Government of Western Australia
Department of Water and Environmental Regulation

Amendment Report

Application for Licence Amendment

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

Licence Number	L8904/2015/1
Licence Holder	Cleanaway Solid Waste Pty Ltd
ACN	120 175 635
Application number	APP-0029361
File Number	DWERVT16037~6
Premises	Banksia Road Putrescible Landfill Lot 2 Banksia Road CROOKED BROOK WA 6236 Legal description – Part of Lot 2 on Deposited Plan 65861 as defined by the premises map provided in Schedule 1 of the revised licence
Date of Report	19 September 2025
Decision	Revised licence granted

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1. Decision summary

Licence L8904/2015/1 is held by Cleanaway Solid Waste Pty Ltd (Licence Holder) for the Banksia Road Putrescible Landfill (the Premises), located at Lot 2 on Deposited Plan 65861 Banksia Road, Crooked Brook.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges from the Premises during the proposed capping works. As a result of this assessment, Revised Licence L8904/2015/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department 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

On 1 June 2025, the Licence Holder submitted an application to the department to amend Licence L8904/2015/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Alteration of references to the approved capping of *Stages 1, 2, and 5* to *Stages 2, 3, and 4* to accord with required revisions to staging plans.

The Existing Licence L8904/2015/1 currently provides approval for the construction of three stages of cell capping, being Stages 1, 2, and 5. Stage 1 capping works were completed in 2024, and the Licence Holder is soon to commence the capping of the next portion of the landfill. However, since the Licence was amended to incorporate capping, the Licence Holder has completed the construction and operation of Cell 12A and revised the staged capping plan for the landfill to better suit the current filling program. The next tranche of capping (Stage 2) is not within the original capping footprint as set out in the Existing Licence, and the Stage 3 and 4 capping areas have been amended to include the recently constructed Cell 12A. Hence, there is a need to further amend the Existing Licence to obtain approval for the next three proposed capping areas; Stages 2, 3, and 4.

Initial construction of the landfill began in 2000, and since then 11 landfill cells have been constructed, with Cell 12A, forming the northwest corner of the landfill having recently been completed. Once Cell 12A has been filled, which is anticipated to take three to five years (including filling over surrounding cells), the western side of the landfill will be complete, and this western portion of the landfill can be closed, capped, and rehabilitated.

Due to the delays in obtaining the approval for the construction of Cell 12A (and Cells 9 and 10), landfilling continued for longer than originally anticipated over existing landfill cells (Cell 5 and 6), such that there now is a portion of the southern face of the landfill that has reached the final top of waste design profile and is able to be capped while Cell 12A is being filled.

The submitted Stage 2 capping design drawings provide the detailed design for the proposed capping of this portion of the landfill. The design detail is typically the same as was successfully used for the recently completed Stage 1 capping and will typically be the same for the Stage 3 and 4 capping works. The only change being the shape of the area to be capped, which is a function of the actual filling of the various portions of the landfill.

Appendix No. 3 of the amendment application package provides the ***Stage 2 (Cell 5 & 6) Capping Construction Plans – IW Projects, Revision 0***, which provides the detailed design

for the Stage 2 landfill capping, and a typical indication of the proposed capping design for Stage 3 and 4.

The design of the capping system includes the following components (from bottom up):

- Minimum 500 mm cover material over waste,
- Geosynthetic Clay Liner (GCL),
- 1.5 mm double textured LLDPE liner,
- Geocomposite Drainage Material with A39 geotextile heat bonded to the top and bottom surface,
- 1.3 m to 1.5 m of uncompacted soil growing medium and topsoil,
- Rehabilitation with grasses and shallow rooted shrubs,
- Stormwater control drains:
    - Contour drains,
    - Primary drains,
    - Stormwater control bunds; and,
- Access roads over the capped surface.

The proposed synthetic lining system of a GCL/LLDPE/Geocomposite drainage layer is an accepted landfill capping system for limiting the possible infiltration rate through the cap liner to less than 75% the landfill base liner (GCL/HDPE lining system).

This amendment is limited only to changes to Category 64 activities from the Existing Licence. No changes to the aspects of the Existing Licence relating to Categories 5 or 62 have been requested by the Licence Holder.

Table 1 below outlines the proposed changes to the Existing Licence.

Table 1: Proposed design changes.

Category	Current design capacity	Proposed design capacity	Description of proposed amendment
5	350,000 tonnes per annual period	No change	No change
61	3,000 tonnes per annual period	No change	Noi change
64	350,000 tonnes per annual period	No change	The only change being the shape of the area to be capped, which is a function of the actual filling of the various portions of the landfill.

2.3 Rehabilitation and Closure Plan

On 7 July 2025, the Licence Holder submitted (APP-0029361) a revised Rehabilitation and Closure Plan (V10.1 (July 2025)) for the premises to satisfy condition 20 of the existing licence (as amended 8 July 2025). An assessment of the plan against condition 20 was undertaken, and the Delegated Officer determined that the plan met the necessary requirements when considering the requested amendments and justifications included in the current amendment

application. The Delegated Officer intends to set a revised Rehabilitation and Closure Plan condition as part of current amendment application to address the need for the ongoing submission of technical specifications and construction quality assurance plans pertaining to future capping stages 2, 3, and 4.

2.4 Landfill stability under capping

2.4.1 Capping Stability Assessment

Due to the large number of landfill cells that have been developed and the recent commencement of capping on site, there have been multiple stability assessments undertaken, including confirmation shear testing of actual construction materials, to confirm theoretical parameters against actual site parameters. All these stability assessments, undertaken by multiple geotechnical specialists, have clearly demonstrated that the landfill base and capping designs, site-specific soil parameters, lining materials and construction methodologies result in a stable landform and final capped landfill.

WML Consulting Engineers (WML) undertook an assessment of the original three-stage capping design (previously Stages 1, 2 and 5) and confirmed the stability of the proposed construction.

The stability analysis was based on the worst-case scenario of the finished waste profile being at a slope of 1 (V) in 3.5 (H) and being a continuous slope of 255 m long (maximum slope length for the full landfill cap). This configuration was extracted from the top of waste (TOW) design profile. The outcome of the WML stability assessment was that the proposed cap liner configuration was suitably stable.

The landfill is progressively developed with a pre-settlement top of waste design profile that consists of a maximum side slope of 1 (V) in 3.5 (H) and a top slope of 1 (V) in 20 (H). This is the ultimate finished profile that is being strived for by the landfill operations. In reality, the final waste surface that will be capped will not consist of a slope that is a consistent 1 (V) in 3.5 (H) or 1 (V) in 20 (H) as due to continuous and differential waste settlement, it is extremely difficult for the landfill operations to accurately achieve a uniform slope at a precise, predetermined angle. In addition, other features such as access roads up the side of the landfill, leachate access sumps and landfill gas infrastructure result in the finished waste profile, prior to capping, being irregular and generally of lesser slope than the maximum design slope. Consequently, much of the final slope to be capped will be more gradual and less uniform than anticipated in the top of waste design profile. In the unlikely event that there are areas of final waste profile that are steeper than 1 (V) in 3.5 (H) and hence outside the parameters of the stability assessment, these areas will be cut back slightly to achieve a maximum surface slope of 1 (V) in 3.5 (H).

The design of the capping system includes the following components, from the bottom up:

- Minimum 500 mm cover material over waste,
- Geosynthetic Clay Liner (GCL),
- 1.5 mm double textured LLDPE liner,
- Geocomposite Drainage Material with A39 geotextile heat bonded to the top and bottom surface,
- 1.3 m to 1.5 m of uncompacted soil growing medium and topsoil,
- Rehabilitation with grasses and shallow rooted shrubs,
- Stormwater control drains,
    - Contour drains,
    - Primary drains, and

- Stormwater control bunds; and
- Access roads over the capped surface.

The proposed synthetic lining system of a GCL/LLDPE/Geocomposite drainage layer is an accepted landfill capping system for limiting the possible infiltration rate through the cap liner to less than 75% the landfill base liner (GCL/HDPE lining system). The Licence Holder has not undertaken an independent cap liner infiltration assessment. This capping system design was successfully used in the recently completed Stage 1 capping.

The Stage 2 capping on the southern face of the landfill incorporates that same capping design and construction materials and has a significantly shorter maximum cap length (180 m vs 255 m) and has the same maximum finished waste profile of 1 (V) in 3.5 (H); hence, the WML stability assessment is still relevant to the proposed Stage 2 capping works. However, to confirm the suitability of the WML capping stability assessment, an independent stability review and assessment was undertaken by Civil Mine & Quarry Geotechnics (CMQ).

The independent CMQ review, and assessment concluded: *"The calculated Factor of Safety (FoS) for all five interfaces, considering both peak and residual shear strengths, satisfies each of the nominated DACs (FoS > 1.5 and FoS > 1.2 respectively). Consequently, the results demonstrate that the proposed geometry is viable."* The outcome of the CQA stability assessment is consistent with the previous WML assessment and hence, again, confirming that the proposed capping design is appropriate for the intended purpose.

Due to waste settlement, the actual landfill slope to be lined will be at a lesser angle than the worst-case scenario considered during the stability assessment, which is a conservative position. In addition, over time, the waste mass will settle further, which further lessens the slope angle and hence, making the capped surface more stable.

Slope Stability Assessment – CMQ, 22 April 2025 (supplied as Appendix 7 to the amendment application) provides a copy of the capping design stability assessment.

2.4.2 Long-term Capping Stability

The landfill stability assessments that have been undertaken for the landfill have clearly demonstrated that, at a maximum finished waste profile of 1 (V) in 3.5 (H), using high quality synthetic liner materials and good construction quality control, the constructed capping works will be long-term stable under a wide range of operating conditions.

The long-term stability of a landfill capping system is a function of numerous considerations, and stability failures can occur under different circumstances, these being:

- Surface erosion to a stage where the synthetic liner is exposed to the atmosphere, and consequently reducing the synthetic liner lifespan due to UV degradation;
- Slip-circle failure (slumping) of the waste mass below the capped surface; and,
- Veneer sheer resulting in the landfill capping layer sliding off the surface of the landfill:
    - Minor, localised failure; or,
    - o Major, catastrophic failure.

Surface erosion is an easily observed failure mechanism and is easily repaired. Typically, the sooner the repair, the less the failure impact. Within the context of long-term landfill capping system failures, this minor circumstance can be ignored. The stability failure of a landfill capping system because of the slip-circle failure of the waste mass below is not a function of the capping system, but the stability of the underlying waste mass, typically being a function of the waste slope, waste type and moisture content within the waste mass. If the landfill capping system allows significant volumes of moisture through to the waste mass, as can occur with a compacted clay capping system, then this could contribute to the waste mass failure. This is one of the primary reasons why the international landfill industry has moved away from

compacted clay capping systems and now predominantly utilises synthetic liners as the environmental barrier. With the Banksia Road Putrescible Landfill having a comprehensive, three-layer synthetic lining system and being at a steep slope, which sheds surface water, significant leakage into the waste mass is very unlikely. Veneer sheer slippage is the primary possibility for a landfill capping system failure.

The stability assessment of capping systems focuses on this factor of synthetic liner performance under shear forces. The past stability assessments undertaken on the Banksia Road Landfill capping design have clearly demonstrated that at the maximum finished waste profile of 1 (V) in 3.5 (H), the capping system is stable over the long-term. In addition, as the landfill ages, the waste mass continues to settle; hence, over time, the slope of the landfill cap decrease, which also decreases the shear forces in the capping system, making the cap more stable. Monitoring the shear performance of a landfill cap once it has been constructed is an extremely complicated activity. The shear resistance (friction angle) of each layer interface is accurately known, to identify the shear interface that is most likely to fail (the interface with the lowest friction angle). However, trying to identify where on the capping surface the failure will occur is a challenge. The failure should theoretically occur where the slope is the steepest; however, there are generally large areas of the capped surface that are at the maximum slope of 1 (V) in 3.5 (H); hence, which specific point(s) on the slope are to be monitored. Based on the capping design and the stability analysis undertaken, the geosynthetic clay liner (GCL) internal friction angle is the weakest, albeit greater than the maximum angle of the slope; hence, a stable capping design. The shear forces interface of the GCL is measured externally by applying a shear force to the outside of both sides of the material and measuring the force applied verses the movement (strain) between the two surfaces. To monitor the actual in situ shear force within the GCL, it would be necessary to insert a small strain gauge into the 6 mm thick GCL layer, and to monitor the strain (movement) developed over time. This is not a simple or standard process, and there is no evidence that this has ever been undertaken by a landfill operator. If this was to be considered, then there would need to be significant laboratory testing to develop a peer-reviewed, representative methodology to reliably monitor the internal strain within a layer of GCL. The size of the strain gauge would typically only be a maximum of a few centimeters square, if not smaller; hence, even if numerous strain gauges were utilised, e.g. 10 gauges at 2 cm^2 each = 200 cm^2 , the Stage 2 capped area is approximately 18,850 m^2 , only 0.0001% of the capped area would be tested, and there is no certainty that the gauges would be located where the maximum shear will develop. Effectively, any result that may be achieved, if any, would be highly unlikely to represent the worst-case shear force, and due to the extremely low level of confidence in the result(s), would be of no technical value.

An additional consideration is that differential settlement within the waste mass results in the variable settlement in the surface that could locally increase or decrease the slope angle around one or more strain gauges. This change in slope angle results in localised increased or decreased shear forces, which could potentially impact the strain gauge reading(s). In summary, there is no known mechanism to realistically monitor the in situ internal shear forces within a layer of GCL within a landfill capping system. If there was a testing method identified or developed, the relevance of the strain gauge reading(s) within the context of the actual shear performance of the landfill capping system would be highly disputable. Ultimately, the fact that numerous industry best-practice stability assessments have demonstrated that the capping design is stable, the fact that there are other capped landfills in WA that are steeper than 1 (V) in 3.5 (H) and that there are no know synthetic landfill capping system failures in WA, should provide adequate confidence to the community that the proposed landfill capping system is long-term stable.

2.5 Ongoing leachate management

The Premises landfill leachate management system consists of two fully separate systems, one for the putrescible landfills and another for the tailings storage cells. This report will only address the management of leachate from the putrescible landfill cells, as these are impacted by the

proposed cell capping activities.

The putrescible landfill leachate management system consists of the following components:

- Synthetic base lining system consisting of a Geosynthetic Clay Liner (GCL) and a 1.5 or 2.0 mm HDPE liner, the exception being Cell 1 (compacted clay liner) and Cell 2 (GCL),
- 300 mm coarse aggregate layer and leachate collection pipes in the base of each landfill cell, on top of the synthetic lining system. The exception being Cells 1 and 2, which have sand collection layers,
- A leachate sump into which the leachate collection system flows,
- A leachate extraction system, including piped risers and pumps in each sump, the exception being Cells 1, 2 and 5, which are gravity fed out of the landfill cell base,
- Leachate piping systems directing the leachate to the Primary Landfill Leachate Pond or Leachate Pond 1,
- Four synthetically lined leachate ponds - Primary Landfill Leachate Pond, Landfill Leachate Evaporation Pond 1, 2, and 3, and
- Leachate is pumped from the Primary Landfill Leachate Pond to a further three leachate ponds (Landfill Leachate Evaporation Pond 1, 2, and 3).

The proposed landfill capping design incorporates a thick growing medium (earth) on top of a synthetic lining system. The growing medium absorbs rainfall and retains the majority thereof within the soil structure to sustain the vegetation growth on top of the capped surface. The vegetation slowly consumes the absorbed moisture. The synthetic liner below the growing medium prevents the infiltration of any moisture that may percolate through the growing medium. The lining system includes a geocomposite drainage layer on top of the synthetic liner. This drainage layer provides a preferential flow path that allows the release of any water that may collect on the liner surface. The combination of the hydraulic properties of the capping system ensures that there is minimal moisture ingress into the waste mass below the lined surface. The elimination of water ingress prevents leachate generation within the capped waste mass and hence, over time, the capped landfill portion slowly dries out and ceases generating leachate. The existing leachate extraction system will remain in place until such time as the volumes of leachate recovered from the capped cell are so low as to not require active management by the Licence Holder.

In April 2022, Tonkin, a specialist waste management consultant undertook the leachate water balance assessment utilising the Landfill Site Design Manual published by the Irish EPA (2000) and Hydrologic Evaluation of Landfill Performance (HELP) model. The water balance assessment predicted the volume of leachate generation over the life of the landfill facility and demonstrated that, based on the current stage of development, the site leachate management system has sufficient current capacity to manage leachate generation volumes. The assessment also provided insight into future leachate volumes over the full operational life of the landfill and hence enables the Licence Holder to plan accordingly for future leachate management infrastructure development. Going forward, the Licence Holder will undertake regular assessments of the actual leachate volume generation and compare that to the Tonkin hypothetical assessment in order to determine the model accuracy and hence future forecasting accuracy.

In mid-2024, WSP (previously Golder Associates), was commissioned by the Licence Holder to update the existing leachate balance assessment for a 12-year site operating period, being the anticipated duration to construct and fill the currently approved landfill Cells 12A, 9 and 10. In November 2024 WSP presented the outcome of the leachate balance assessment. The WSP modelling uses conservatively high input rainfall volumes, as recommended by the Victorian EPA Best Practice Environmental Management Guidelines. The model input rainfall volumes are significantly higher than the typical rainfall that has been experienced over the past decade;

hence, the modelling is hypothetical and based on extreme rainfall years. The WSP assessment modelled the current base case of simply using the existing leachate ponds for evaporation, and then progressively modelled the impact of implementing numerous additional leachate management techniques to remove leachate from the water balance.

In summary, the base case clearly showed the leachate ponds progressively filling to maximum capacity within three years, adding surface sprinklers, covering ponds during winter, constructing an additional leachate pond, using a water cart to spread leachate on the active landfill area and developing an enhanced evaporation system all improved the ability of the existing system to manage the forecast leachate generation. In an extreme rainfall period (numerous years of unseasonal heavy rainfall), the current leachate evaporation pond system is inadequate to cater for the modelled leachate generation volumes. However, based on actual seasonal rainfall, Premises activities and real-time monitoring data, the leachate ponds, with surface sprays, are adequately catering for current leachate generation volumes. The WSP assessment report concludes that:

- The Licence Holder monitor and record leachate flow to the ponds by installing flowmeters on all the pipelines reporting to the leachate storage ponds on a minimum daily basis; Monitor and record weekly leachate levels,
- Periodically calibrate the existing leachate estimation model using the actual measurements above to ensure or update the predicted leachate generation trend,
- Furthermore, onsite leachate should be managed in accordance with the Premises Leachate Management Plan, and,
- WPH notes that the annual rainfall in the region has a decreasing trend from 1900. It is possible (but not definitive) that the trend continues in the following years and leads to lower values of leachate generation. It is also noted that the current rainfall set used for the modelling presented has been selected conservatively and led to conservative values for each generation.

Ultimately, using conservative rainfall input data results in leachate generation that does not reflect current levels of generation, and hence, the modelling outcomes are not representative of the current leachate management situation at the Premises. However, the modelling does provide a good representation of the impact of the implementation of various additional leachate management techniques, that could be implemented to dramatically improve leachate management on the Premises, albeit that some of these would take time to implement. So long as the monitoring of the liquid levels in the leachate ponds is ongoing and can demonstrate that there is sufficient freeboard (spare capacity) in all ponds to cater for a short period of extreme weather, the Licence Holder will be able to implement additional leachate management activities should more intense weather patterns become the norm.

Leachate management revolves around the accumulation of leachate in the sumps of the various putrescible landfill cells and then either gravity feeding or pumping the leachate into the leachate ponds. The subsequent capping of completed areas of landfill significantly reduces the generation of leachate. Ultimately, once the complete landfill area has been capped, the generation should decrease to insignificant quantities over time. The capping design includes details on how to seal penetrations through the synthetic liner within the landfill cap. These seals will significantly reduce the percolation of stormwater through the interface around the cap penetrations and hence reduce leachate generation.

In accordance with the conditions of the existing licence, the use of collection for dust suppression activities as part of capping construction works is not approved.

2.6 Landfill Gas

The Licence Holder has developed a Landfill Gas Management Plan for the putrescible landfill facility. The Landfill Gas Management Plan covers the following aspects:

- Premises information,
- Landfill gas generation and Recovery Estimates,
- Landfill gas recovery system,
- Operation and maintenance,
- Monitoring program, and
- Emergency response information.

The proposed synthetic cap lining system will prevent the emission of landfill gas through the capped surface and enable the capture of landfill gas from within the encapsulated waste mass. This significantly improves the efficiency of landfill gas extraction on site and significantly reduces the fugitive emission of landfill gas to the atmosphere.

The capping design includes details on how to seal penetrations through the synthetic liner within the landfill cap. These seals will significantly reduce the emission of fugitive gas through the interface around the cap penetrations and hence reduce harmful greenhouse gas and odour emissions from the capped surface.

The depth of the soil growing medium on top of the synthetic cap surface provides an ability to oxidize landfill gas that may escape through penetrations in the cap or through minor defects within the synthetic liner materials.

In addition to the beneficial impact of significantly decreasing greenhouse gas emissions, the reduction in landfill gas emissions also significantly reduces odour emissions from waste mass.

2.7 Surface water management

The primary function of the surface water management system at the Premises is to ensure that the landfill operational activities and infrastructure are not adversely impacted by stormwater events and that the stormwater management system is able to contain a 1%, 7-day Annual Exceedance Probability (ARP) rainfall event (1 in 100-year event) such that all stormwater is contained on site.

It is designed to ensure that stormwater that contacts the waste does not cause an adverse impact on surface water or groundwater. All water that encounters waste is deemed to be contaminated and hence is directed to the leachate management system. The proposed capping works will have no impact on the landfill operations, as all capping work will be carried out on completed landfill areas, where landfilling has ceased and moved into subsequent landfill areas.

The proposed capping system prevents the contamination of any rainwater falling upon the capped surface and will direct any surface water runoff into stormwater drains; flowing to the edge of the capped landfill area and discharging into perimeter drains running around the landfill footprint. The capping of completed landfill areas significantly improves the diversion of uncontaminated stormwater from the landfill footprint

The Licence Holder has developed an extensive Landfill Rehabilitation and Closure Plan that covers all the activities relating to the closure of waste management activities and the subsequent rehabilitation of portions of the Premises. The proposed capping works form an essential component of this Landfill Rehabilitation and Closure Plan. The capping works have been staged to align with the anticipated completion of waste placement in portions of the landfill. The timing of the capping works will generally occur within 6 to 18 months of the completion of waste placement in the various stages, over the summer construction window. Following the construction of the capping works, the final capped surface will be rehabilitated

with suitable grasses and shallow-rooted native plant species. This will rapidly stabilize the soil surface to limit potential for soil erosion.

The capping of the landfill surface with a deep growing medium will provide a suitable environment for weed propagation. However, weeds are detrimental to the long-term rehabilitation of the landfill surface with native grass and shallow-rooted plant species; hence, the Licence Holder will take necessary actions to identify and control weeds to prevent proliferation. Weed control is an ongoing activity at the Premises, involving regular inspections and control by Premises staff or the engagement of a weed-control contractor by the Licence Holder.

2.8 Dust management

Dust emissions at the Premises are visually monitored on a continuous basis by Licence Holder staff and construction contractors. The Licence Holder maintains a complaints register in accordance with the requirements of the Existing licence.

Capping construction works will be carried out by a competent contractor that is well aware of the Premises site conditions, how to manage dust appropriately, and the Licence Holder's concerns about dust management. Vehicle speed is currently restricted under the exiting licence to a maximum of 20 km per hour on the Premises

Contingency plans will be put into effect during construction works should unacceptably high dust emissions be identified offsite, with the following actions available to improve dust management on site:

- Further restriction of haulage vehicle speed,
- Application of additional quantities of water via water cart,
- Restriction of dust generating activities to the appropriate time of day to reduce dust generation (weather and wind dependent), and
- Utilisation of commercial chemical dust suppressants as a last resort.

The potentially dust generating activities that have been identified above are typically individual activities. If there were two or more of these occurring simultaneously, there is the potential for a cumulative impact being generated. The consequence of this will be highly dependent on the type of activity and the quantity of dust being generated. As there are preventative measures that can be applied (primarily, temporally ceasing the operation), the impact on receptors can be controlled.

2.9 Noise management

There is the potential for noise emissions to be generated during landfill capping construction; however, post-cap construction, there are no noise emissions from capped surface.

To demonstrate compliance with the applicable Noise Regulations, the Licence Holder has undertaken an environmental noise assessment of the site, including the contribution of construction activities, specifically related to Cell 12A, 9, and 10 constructions. This noise assessment remains valid for the proposed capping works, as the works will occur in a similar area, however, utilising less machinery.

This noise assessment concluded that the "*noise modelling and assessment of the noise emissions from the various operating conditions has been undertaken. The result of that assessment shows that noise emissions from the facility will comply with the requirements of the Environmental Protection (Noise) Regulations 1997 at all times".*

The Environmental Noise Assessment was referred to the department's Noise Branch for technical review on 14 July 2025. On 18 July 2025, technical advice from the Noise Branch was provided to the Delegated Officer.

Based on the conditions within licence L8903/2015/1, Herring Storer Acoustics (HSA) conducted a site noise monitoring of the facility in March 2020 and additional noise monitoring between 15 October and 11 November 2020. HSA also conducted noise modelling and assessment of the site in December 2020. The Noise Branch previously reviewed and commented on all these reports. The results demonstrated that noise generated from the facility's typical operation complied with the assigned noise levels at all neighbouring noise sensitive premises.

The Noise Branch has reviewed HSA's environmental noise assessment report prepared on 3 March 2022. HSA 's 2022 assessment not only included noise emissions from the Dardanup Waste Disposal Facility in typical operational conditions, but also the anticipated addition noise impact associated with landfill cell construction activities and excavation of stormwater basins in the western portion of the site. It was expected that the occasional landfill cell construction activities had the potential to impact on the noise levels across the site. HSA's assessment concentrated on the potential increased noise emissions from the proposed new landfill cell construction associated with the development of Cells 12A, 9 & 10 and the Stormwater Basins on the western side of the site.

The Noise Branch understands that the facility's operation hours are 06:00 to 18:00 every day. The facility also accepts tailings from mineral sands processing which are delivered to the site until 20:00. However, all construction activities are limited to 7.00 to 17.00 on Monday to Friday and occasionally between 7.00 to 15.00 on Saturday. There is no construction on Sunday or Public holidays. Hence, the proposed construction work will only contribute to the daytime noise emissions.

The methodology of the noise modelling and the inputs and assumptions used for the modelling seem correct and acceptable, the scenarios selected for the noise modelling seem reasonable, and the modelled results also seem reliable.

Based on HSA's assessed results, daytime noise emissions from the site, including those from the proposed construction activities, will be at least 5 dB below the daytime assigned noise level at the closest neighbouring residence. Therefore, compliance with the daytime assigned noise levels will be achieved, even by including the possible adjustment for tonality or cumulative noise impact. HSA's assessment results also indicate that noise from the proposed occasional construction work will not make a significant contribution to the overall noise emission levels from the facility either.

2.10 Part IV of the EP Act

Ministerial Statement (MS) 1213 was made in relation to the premises on 21 November 2023 MS 1213 provided conditions at the premises relating to the maximum extent or range for development envelope, development height, net greenhouse gas emissions, and project life for landfill Cells 12A, 9, and 10 at the Premises. Cell 12A forms part of the infrastructure affected by the proposed amendment.

A Compliance Assessment Plan (CAP) as required by Condition D2-5 and D2-6 of Ministerial Statement 1213 was submitted to the department on 12 June 2024, in which the licence holder confirmed its intent to llimit development height to 130 m (top of waste at 128 m). Further, as set out in the revised Banksia Road rehabilitation and Closure Plan (V10.1 (July 2025)), the maximum height of the final top of waste contours will be RL 130mAHD (prior to settlement); which aligns with the topography of the adjacent State Forest.

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 and operation which have been considered in this Amendment Report are detailed in Table 2 below. Table 2 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 2: Licence Holder emissions controls.

Emission	Sources	Potential pathways	Proposed controls
Dust	Vehicle movements across unsealed surfaces and soil-covered roadways. Loading and unloading of capping materials by heavy machinery Surface preparation Excavation work Wind erosion and dust lift-off from dry surfaces	Air/windborne pathway	Site-specific Dust Management Plan recently amended to include the development of stormwater infrastructure in the western portion of the site. Roads are wet down by water cart as necessary Wetting down of haul roads and stockpile area Vehicles kept to designated access roads Reduced vehicle speeds Restricted activities during certain weather conditions (strong winds) Application of dust suppressant chemicals if necessary (e.g. Dustex)
Noise	Vehicle movements Loading and unloading of capping materials by heavy machinery Excavation work	Air/windborne pathway	Vehicles kept to designated access roads Reduced vehicle speeds
Sediment-laden stormwater runoff	Water erosion and entrainment of soil particles by rainwater runoff from cap surface	Overland flow	Existing stormwater collection system, which contains all surface water on site for reuse as part of the landfill operations
Landfill leachate	Percolation of rainwater through and release of liquids from buried waste mass	Seepage to soil and groundwater	Landfill capping will decrease leachate generation within the closed portion of the landfill, which, over time, will reduce the volume of leachate requiring management at the Premises

Emission	Sources	Potential pathways	Proposed controls
			Existing leachate management infrastructure
Landfill gas	Decomposition of putrescible wastes under anaerobic landfill conditions	Air/windborne pathway, Lateral migration and eruption	The proposed capping works will reduce landfill gas emissions from the capped cell Landfill gas collection and flaring

3.1.2 Receptors

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

Table 3 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 3: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Residential Premises	• 0.54 km south of the southwest corner of the premises, separated by the Dardanup Conservation Park. • 0.92 km due west of the premises. • 1 km west southwest of the southwest corner of the premises. • 1.2 km southwest of the southwest corner of the premises. • 1.5 km due south of the premises, separated by the Dardanup Conservation Park and Boyanup State Forest. • 1.5 km northwest of the northwest corner of the premises. • 1.5 km northeast of the northeast corner of the premises, separated by the Dardanup Conservation Park and Boyanup State Forest. • 1.75 km east northeast from the eastern boundary of the premises separated by the Dardanup Conservation Park and Boyanup State Forest.
Dardanup Aeromodellers Society, 270 Panizza Rd, Crooked Brook	Approximately 1.3 km north of northern premises boundary.
Environmental receptors	**Distance from prescribed activity**
Dardanup Conservation Park	Adjacent to southern and eastern boundaries of the premises
Boyanup State Forest	Approximately 0.7 km south, and 1 km east of the premises.
Priority Ecological Community	Three occurrences of this PEC occur within the Dardanup

(PEC) – Dardanup Jarrah and Mountain Marri woodland on laterite (P1)	Conservation Park. The closest occurrence is mapped within 15 m of the premises eastern boundary
Priority Ecological Community/Threatened Ecological Community (TEC) – Banksia Dominated Woodlands of the Swan Coastal Plain	An occurrence of this PEC/TEC is mapped adjacent to the southern boundary of the premises, and to the west of the premises on the opposite side of Banksia Road.
Geomorphic wetland: Multiple use Palusplain and Dampland (flat, seasonally waterlogged)	Approximately 400 m southwest through to the northwest of the premises boundary.
Crooked Brook (significant stream)	Located approximately 1100 m south/southwest of the premises boundary flowing in a generally east/west direction. Crooked Brook flows into Preston River approximately 5km downstream.
Preston River	Approximately 5 km west of the premises. Groundwater from the superficial aquifer discharges into the Preston River.
Groundwater	It is understood that the superficial aquifer is present within the Yoganup geological formation between 20 m to 30 m below ground level. It is also possible that further isolated perched aquifers occur under the premises 15 – 20 m below ground level. The permanent, confined Leederville aquifer has been encountered at the site between 35 mbgl and 40 mbgl Groundwater flows in a northwest direction.
Beneficial users of groundwater	Approximately 41 bores are located within 3 km of the premises. Water abstracted from these bores are used for such purposes as: • Stock watering. • Dairy purposes. • Irrigation of pasture. • Domestic use.
Dardanup Water Reserve	The Priority 1 groundwater protection zone for Dardanup Water Reserve is located approximately 2.5 km northwest of the premises.
Priority Flora	• Priority 3 flora species – adjacent to the southeast corner of the premises and approximately 180 m south of the premises. • Priority 4 flora species - approximately 160 m east of the premises.
Fauna - Baudin's black cockatoo (*Zanda baudinii*), Carnaby's black cockatoo (*Zanda latirostris*) and the forest red-tailed black-cockatoo	The remaining vegetation on the eastern side of the premises contains areas of potential black cockatoo breeding habitat as well as foraging and roosting habitat

(*Calyptorhynchus banksii naso*)	

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and considers 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 Licence Holder 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 Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need

The Revised Licence L8904/2015/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. Class III landfill capping and rehabilitation.

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 4. Risk assessment of potential emissions and discharges from the Premises during construction, commissioning and operation.

Risk Event					Risk rating[1] C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
Construction								
Placement of screen and associated equipment including vehicle movements (reversing beepers). Construction of stormwater channels and stormwater sump.	Dust	Air/windborne pathway causing impacts to health and amenity	Rural residences	Refer to Section 5.1	C = Slight L = Unlikely **Low Risk**	Y	Condition 28, 31, 32	N/A
	Noise			Refer to Section 5.1	C = Slight L = Unlikely **Low Risk**	Y	Condition 36	N/A
Operation								
Vehicle movements	Dust	Air/windborne pathway causing impacts to health and amenity	Rural residences	Refer to Section 5.1	C = Slight L = Unlikely **Low Risk**	Y	Condition 28, 31, 32	N/A
Final cap establishment	Sediment laden stormwater	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality	Remnant native vegetation	Refer to Section 5.1	C = Slight L = Rare **Low Risk**	Y	Condition 16	N/A
	Landfill leachate	Infiltration through soil profile with adverse impacts on groundwater quality	Beneficial groundwater users	Refer to Section 5.1	C = Slight L = Rare **Low Risk**	Y	Condition 12, 61, 62, 79, and 80	N/A

Risk Event					Risk rating[1] C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Licence Holder's controls**				
	Landfill gas	Air/windborne pathway causing impacts to health and amenity	Rural residences	Refer to Section 5.1	C = Slight L = Rare **Low Risk**	Y	Condition 14 and 15	N/A
	Odour	Air/windborne pathway causing impacts to health and amenity	Rural residences	Refer to Section 5.1	C = Slight L = Rare **Low Risk**	Y	Condition 37, 38, and 39	N/A

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

Note 2: Proposed Licence Holder controls are depicted by standard text. **Bold and underlined text** depicts additional regulatory controls imposed by the department.

3.3 Proposed amendments to the Existing Licence

There are multiple identified licence amendments that are required to update the Premises Licence to correctly capture future activities. These are set out in Table 5 below.

Table 5: Requested licence amendments.

Condition	Condition description	Required amendment	Justification
20	Final capping	The Licence Holder must ~~prepare and submit to the CEO by 31 March 2022, an updated~~ **maintain an approved** Rehabilitation and Closure Plan for all Landfill Cells. The updated Rehabilitation and Closure Plan must include as a minimum: (a) Details of the design and operation of the phytocap performance trial on Cell 5; (b) Results and recommendations from the phytocap performance trial on Cell 5; (c) A proposed filling schedule and timeframes to achieve final waste contours for all landfill Cells in accordance with ~~Plan 6~~ **Plan 8**, Schedule 3 (note - Plan 8 will need to be replaced with Figure 2, Bank-SK90 in the revised Rehabilitation Plan, also, Figure 2 no longer contains a table of anticipated capping construction timing. The capping timing is provided in Table B: Landfill Capping Events in the revised Rehabilitation Plan, which will need to also be included in the licence and appropriately referenced above), which prioritises the completion of landfill Cells containing waste over the construction and filling of new landfill Cells and justifies where such prioritisation is not possible; (d) The proposed construction specification for final capping for all landfill Cells; (e) Existing surveyed levels of all landfill Cells relative to the proposed final waste contours; (f) Construction quality	The Rehabilitation and Closure Plan (Landfill Rehabilitation and Closure Plan, 2024, Version 10) has been updated and submitted in support of the amendment application. Plan 6 is the incorrect reference. Proposed revised wording to encompass changes is as follows: *The Licence Holder must maintain and implement a Rehabilitation and Closure Management Plan which, as a minimum, includes:* *(a) A proposed filling schedule and timeframes to achieve final waste contours for all landfill Cells which prioritises the completion of landfill Cells containing waste over the construction and filling of new landfill Cells and justifies where such prioritisation is not possible;* *(b) The proposed construction specification for final capping for all landfill Cells;* *(c) Existing surveyed levels of all landfill Cells relative to the proposed final waste contours;* *(d) …*

Condition	Condition description	Required amendment	Justification
		assurance plans for capping works for all landfill Cells; and (g) A capping schedule that ensures that **capping construction is to commence no later than 12-18 months after final waste profile is achieved for each capping stage**.: ~~(i) All portions of landfill Cells that have achieved final waste contours are capped within 18 months;~~ ~~(ii) Cells 7 and 8 are capped within 18 months of reaching final waste contours in each cell.~~	
Condition 75, Table 25	Landfill cell capping - Capping design and construction / installation requirements	Referenced plans and capping stage timeframe to be updated. Row 1: Infrastructure - The reference to "Capping of Stage 1, 2 & 5" needs to be amended to "Stage 1 to 4". Design and Construction/Installation Requirement – "1V:35H" should be "1V:3.5H" and "A34" should be "A39" These are incorrect references. Infrastructure Location – The reference to "Plan 7 in Schedule 3" should be "Plan 8 in Schedule 3". This is an incorrect reference in the licence. Timeframe – This should be changed to "Capping construction to commence no later than 12-18 months after the final waste profile is achieved for each capping stage". If Table B: Landfill Capping Events in the revised Rehabilitation Plan is copied into the licence, this it should be referenced here.	The application is for the next three stages of capping and amends the order of staged capping from the previous Stage 1, 2 & 5 to Stage 1, 2, 3 & 4, with Stage 1 having already been completed. Row 1 capping stage timeframe to be updated to reflect Table B: Landfill Capping Events in the Landfill Rehabilitation and Closure Plan. Correction of typos.
Schedule 3, Plan 7	Final Landfill Contour Plan	Needs to be replaced with Figure 2: Landfill Top of Waste profile Layout Plan from the Landfill Rehabilitation and Closure Plan	Updated plan.

Condition	Condition description	Required amendment	Justification
Schedule 3, Plan 8	Landfill Staging Plan	Needs to be replaced with Figure 1: Rehabilitation Staging Plan from the Landfill Rehabilitation and Closure Plan.	Updated plan. Schedule 3, Plan 8 contains a table of anticipated capping timing. The new Figure 1: Rehabilitation Staging Plan does not contain a table of anticipated capping timing; however, Table B: Landfill Capping Events in the Landfill Rehabilitation and Closure Plan provides the anticipated capping timing. With the licence referencing the timing of capping construction, then Table B will need to be included in the licence and referenced accordingly.

4. Consultation

Table 6 provides a summary of the consultation undertaken by the department. The public advertising period extended for a 28-day period from 1 July 2025 to 29 July 2025.

Table 6: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website (02/07/2025)	None received.	N/A
Local Government Authority (Shire of Dardanup) advised of proposal (02/07/2025)	None received.	N/A
Dardanup Environmental Advisory group (DEAG) advised of proposal (02/07/2025)	None received.	N/A
Registered stakeholders advised of proposal (02/07/2025)	Submission letter received 15/08/2025 - Refer to Appendix 1	Refer to Appendix 1
Licence Holder was provided with draft amendment on (20/08/2025)	The only comment CWY has relating to the *Draft* is in Condition 21. This requires the submission of certain information for the Stage 2 capping of which, seemingly based on the Condition set, CWY may not meet as we submitted the application in June 2025 therefore not meeting that "6 month prior to	Noted. As Stage 2 capping works technical documentation has been received, reference to Stage 2 has been deleted from amended condition.

	commencement" requirement. As previously discussed CWY wish to commence the works in October 2025.	

5. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

5.1 Summary of amendments

Table 7 provides a summary of the proposed amendments and will act as a record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

Table 7: Summary of licence amendments

Condition no.	Proposed amendments
13(f)	Amended for clarity. In reviewing capping specifications within the Licence as part of the assessment of this amendment, the Delegated Officer has identified ambiguity and amended the condition to clarify approved leachate reinjection.
20	Condition amended to replace requirement for Rehabilitation and Closure Plan submission to implementation and maintenance.
21	New condition added requiring Licence Holder to prepare and submit to the CEO technical documentation specific to each stage of capping works a minimum of six months prior to the commencement of stage 2, 3, or 4 capping works.
79, Table 24: Notification requirements	Correction of erroneous condition references.
80, Table 25	Caping infrastructure description and details amended.
83	Capping stage references amended.
Schedule 3: Plans, Plan 7: Final landfill contour plan	Revised plan substituted.
Schedule 3: Plans, Plan 8: Rehabilitation staging plan	Revised plan substituted. Anticipated capping timing has not been conditioned within the Licence as the notification requirement (6 months prior to capping works commencing) for each capping stage is considered as sufficient notification, whilst providing flexibility around capping dates.

Schedule 3: Plans, Plan 9: Stage 1, 2 and 5 Capping – Overview of stormwater infrastructure	Plan title amended. Revised plan inserted.
Schedule 3: Plans, Plan 10: *Stage 1, 2 and 5 Capping – Cross section of typical stormwater drains (1)*	Plan title amended. Revised plan inserted.
Schedule 3: Plans, Plan11: Stage 1, 2 and 5 Capping – Cross section of typical stormwater drains (2)	Plan title amended. Revised plan inserted.

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.

Appendix 1: Summary of received stakeholder comments on amendment application

Comment number	Stakeholder comment	Department's response
1	*I am not sure why the order of capping requires a change when the there (sic) has been NO change to the filling schedule listed in the Licence or in the Time Limited Works Approval.*	As set out in section 2.2, The Existing Licence L8904/2015/1 currently provides approval for the construction of three stages of cell capping, being Stages 1, 2, and 5. Stage 1 capping works were completed in 2024, and the Licence Holder is soon to commence the capping of the next portion of the landfill. However, since the Licence was amended to incorporate capping, the Licence Holder has completed the construction and operation of Cell 12A and revised the staged capping plan for the landfill to better suit the current filling program. The next tranche of capping (Stage 2) is not within the original capping footprint as set out in the Existing Licence, and the Stage 3 and 4 capping areas have been amended to include the recently constructed Cell 12A. Hence, there is a need to further amend the Existing Licence to obtain approval for the next three proposed capping areas; Stages 2, 3, and 4.
2	*I am not sure it can even be really said there is a Condition in the Licence that mandates a filling schedule for the Landfill Cells. The closest the Licence comes to this appears to be through reference to Plan 8 in Schedule 3, which in an (sic) table inset into the plan provides an indicative rehabilitation schedule.*	Plan 8 in Schedule 3 depicts the rehabilitation staging for the stages of the landfill. These stages correspond with conditions of the licence, and so the insertion of a revised plan required alterations to the related licence conditions.
3	*What is not clear if this revision submitted in July satisfied the requirements of Condition 20 of Licence Amendment of 8/7/25 (APP-0028995) or is this still to come and will further Licence updates still be required as a result?*	The Licence Holder submitted a revised Banksia Road Rehabilitation and Closure Plan. The department has assessed the document and determined that the plan is suitable to demonstrate compliance with the requirements outlined in Condition 20, noting that an amendment to reflect the new revised capping stages had been submitted at the time the document was submitted. As such the revised plan contains reference to the new capping stages and Condition 20 has been updated accordingly to reflect the new capping stages.
4	*Why not take the opportunity to pause for a moment, consider all of the raft of changes currently proposed, how they fit (or don't fit) with each other, along with the other changes and additions made to the Licence over the past 2 years, and clean it up, remove the ambiguities, and maybe future proof it.*	The scope of the amendment is limited to that set out in the Licence Holder's application. Redundant conditions may be reviewed and deleted as part of a future licence review once the current licence amendment application has been assessed, and outstanding appeals against the past grant of decisions in relation to the Licence have been finalised.

Comment number	Stakeholder comment	Department's response
4	*Does the filling schedule to be approved in this Amendment match that described in the Cell12A Amendment, and how do these align with the construction and commissioning and filling schedules for Cells 9 & 10 approved in Works Approval WA6855-2023-1 and are these consistent with the updated Rehabilitation and Closure Plan for all Landfill Cells required by 31 July 2025.* *Or perchance will the Licence need to be amended again in a few weeks?*	Revised plans have been provided for inclusion in the amended licence, and a future licence amendment relating to the ongoing operation of Cell 12A is currently under assessment by the department.
5	*Should there be concern that there are some obscure changes tucked away in these documents that will have a major impact on the community?*	Any applications (along with submitted supporting documentation) relating to this premises licence are provided to direct interest stakeholders for comment, and made publicly available on the Departments website during the public consultation period. Any proposed changes to the licence are risk assessed in accordance with department's Regulatory Framework.
6	*How far is the Condition 20 in the latest Licence from that in the Proposed Amendment?*	All alterations to existing conditions, and any new conditions inserted into an amended licence, are set out in the associated Amendment. Report. Refer to Table 7: Summary of licence amendments for the details of condition amendments.
7	*The removal of all references to the Phytocap trail is long overdue, and inclusion of the revised plans and tables obvious (providing there are the correct versions and consistent throughout).*	Noted.
8	*Rather than setting calendar date targets the inclusion of the requirement for A capping schedule that ensures that capping construction is to commence no later than 12-18 months after final waste profile is achieved for each capping stage sensible, although a timeframe of 6 to 12 months would be preferable.*	Noted.

Comment number	Stakeholder comment	Department's response
9	*The proponents request to change the wording to "**The Licence Holder must ~~prepare and submit to the CEO by 31 March 2022, an updated~~ maintain an approved Rehabilitation and Closure Plan for all Landfill Cells"** is supported in principle, however probably needs some more thought. I assume that every time the proponent makes a correction to, or fine tunes the Rehabilitation Plan, DWER is not expecting a Licence amendment to be enacted.*	The department does not assess or approve each iteration of the Rehabilitation and Closure Plan prepared by the Licence Holder. The Delegated Officer has inserted a revised Rehabilitation and Closure Plan condition as part of the licence amendment to address the need for the ongoing submission of technical specifications and construction quality assurance plans pertaining to future capping stages 2, 3, and 4.
10	*The Licence needs to recognise this and allow for operational fine tuning within limits which do not require the proponent needing a Licence Amendment each time they optimise their operational or management plans.*	Licence amendments are required where there are material changes proposed which would alter the emissions profile for the premises.
11	*How is the Rehabilitation and Closure Plan approval maintained?*	The Rehabilitation and Closure Plan is prepared by and maintained by the Licence Holder in accordance with the requirements of the licence.
12	*To me, the replacement of a due date with some type of maintain (update/review) and approve is a welcome and positive step, and I would go as far as recommending that a number or other "task orientated Conditions" should also be similarly approached.* *Conditions to which this could provide a positive outcome include;*	Noted (Refer to specific responses below).
13	***Condition 17 & 18**; on construction of and compliance of the construction of the southern boundary drain could deleted and reporting on the operation and maintenance of the drain included in the annual Environmental and Compliance Report.*	The scope of the amendment is limited to that set out in the Licence Holder's application. Redundant conditions may be reviewed and deleted as part of a future licence review once the current licence amendment application has been assessed, and outstanding appeals against the past grant of decisions in relation to the Licence have been finalised.
14	***Condition 22 Capping and Rehabilitation Plan for TDS Cell –** as the plan has been accepted by DWER and is currently being enacted this should become a monitoring and reporting program.*	

Comment number	Stakeholder comment	Department's response
15	***Condition 46 Fire Management Plan*** *One can only question why Cleanaway were given an extension of 30 days to complete their Fire Management Plan when they have already had six months to complete it? At least The Fire Management Plan has conditions requiring its maintenance and implementation, and annual testing.*	To complete the Fire Management Plan, an extensive revision to the bushfire management plan was required to reflect current conditions and infrastructure.
16	***Condition 61 & 62 Leachate Plan*** *– how out of date are these Conditions?* *The Plan was to be submitted in March 2022 and was to be implemented no later than 1 January 2025 – has it been implemented?* *Is it not time for these Conditions to be removed and replaced with a Condition requiring the Leachate Plan to be maintained and approved? (also improved)*	The scope of the amendment is limited to that set out in the Licence Holder's application. Redundant conditions may be reviewed and deleted as part of a future licence review once the current licence amendment application has been assessed, and outstanding appeals against the past grant of decisions in relation to the Licence have been finalised.
17	***Conditions 65, 66 Dust Monitoring*** *These conditions are almost prehistoric with a sampling and analysis plan to be submitted by January 2022 and a report recommending if any future monitoring was required no later than 60 days after completion of sampling.* *Despite there being four Conditions specify management actions for dust suppression, there is no requirement of ongoing evaluation of the effectiveness of these conditions, no maintain and approve, definitely NO IMPROVE and no Adaptive Management.*	
18	***Condition 68 Hydrological Risk assessment****. Again, a March 2022 requirement, does this require follow up or can it be deleted?* *Some if not all of the ongoing requirement for these are, or should be included in Condition 75 Annual Environment Report.*	

Comment number	Stakeholder comment	Department's response
19	*The key point in all this is that continual ad hoc and uncoordinated amendments are making the Licence more complex, the Conditions are becoming less specific and measurable, with no evidence that there are suitable or attainable.*	