Government of Western Australia
Department of Water and Environmental Regulation

Decision Report

Application for Works Approval

Part V Division 3 of the *Environmental Protection Act 1986*

Works Approval Number	W3108/2025/1
Applicant	City of Cockburn
DWER file number	INS-0003108 APP-0031521
Premises	Henderson Waste Recovery Park 920 Rockingham Road WATTLEUP WA 6166 Legal description - Lot 202 on Deposited Plan 60443, Lot 2 on Diagram 17988 and Lot 235 on Deposited Plan 226117 As defined by the premises maps attached to the issued works approval
Date of report	14 April 2026
Decision	Works approval granted

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1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the construction and operation of the premises. As a result of this assessment, works approval W3108/2025/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this decision report, the Department of Water and Environmental Regulation (the department; DWER) has considered and given due regard to its regulatory framework and relevant policy documents which are available at https://dwer.wa.gov.au/regulatory-documents.

2.2 Application summary and overview of premises

On 25 September 2025, the applicant submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The City of Cockburn (the applicant) currently holds licence L9159/2018/2 for the operation of Henderson Waste Recovery Park located at Lot 202 on Deposited Plan 60443, Lot 2 on Diagram 17988 and Lot 235 on Deposited Plan 226117, 920 Rockingham Road, Wattleup (the premises). The premises includes an existing green waste receival and transfer facility, which the applicant proposes to upgrade. The works approval application proposes to undertake construction activities required for the development of a new bulk green waste and GO (Garden organics) bin storage area at the premises.

The proposed activities include receiving accumulated green waste from the community drop-off area, direct receival of bulk green waste, direct receival of GO bin green waste from the City of Cockburn kerbside collections, and short-term storage of accumulated green waste for offsite transfer. The proposed new infrastructure will include the following:

- A 65 m x 40 m compacted limestone and recycled asphalt hardstand for the receival, storage and transfer of green waste and GO waste;
- A 15 m x 20 m x 2 m HDPE lined leachate collection sump, including perimeter fencing, gate and safety rope ladder;
- Vehicle access road; and,
- Site fencing and entrance gate.

The premises relates to category 62 solid waste depot and assessed production / design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W3108/2025/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guideline: Risk Assessments* (DWER 2020) are outlined in works approval W3108/2025/1.

2.3 Proposed reuse of leachate for dust suppression and irrigation on capped landfill cell

The applicant has proposed the reuse of leachate for dust suppression and for irrigation activities across the premises, including application to a capped landfill cell. It is DWER's expectation that leachate generated from putrescible waste is contained and managed so as to prevent its discharge to the environment. The Delegated Officer does not support this proposal as it involves discharge of leachate to the environment either directly or as a likely outcome of runoff from application to capped areas.

3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk Assessments* (DWER 2020).

To establish a risk event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises construction / operation which have been considered in this decision report are detailed in Table 1 below. Table 1 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 1: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls (in addition to existing controls in L9159/2018/2)
Construction			
Dust	Dust generated during construction	Air / windborne pathway	Wetting down affected areas via water cart and hoses
Noise	Noise generated during construction	Air / windborne pathway	Low vehicle speed Low frequency reversing beacons (croaker type)
Operation			
Dust	Dust generated during operation of the new infrastructure: Handling of green waste within the new green waste area	Air / windborne pathway	Minimal emissions identified, none that will go beyond the immediate area surrounding the green waste activities. Same operation for the new facility as currently occurs for the existing facility, which does not generate noticeable dust. Water cart and/or hoses wetting down affected areas and material stockpiles.
Odour	Odour generated during operation of the new infrastructure	Air / windborne pathway	No emissions identified due to maximum 72-hour storage of accumulated materials. Same operation for the new facility as currently occurs for the existing facility, which does not generate noticeable odour.
Noise	Noise generated during operation of the new infrastructure	Air / windborne pathway	No emissions identified

Emission	Sources	Potential pathways	Proposed controls (in addition to existing controls in L9159/2018/2)
Leachate	Seepage and spillage during operation of the new infrastructure	Seepage and spillage to soil and groundwater	Asphalt/limestone operational area Sloping operational area to prevent ponding and stagnation within green waste stockpiles, flow directed to HDPE lined leachate collection sump. Surface water diversion away from green waste area Regular removal of accumulated green waste material Lower risk leachate is proposed to be used for dust suppression or irrigation of capped landfill cells. Contaminated leachate is proposed to be incorporated into the landfill leachate system. CQA inspections will be undertaken to verify that the installation of the geomembrane liner has been carried out in accordance with the specifications.
Wind-blown waste - litter	Associated with proposed operational activities	Air / windborne pathway	No emission identified No controls required during operation
Fire/smoke	Fire in green waste storage area	Air / windborne pathway	Regular removal of green waste materials reduces the possibility of heat build-up in the stockpiles resulting in spontaneous combustion. Available water supply for firefighting purposes from onsite groundwater bores. Existing site firefighting infrastructure and capability for rapid fire response. Fire brigade in close proximity.
Fire debris and wash waters	Firefighting activities during operation – Fire in green waste storage area and subsequent firefighting water runoff	Seepage to soil and groundwater	All firefighting debris and wash water will end up in the lined leachate collection sump where it will be captured. The extent of retention within the leachate collection sump will be a function of the extent to which the leachate collection sump liner is impacted by the fire.

3.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2020), the Delegated Officer has excluded the applicant's employees, visitors, and contractors from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 2 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises *(Guideline: Environmental Siting* (DWER 2020)).

Table 2: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	**Distance from prescribed activity**
Residential premises	Closest residential premises is approx. 200 m east of the construction area.
Commercial premises	Closest commercial premises is approx. 235 m west of the construction area.
Environmental receptors	**Distance from prescribed activity**
Groundwater	Groundwater beneath the premises has been observed at depths between 7 and 18 metres below ground level (mbgl). Relative standing water level range is from 0.48 to 1.1 m AHD. The new leachate collection sump invert has been measured to be at a relative level 4.9 with a distance of 3.8 m to groundwater. The Superficial aquifer in this location consists of Tamala Limestone with the base of the aquifer found between 27 to 35 mbgl.
Beneficial users of groundwater	Local groundwater flow direction is inferred to be in a south-west direction. Twelve in-force groundwater abstraction licences are located withing a 500 m radius of the premises with abstraction solely from the Perth-Superficial aquifer. Uses for abstracted groundwater include irrigation for market gardening and turf farming, dust suppression for industrial purposes, and domestic use.
RIWI Act Groundwater Area	The premises is within the proclaimed Cockburn Groundwater Area.
Bush Forever Site 346	Approx. 920 m northwest of the construction area.
Threatened and Priority Ecological Communities (TEC/PEC)	Several located within 200m of the premises boundary.
Threatened Fauna	Several identified surrounding the premises, indicating that native vegetation may be providing habitat.
Regional Parks	Beeliar Regional Park located approx. 920 m northwest of the construction area.
Geomorphic Wetlands – Swan Coastal Plain (Management)	Brownman Swamp – Approx. 1.1 km northwest of the construction area. Lake Mount Brown – Approx. 815 m west of the construction area.

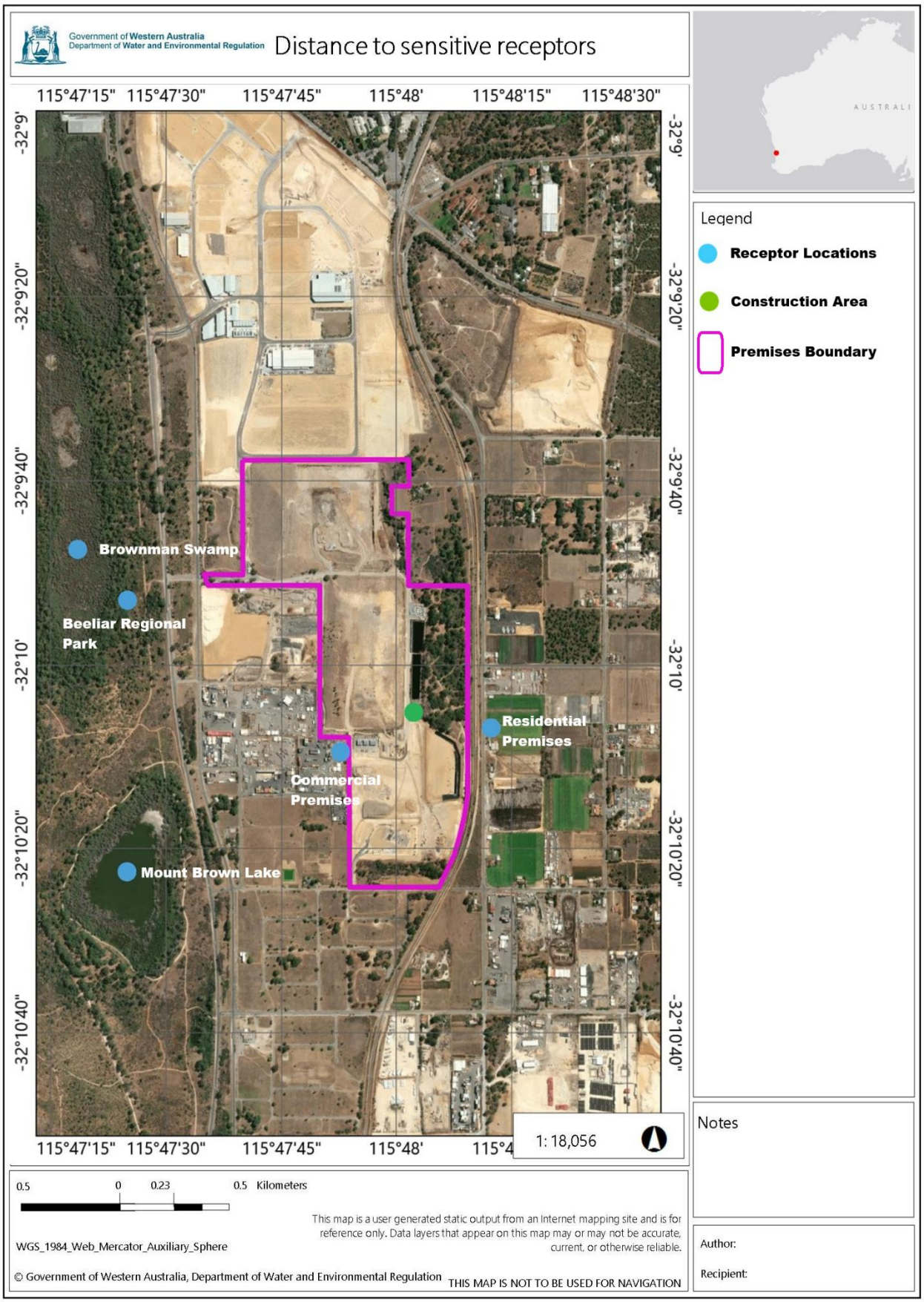

Figure 1: Distance to sensitive receptors

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the applicant has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the delegated officer considers the applicant's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the works approval as regulatory controls.

Additional regulatory controls may be imposed where the applicant's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

Works approval W3108/2025/1 that accompanies this decision report authorises construction and time-limited operations. The conditions in the issued works approval, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence amendment is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the premises. A risk assessment for the operational phase has been included in this decision report, however licence conditions will not be finalised until the department assesses the licence amendment application.

Table 3: Risk assessment of potential emissions and discharges from the premises during construction and operation

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of works approval	Justification for additional regulatory controls / DWER comments
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Construction								
Construction of green waste hardstand and leachate collection sump, including operation of vehicles and machinery	Dust	**Pathway:** Air/windborne **Impacts:** Health and amenity	Residential premises 200 m east of the construction area. Commercial premises 235 m west of the construction area.	Refer to Table 1	C = Minor L = Rare **Low Risk**	Y	N/A	The Delegated Officer considers dust emissions associated with construction activities can be adequately regulated by the general provisions of the EP Act and compliance with Condition 21 in the existing licence L9159/2018/2.
	Noise				C = Minor L = Rare **Low Risk**	Y	N/A	Applicant is required to comply with the Environmental Protection (Noise) Regulations 1997.
	Leachate	**Pathway:** Overland runoff or via seepage (infiltration) to underlying groundwater due to ailure of embankment adjacent to proposed works during construction and operation. **Impacts:** Ecosystem disturbance or potential for impacted groundwater to migrate off-site and impact sensitive water catchments and down-gradient groundwater users.	Residential premises 200 m east of the construction area. Commercial premises 235 m west of the construction area. Beneficial users of groundwater – 12 abstraction bores within 500 m of premises.	Refer to Table 1	C = Moderate L = Possible **Medium Risk**	N	**Conditions 7, 12 and 13**	Proposed works will encroach on existing leachate pond embankments. The Delegated Officer has applied additional conditions to ensure appropriate oversight of embankment stability adjacent to the proposed works during both construction and operation.

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of works approval	Justification for additional regulatory controls / DWER comments
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Operation (including time-limited-operations operations)								
Loading, unloading, storage and handling of green waste Vehicle movements	Dust	**Pathway:** Air/windborne **Impacts:** Health and amenity	Residential premises 200 m east of the construction area. Commercial premises 235 m west of the construction area.	Refer to Table 1	C = Minor L = Rare **Low Risk**	Y	Condition 8	The Delegated Officer considers dust emissions associated with operational activities can be adequately regulated by the general provisions of the EP Act and compliance with Condition 21 in the existing licence L9159/2018/2.
	Noise				C = Minor L = Rare **Low Risk**	Y	N/A	Applicant is required to comply with the Environmental Protection (Noise) Regulations 1997.
	Windblown waste				C = Slight L = Rare **Low Risk**	Y	N/A	The Delegated Officer considers windblown waste emissions associated with operational activities can be adequately regulated by the compliance with Conditions 22 and 24 in the existing licence L9159/2018/2.
	Odour				C = Minor L = Rare **Low Risk**	Y	Condition 8	The Delegated Officer considers odour emissions associated with operational activities can be adequately regulated by compliance with Condition 23 in the existing licence L9159/2018/2.

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of works approval	Justification for additional regulatory controls / DWER comments
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Loading, unloading, storage and handling of green waste Vehicle movements	Leachate containing elevated levels of nutrients or contaminants	**Pathway:** Overland runoff or via seepage (infiltration) to underlying groundwater. **Impact**: Ecosystem disturbance or potential for impacted groundwater to migrate off-site and impact sensitive water catchments and down-gradient groundwater users.	Beneficial users of groundwater – 12 abstraction bores within 500 m of premises. Geomorphic wetlands – closest located ~ 815 m west (downgradient) of the construction area. Threatened/priority ecological community buffers and threatened fauna surrounding the premises	Refer to Table 1	C = Moderate L = Possible **Medium Risk**	N	Conditions 1, 7 and 8.	The Delegated Officer does not support the proposed reuse of green waste leachate on unlined areas as this constitutes a direct discharge to the environment. All leachate generated must be directed to the leachate collection sump. Condition 15, Table 6 of existing licence L9159/2018/2 currently requires containment of leachate; however, this condition will need amending as part of a future licence amendment to include the leachate collection sump.
Fire in green waste storage area	Fire wash waters				C = Moderate L = Possible **Medium Risk**	Y	Conditions 1, 7 and 8.	The Delegated Officer considers fire wash water emissions associated with operational activities can be adequately regulated by the applicant's controls.
	Smoke from fire	**Pathway:** Air/windborne **Impacts:** Health and amenity	Residential premises 200 m east of the construction area. Commercial premises 235 m west of the construction area.	Refer to Table 1	C = Minor L = Possible **Medium Risk**	Y	Condition 8	The Delegated Officer considers smoke from fire emissions can be adequately regulated by the applicant controls and compliance with Condition 20 in the existing licence L9159/2018/2.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk Assessments* (DWER 2020).

Note 2: Proposed applicant controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department

4. Consultation

Table 4 provides a summary of the consultation undertaken by the department.

Table 4: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website from 09 December 2025 to 30 December 2025	None received.	N/A
Applicant was provided with draft documents on 10 March 2026	Refer to Appendix 1.	Refer to Appendix 1.

5. Conclusion

Based on the assessment in this decision report, the Delegated Officer has determined that a works approval will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia. Accessed at: https://www.wa.gov.au/service/building-utilities-and-essential-services/integrated-essential-services/dwer-regulatory-documents
2. Department of Water and Environmental Regulation (DWER) 2016 (as amended 2020), *Guideline: Environmental Siting*, Perth, Western Australia. Accessed at: https://www.wa.gov.au/service/building-utilities-and-essential-services/integrated-essential-services/dwer-regulatory-documents
3. DWER 2017 (as amended 2020), *Guideline: Risk Assessments*, Perth, Western Australia. Accessed at: https://www.wa.gov.au/service/building-utilities-and-essential-services/integrated-essential-services/dwer-regulatory-documents
4. DWER 2019 (as amended 2020), *Guideline: Decision Making*, Perth, Western Australia. Accessed at: https://www.wa.gov.au/service/building-utilities-and-essential-services/integrated-essential-services/dwer-regulatory-documents
5. DWER 2019 (as amended 2024), *Guideline: Industry Regulation Guide to Licensing*, Perth, Western Australia. Accessed at: https://www.wa.gov.au/service/building-utilities-and-essential-services/integrated-essential-services/dwer-regulatory-documents

Appendix 1: Summary of applicant's comments on risk assessment and draft conditions

Condition	Summary of applicant's comment	Department's response
7, Table 2, Item 2 (e)	Applicant recommend changing the reference "leachate collection sump" to "green waste stormwater run-off sump" as this is consistent with the naming of this lined pond in the drawings and removes any confusion with the other leachate ponds on site.	The Delegated Officer did not approve this comment. The infrastructure functions as a leachate sump, not a stormwater sump. Retaining the term "leachate collection sump" is appropriate and avoids misclassification. The condition clarifies that this infrastructure is referred to as the "stormwater collection sump" in Schedule 1, which addresses any potential confusion arising with the drawings.
8, Table 3, Item b	Applicant recommended replacing wording "Not to be stored in dried state" with "Not allowed to dry out (brown in colour)".	The Delegated Officer approved this comment and amended the wording to "Not allowed to dry out (brown in colour)" as proposed.
8, Table 3, Item d	Applicant requested to change the "72 hour" limitation to "5 days", to account for spikes in green waste delivery during peak bulk verge collections and periodic delays in green waste removal.	The Delegated Officer approved this comment and amended the condition to a 5-day limitation as proposed.
9, Table 4	Applicant noted that weighing "each load arriving and leaving the premises" is not possible as a significant quantity of green waste arrives through the domestic drop-off (transfer) facility for which average weights are used for cars and trailers. They are not weighed on entering the premises. However, once the green waste has been consolidated at the drop-off facility, it is weighed before it is transferred to the new green waste area; hence, the same outcome is achieved, but not strictly as per the current condition. Recommended wording "Each load entering and leaving the facility".	The Delegated Officer approved this comment and amended the condition to "Each load entering and leaving the facility".