options that haven't been considered or fully investigated, the developer will be required to pursue those other options prior to subdivision clearance. The developer should demonstrate why the outfall works can't be constructed

Consideration of tankering eligibility is dependent on past performance of delivering outfall works and prompt payment of all associated tankering bills. A developer will not be eligible for tankering where they have failed to deliver agreed works, or any Company or Company Director associated with a tankering proposal has failed to pay any bills on time.

Tankering strategy

Once a development is considered eligible for tankering, the developer must then provide a strategy that outlines the following specific details:

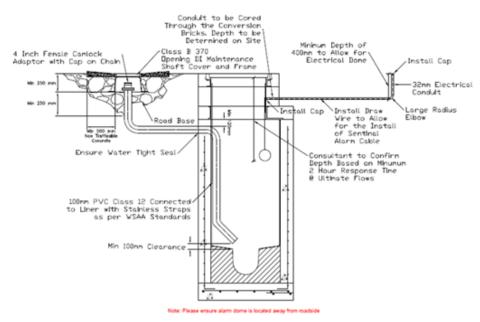
- 1. Name of Site Supervisor and their contact details.
- 2. This strategy is for
 - a) Stage number
 - b) Number of lots
 - c) Desired clearance date
 - d) Lots cleared to date
- 3. Stage timeframe addressing the following:
 - a) Nominated clearance date
 - b) Expected title date
 - c) Expected commencement of building activity
 - d) Expected occupation of dwellings
 - e) PPC dependant works
- 4. Total available storage (m3) and tankering alarm level. Note, if there's less than 10m3, this needs to be flagged and assessed against the likelihood of receiving more than 10,000L in 1 day. Storage and flow calculations to be provided as an appendix
- 5. Estimated frequency of tankering visits as they increase for the duration of the tankering period.



- 6. Plan of tankering point as appendix
 - a) tankering chamber location
 - b) tankering chamber depth maximum 5 metres
 - c) 100m buffer from existing dwellings and residential lots
 - d) Access to the tankering chamber
 - Clearly showing the access route from the existing road network, through the development of the tankering chamber
 - Shall be a minimum of a constructed track no less than 6 meters wide with a turning circle capable of handling an 11,000L truck and have an approval of the relevant local government authority. 11,000L truck turning circle sketch is required to support usability.
- 7. Gradient of track to access chamber.
- 8. Camlock tankering chamber detail including alarm level (Diagram 1)
- 9. Method statement for isolation (High Risk Isolation type is the preferred method refer to the Isolation Guideline in the Developers Manual).
- 10. Confirm that access to the tankering access chamber will be available 24 hours a day, 7 days a week. Including and access information like padlock codes, signage, phone numbers to call etc.
- 11. Traffic management requirements if any, and local government authority approval, where applicable.

Tankering Diagram 1

CAMLOCK TANKERING CHAMBER DETAIL





Tankering Performance Agreement

Following acceptance of the tankering strategy the developer will be provided with a tankering performance agreement.

All subsequent stages of subdivision are required to follow the above process and confirm that the schedule for the outfall works is being maintained and that all tankering costs are being paid on time.

Where the schedule for the outfall works is not being met or tankering bills are not being paid, clearance of further stages will not be considered.

We will return the financial security after the takeover of the outfall works and when all tankering bills have been paid.

Please note: In the Perth Region, we manage the temporary carting of wastewater with the developer being held liable for all associated costs. In all country regions, the developer manages the temporary carting of wastewater at the developer's cost.

Performance clearance milestones and securities

If a tankering strategy is approved the developer must enter a tankering performance agreement and a Land Servicing Performance Agreement (if applicable) and supply a financial security.

The following table details the typical securities required for tankering:

Tankering	\$150,000*					
Sewer headworks assets and connecting reticulation links						
Sewer headworks assets - Where dependent works are funded and delivered by the developer ahead of Water Corporation's 5-year Capital Works Program (or classed as Temporary Works)	150% of the cost estimate of constructing the works					
Sewer Connecting Links (outside WAPC application area) - Where the works are dependent on sewer reticulation works	150% of the cost estimate of constructing the works					



Wastewater outfall clearance milestones

Refer to the below table for the minimum milestones to be reached, prior to applying for clearance of conditions. This predominately relates to wastewater works however water headworks and reticulation are also mentioned in the Clearance Milestone Table for overall clarity.

Works	Funding & Delivery	Res	Residential Development*			Industrial Development		
		Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3	
Wastewater			Developer A		Developer A			
Headworks	Water Corp Funded Developer A Delivered	Scoping Report Accepted DCWA Accepted	Detailed Design Finalised Approvals Finalised	Headworks Start Up	Contract Award	Takeover		
Pumping Stations Gravity Sewers DN375 or larger		Stage 1 + Stage 2 + Stage 3 = 150 cleared lots maximum**						
		Developer B			Developer B			
		Headworks Start Up	Takeover		Takeover			
		Stage 1 = 150 cleared lots maximum**					-	
		Developer A			Developer A			
	Developer A Funded Developer A Delivered	Headworks Start Up	Takeover		Takeover			
		Stage 1 = 150 cleared lots maximum**				1	_1	
		Developer B			Developer B			
		Takeover			Takeover			
Water		Res	Residential Development*		Industrial Development			
Headworks		Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3	
Water Corp Funded Booster Pump Station Developer A Delivered	Water Corp Funded Developer A Delivered	Clearance	Clearance	Clearance	Clearance	Clearance	Clearance	
Tank	Developer A Delivered	Developer A			Developer A			
B1 4 11 41 41 41		Takeover			Takeover			
Distribution Main		Developer B			Developer B			
		Takeover			Takeover			
		Developer A			Developer A			
	Developer A Funded	Takeover			Takeover			
	Developer A Delivered	Developer B		Developer B				
		Takeover			Takeover			
Reticulation	Developer A Funded	Residential Development*		Industrial Development				
		Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3	
Reliculation		Clearance	Clearance	Clearance	Clearance	Clearance	Clearance	
Wastewater	Developer A Delivered	Developer A		Developer A				
and		Retic Start Up			Retic Start Up			
Water		Stage 1 = 150 cleared lots maximum**						
			Developer B		Developer B			
		Takeover			Takeover			
	1			1				

- Clearances within the 100m tankering buffer will not be considered until the need for tankering has ceased.
- Subsequent stages are subject to progression of the outfall works.

More information

For further information please email <u>land.servicing@watercorporation.com.au</u> or call us on **(08) 9420 2099.**

