



Application for Works Approval

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

| | |
|------------------------------|---|
| Works Approval Number | W6441/2020/1 |
| Applicant | Yeeda Pastoral Company Pty Ltd |
| ACN | 094 819 717 |
| File Number | DER2020/000389 |
| Premises | Yeeda Station 210 Great Northern Hwy ROEBUCK WA 6725 Legal description – Part of Lot 254 on Plan 220707 As defined by the coordinates in Schedule 1 of the works approval |
| Date of Report | 24 November 2020 |
| Proposed Decision | Works approval granted |

1. Purpose and scope of assessment

Yeeda Pastoral Company Pty Ltd (the applicant) proposes to construct an extension of their existing cattle holding yards at the Yeeda Pastoral Station, located about 110 km east of Broome and 100 km south of Derby. An application for works approval was submitted by the applicant under Division 3 Part V of the EP Act on 4 September 2020.

This report sets out the delegated officer's assessment of risks arising from emissions and discharges that will be generated during works and subsequent operations at the premises.

In completing the assessment documented in this 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>.

1.1 Application details

The applicant proposes to extend an existing set of cattle holding pens at the premises, which will trigger the threshold for prescribed activity Category 55 – livestock holding yards. The cattle pens are located on an existing prescribed premises known as the 'Yeeda liquid waste facility', which is used for the disposal of wastewater from the adjacent Colourstone abattoir and is subject to licence L8989/2016/1.

The below table describes the prescribed premises category the application is subject, as defined in Schedule 1 of the EP Regulations.

| Classification of premises | Description | Assessed design capacity |
|----------------------------|--|--|
| Category 55 | Livestock saleyard or holding pen: premises on which animals are held pending their sale, shipment or slaughter. | 30,000 animals per year (2,500 animals at any one time) |

Following completion of the works, the applicant will be required to submit a licence amendment to extend the prescribed premises boundary to include the newly constructed pens (Figure 1 refers).

1.2 Description of proposed activity

The proposed holding pens will have a nominal operating capacity of 1,000 animals (740 Standard Cattle Units, SCU) at any one time, with a maximum design capacity of 2,500 animals (1,850 SCU). The purpose of the pens is to hold cattle prior to their slaughter at the adjacent Colourstone abattoir, with the duration of stay expected to be less than 10 days. The pens are specifically designed as holding and drafting pens for the abattoir.

The pens will operate during the months of March through to early December, with operations closed during the wettest months of late December, January, February and into March. This is consistent with the trading patterns of the Colourstone abattoir (L8977/2016/1), which is 800 m south of the Yeeda liquid waste facility.

The applicant is proposing to remove all animal waste from the holding pens before the December shut down to reduce the level of contaminated run-off from the wet season storm water events. Surface water run-off from the pens will be directed to drainage channels that lead to a final catchment dam. The dam will measure about 30 m x 70 m and will be 2 m deep (with a 1 m operational freeboard) and is designed to hold 4,200 m³ of water with a high surface area to volume ratio to aid evaporation. The applicant has calculated the required catchment dam size based on the 2016 intensity, frequency, duration (IFD) modelling for the location. The data produced 301 mm in a 72-hour period with a 5% probability.

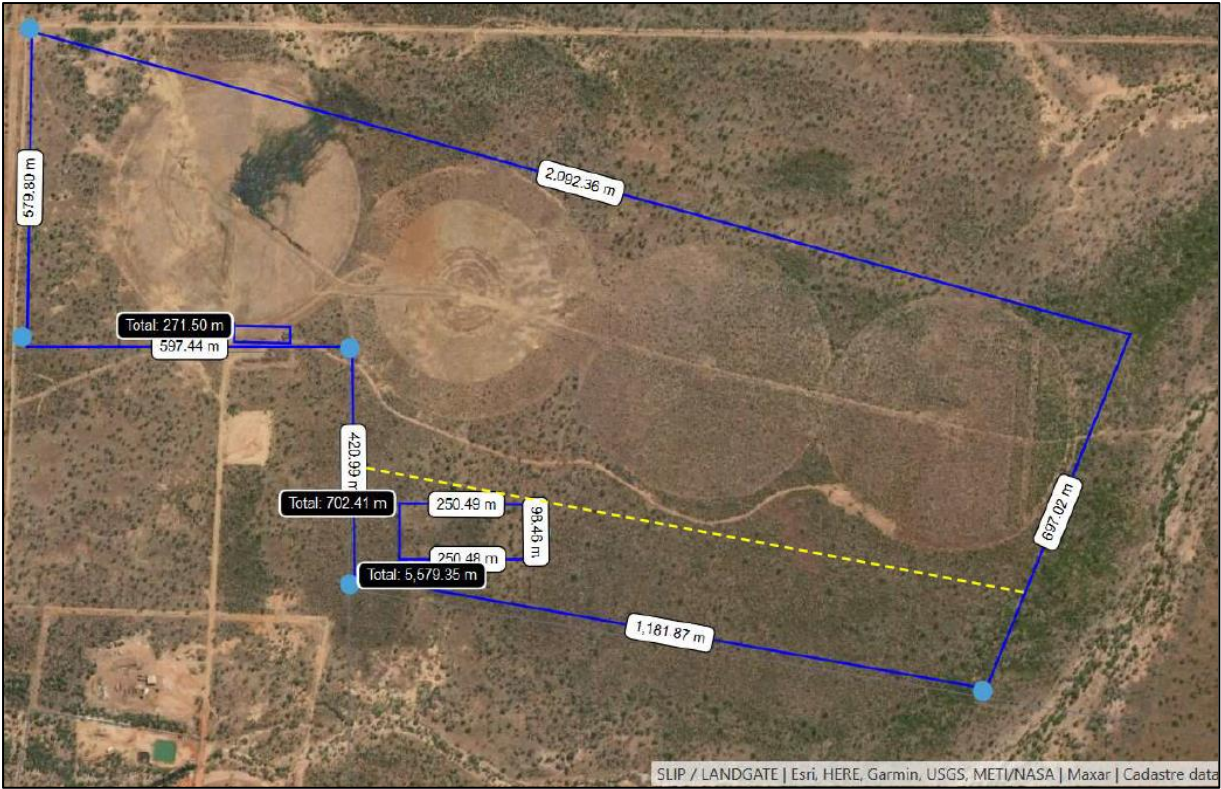


Figure 1: Location of proposed holding pens extension against current licence L8980/2016/1 (current southern prescribed premise boundary in yellow)

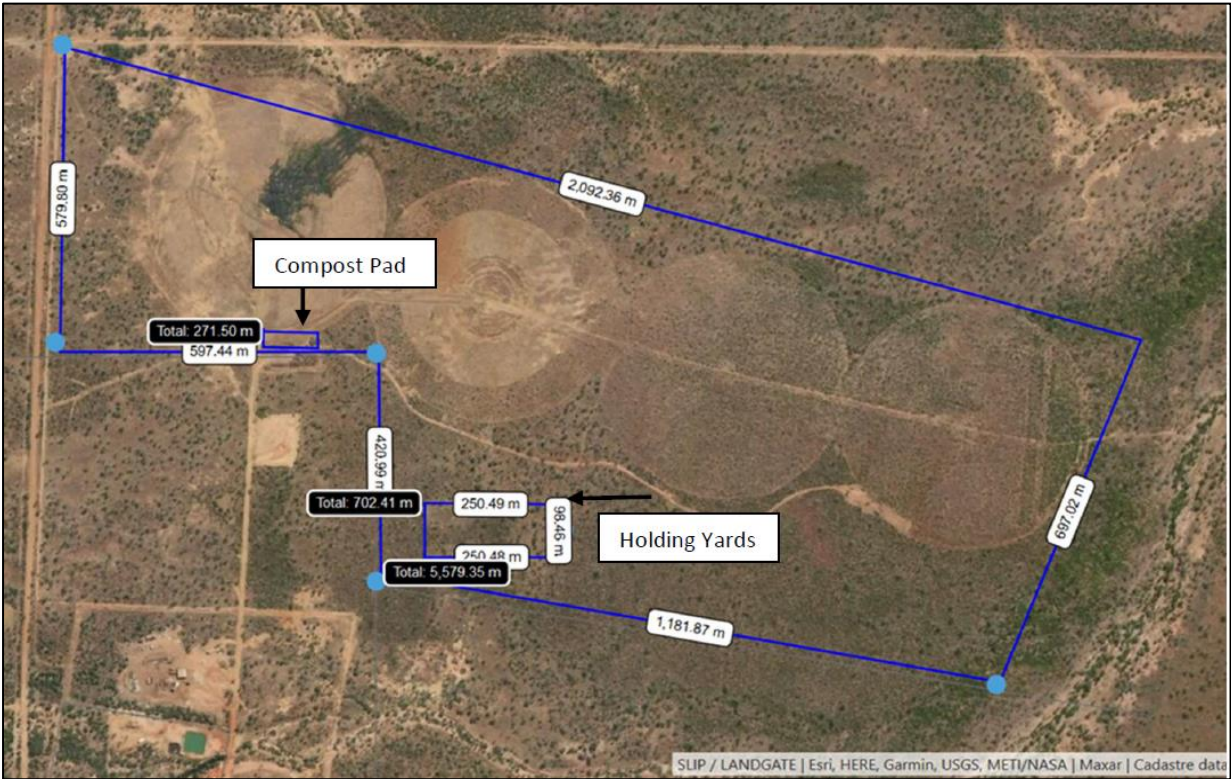


Figure 2: Proposed location of holding pens

The below chart shown shows the average rainfall at Derby Airport (60 km northeast of the proposed works approval location), which shows monthly averages around 200 mm in the high rainfall months of January to February, reducing to 130 mm in March. The design capacity of the catchment pond is based on assessment of 301 mm over a 72-hour period.

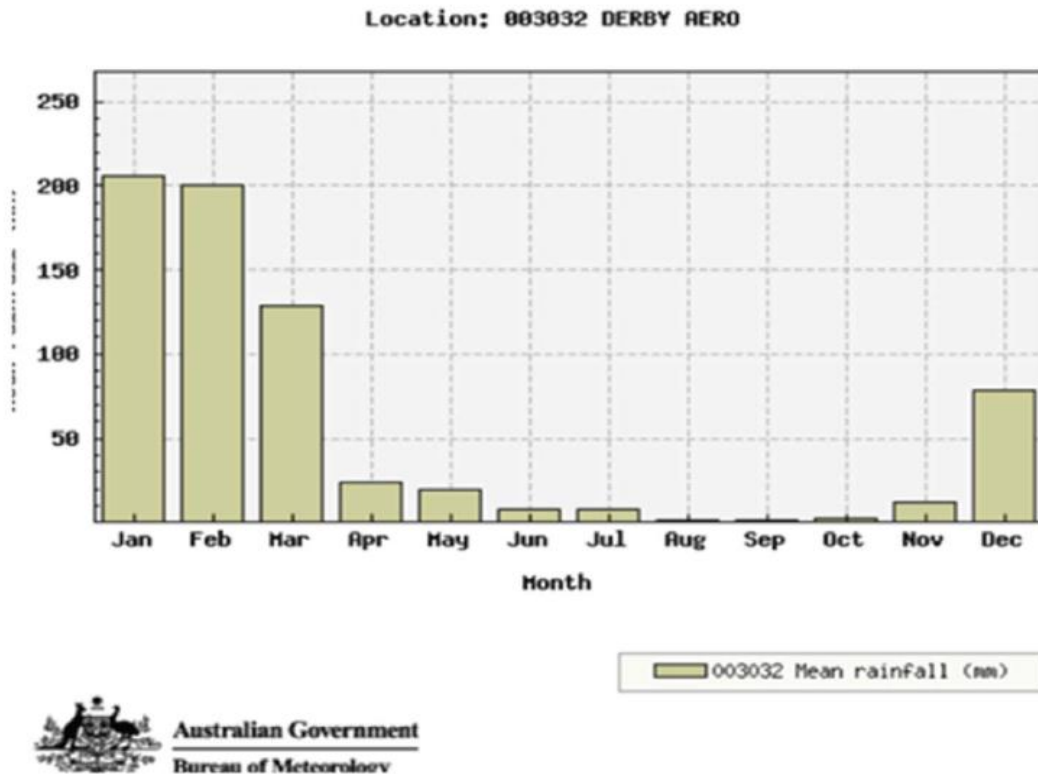


Figure 3: Monthly average rainfall at Derby Airport

Water stored in the catchment dam will disperse through evaporation, with annual evaporation rates at 3,300 mm, well in excess of annual rainfall rates of approximately 622 mm. The dam is expected to be dry for 7 to 8 months of the year.

Solid waste generated on site will include manure, which will periodically be removed from the holding pens and stored on an existing compost pad at the Yeeda liquid waste facility. Animal carcass acceptance is also regulated under the same licence and will be deposited onto the compost pad. A licence amendment will be required to accept the additional waste.

1.3 Infrastructure table

| Infrastructure | Description |
|---|---|
| Additional 9 holding pens (16 in total) | Constructed of compacted gravel graded to the outside of the yards. The size for the total site when completed will be approximately 175 m x 100 m. |
| Drainage channels | Drainage channels constructed of compacted gravel will divert water to the evaporation dam. |
| Catchment dam | The clay lined 30 m x 70 m in size. Compacted clay base with 1m of bunded freeboard to prevent overtopping and be 2.0 m deep. |

| Infrastructure | Description |
|----------------------------------|--|
| | It is designed to hold up to 4,200 m ³ of water and specifically designed to have a high surface area to volume ratio to aid the evaporation process. |
| Groundwater monitoring bore YMB5 | Designed and constructed in accordance with ASTM D5092/D5092M-16: Standard practice for design and installation of groundwater monitoring bores. |

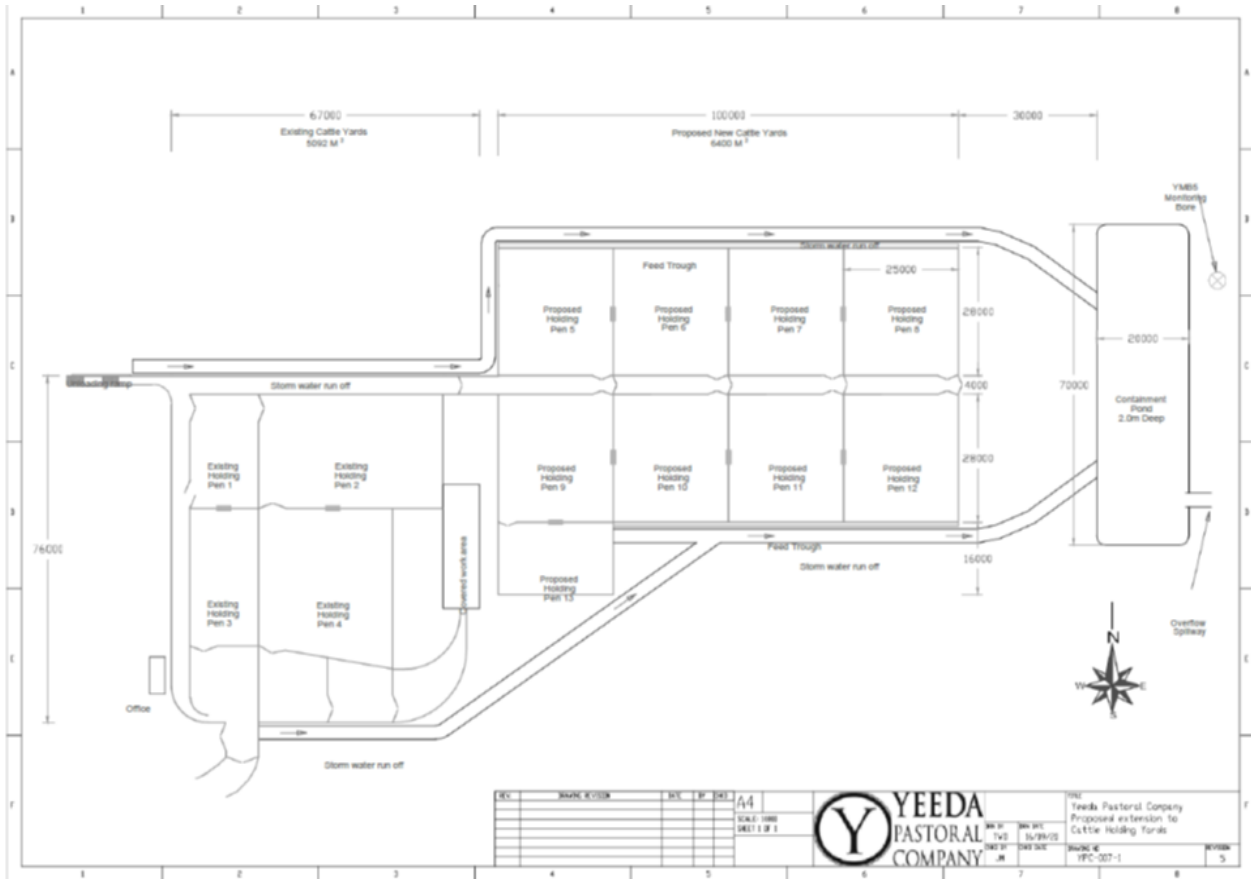


Figure 4: Proposed infrastructure for additional holding yards

1.4 Construction and proposed timeframes

Construction will take up to 2 months and will consist of minor earthworks, for construction of the pens (galvanised posts set in concrete), stormwater drainage channels, catchment pond and construction of monitoring bore YMB5.

2. Environmental siting

In accordance with the *Guidance Statement: Risk Assessment* (DER 2017), the Delegated Officer has excluded employees, visitors, and contractors of the applicants from its assessment. Protection of these parties often involves different exposure risks and prevention strategies and is provided for under other state legislation.

Table provides a summary of potential human and environmental receptors that may be impacted because of activities upon or emission and discharges from the prescribed premises (*Guidance Statement: Environmental Siting* (DER 2016)).

Table 2: Sensitive receptors and distance from prescribed activity

| Human receptors | Distance from prescribed activity |
|--|--|
| Residential Premises – Bidan (Bedunburra) Aboriginal Community – approximately six residences | 1.6 km south-west of the proposed holding yards |
| Environmental receptors | Distance from prescribed activity |
| Non-perennial lake | Approximately 1.8 km to the south of the proposed holding yards |
| Perennial River – Little Logue River | Approximately 1.1km m to the east of the holding yards |
| Ephemeral Creek which flows at the peak of the wet season | Approximately 450m to the south of the proposed holding yards |
| Ephemeral creek system – minor watercourse – tributary of Little Logue River | Watercourse initiates within northwestern corner of (amended) Premises boundary flowing north (off the Premises) and then east approximately 1.1km from the proposed holding yards |
| Groundwater is considered fresh. Water is not used for potable purposes but is used for stock water supplies | Depth to groundwater encountered at approximately 15 mbgl |

3. Legislative context

The Shire of Derby-West Kimberley (the Shire) was consulted at the time of the works approval application on 21 September 2020 to determine if the applicant had obtained the relevant planning approvals and to seek comment on the proposal.

The Shire is currently assessing whether a planning application is required under local planning laws and will advise the department of their determination.

4. Consultation history

Table 3: Consultation history

| Consultation method | Comments received |
|---|--|
| Application advertised on the department's website (21/09/2020) | Environs Kimberley requested to be added to the stakeholders list for the site |
| Shire of Derby-West Kimberley advised of proposal (21/09/2020) | No comments received |
| Other Stakeholders Resident - advised of proposal (21/09/2020) | No comments received |
| Bidan (Bedunburra) Aboriginal Community | No comments received |

5. 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 *Guidance Statement: Risk Assessments* (DER 2017).

Works approval W6441/2020/1 that accompanies this report authorises construction and time limited operations. The conditions in the issued works approval have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015). A licence is required to authorise emissions associated with the operation of the premises i.e. holding of animals in the yards. A risk assessment for the operational phase has been included in this report, however licence conditions will not be finalised until the department assesses the licence application.

Table 4: Risk assessment of potential emissions and discharges from the Premises during operation

| Risk Event | | | | Consequence rating ¹ | Likelihood rating ¹ | Risk ¹ | Reasoning | W6437/2020/1 - Regulatory controls |
|--|--|--|---|--|--|-------------------|--|---|
| Sources/Activities - Category 55 Livestock holding yard | Potential emissions | Potential receptors | Potential pathway & receptor (impact) | | | | | |
| Construction | | | | | | | | |
| Construction of cattle yards and associated infrastructure | Dust associated with machinery and vehicle movements | Closest residence 1.8km south of the proposed holding yards (Bidan Aboriginal Community) | Air/windborne pathway causing impacts to health and amenity | Low level impact to amenity on local scale Slight | Will probably not occur in most circumstances Unlikely | Low | Based on the scale and short duration of the works, and distance to off-site receptors (>1km), the delegated officer does not reasonably foresee off-site receptors being impacted by noise and dust during construction works. | None specified. |
| | Noise associated with construction works | | | Low level impact to amenity on local scale Slight | Will probably not occur in most circumstances Unlikely | Low | | |
| | Surface water runoff | Ephemeral Creek system (450m) | Overland runoff to surface water systems, causing erosion and sedimentation | Low level off-site impacts on local scale Minor | May only occur in exceptional circumstances Rare | Low | Based on the short duration of the works, which will be conducted during the dry season, the delegated officer does not reasonably foresee impacts to surface water from runoff during construction works. | None specified. |
| Time limited operations | | | | | | | | |
| Operation of cattle holding yards | Dust associated with cattle movements | Closest residence 1.8km south of the proposed holding yard (Bidan Aboriginal Community) | Air/windborne pathway causing impacts to health and amenity | Low level impact to amenity on local scale Minor | May only occur in exceptional circumstances Rare | Low | Some additional dust is expected during operation of the new yards; however, the delegated officer does not expect this to be significantly different from dust levels during operation of the existing yards at the premises. | None specified. |
| | Noise associated with cattle | | | Low level impact to amenity on local scale Minor | May only occur in exceptional circumstances Rare | Low | Some additional noise is expected during operation of the new yards; however, the delegated officer does not expect this to be significantly different from noise levels during operation of the existing yards at the premises. | None specified. |
| | Odour from wastes generated during operations | | | Low level impact to amenity on local scale Slight | Will probably not occur in most circumstances Unlikely | Medium | Some additional odour is expected during operation of the new yards, however the delegated officer does not expect this to be significantly different from current odour levels during operation of the existing yards at the premises. Manure and animal carcasses will be managed in accordance with existing requirements, i.e. through composting at the Yeeda Liquid Waste Facility (L8980/2016/1), which the delegated officer considers will be sufficient to lower the risk of impacts. | <u>Condition 7</u> – removal of manure |
| | Surface water runoff (including existing yards) | Groundwater typical in area at 15mbgl Ephemeral Creek system (450m) and Little Logue River (1.1km) from proposed holding yards | Seepage infiltrating to groundwater, causing groundwater contamination Overland runoff to surface water systems, causing contamination | Mid-level on-site impacts, low level off-site impacts on local scale Minor | Will probably not occur in most circumstances Unlikely | Medium | The yards will comprise clay lined drainage channels to divert surface water runoff to a final lined containment pond, where it will be allowed to evaporate. No operations will take place during the wet season with all cattle removed from the holding yards, which will be cleaned annually of manure before January-February wet season shut-down. All cattle yards will be empty at this time, in line with Colourstone Abattoir shutdown. | <u>Condition 1</u> -(table 1) – Design and construction requirements. |
| Management of solid and liquid waste | Waste and leachate | | | Low level on-site impacts Minor | Will probably not occur in most circumstances Unlikely | Medium | Solid waste generated at the site will be managed in accordance with existing requirements, i.e. through composting at the Yeeda Liquid Waste facility (L8980/2016/1). | <u>Condition 1</u> -(table 1) – Design and construction requirements. |
| Management of deceased animals | | | | Low level impact to amenity on local scale Minor | Will probably not occur in most circumstances Unlikely | Medium | Deceased animals will be managed in accordance with existing requirements, i.e. through composting at the Yeeda Liquid Waste facility (L8980/2016/1). | <u>Condition 7</u> – removal of manure and animal carcasses. |

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Guidance Statement: Risk Assessments (DER)

6. Decision

The delegated officer has determined to approve the proposal to construct an extension of the existing cattle holding pens at the Yeeda Pastoral Station, with a design capacity of 2,500 animals. This determination is predominantly based on the proposed infrastructure controls and there being sufficient distance to receptors, in which the delegated officer does not reasonably foresee there being off-site impacts from operations.

Controls will be imposed on the works approval to specify infrastructure design and construction requirements, to ensure the proposal does not result in unacceptable risks to public health and the environment. An amendment to existing licence L8989/2016/1 will be required following construction of the works, to include the pens within the existing premises boundary and authorise ongoing operations.

7. Applicant comments on draft decision

The applicant requested an extension to the construction phase of the works approval to 30 June 2021, waiving the 21-day period on 20 November 2020.

8. Conclusion

Based on the assessment in this 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.

9. References

1. Department of Environment Regulation (DER) 2016, *Guidance Statement: Environmental Siting*, Perth, Western Australia.
2. DER 2017, *Guidance Statement: Risk Assessments*, Perth, Western Australia.
3. DER 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.

Appendix 1: Application validation summary

| SECTION 1: APPLICATION SUMMARY | | |
|--|---|---|
| Application type | | |
| Works approval | <input checked="" type="checkbox"/> | |
| Date application received | 04/09/2020 | |
| Applicant and Premises details | | |
| Applicant name/s (full legal name/s) | Yeeda Pastoral Company Pty Ltd | |
| Premises name | Yeeda Station, Colourstone, DERBY | |
| Premises location | Lot 254 on DP 220707, Volume 3010 476 Lot 254 on DP 220707, Volume 3010 477 Pastoral lease (DWERDT302810). | |
| Local Government Authority | Shire of DERBY – West Kimberley | |
| Application documents | | |
| HPCM file reference number: | DER2018/001042 | |
| Key application documents (additional to application form): | Pastoral Lease – Yeeda Station Description of proposed activities and internal assessments Public health and environmental risk assessment | |
| Scope of application/assessment | | |
| Summary of proposed activities or changes to existing operations. | <p>Works approval</p> <p>Construction of additional cattle holding yards to allow it to increase in holding capacity. Infrastructure will comprise of posts, rails, water, feed facilities and an evaporation pond.</p> <p>The yards will operate from March to December annually, consistent with the patterns of the local abattoir which is located in the immediate vicinity. Cattle will be held for short periods (up to 10 days each per head) prior to transportation to the abattoir.</p> | |
| Table 1: Prescribed premises categories | | |
| Prescribed premises category and description | Proposed production or design capacity | Proposed changes to the production or design capacity (amendments only) |
| Category 55: Livestock sale yard or holding pen: premises on which live animals are held pending their sale, shipment or slaughter. | 30,000 animals per year in application (4.9, page 8 of application). | N/A |
| Legislative context and other approvals | | |
| Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/> |

| | | |
|---|--|--|
| Does the applicant hold any existing Part IV Ministerial Statements relevant to the application? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Ministerial statement No: EPA Report No: |
| Has the proposal been referred and/or assessed under the EPBC Act? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Reference No: |
| Has the applicant demonstrated occupancy (proof of occupier status)? | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | Pastoral lease <input checked="" type="checkbox"/> Expiry: 15/10/2046 |
| Has the applicant obtained all relevant planning approvals? | <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Needs to be verified if required. See notes.</p> | <p>Section 7.5 of the works approval application states that the proposal is an extension to cattle yards that is defined as pastoral infrastructure and is authorized pursuant to the Pastoral Purposes Framework and the Land Administrative Act.</p> <p>Section 7.1 of the Yeeda Liquid Waste Facility (L8980/2016/1) decision report does state 'The Shire of Derby-West Kimberley (the Shire) was consulted at the time of the original licence application on 22 July 2016 to determine if the Applicant had obtained the relevant planning approvals and to seek comment on the proposal. Advice from the Shire indicated that, prior to construction of the Colourstone Abattoir and Yeeda Liquid Waste Facility, the Shire did not exercise any statutory planning controls over the area of land comprising the abattoir and Yeeda Station and, as such, no Development Approval was required.</p> <p>The Shire has since resolved to prepare a whole of district Local Planning Scheme, and an Interim Development Order (IDO) encompassing all land tenure within the Shire has been approved for the period while the new scheme is being prepared. The Shire has advised that granting of the IDO does not apply retrospectively, therefore, should there be any changes to the proposal, and development approval may be required.</p> <p>As this works approval will likely trigger an amendment to licence L8980/2016/1 to increase the southern boundary and encompass the prescribed activity within the works approval, this may well be considered a change to the proposal and approval may be required.</p> |
| Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | CPS No: N/A No clearing is proposed. |

| | | |
|--|--|---|
| Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Application reference No: N/A Licence/permit No: N/A No clearing is proposed. |
| Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Application reference No: N/A Licence/permit No: N/A |
| Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Name: N/A Type: NA Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Regional office: Broome |
| Is the Premises situated in a Public Drinking Water Source Area (PDWSA)? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Name: N/A Priority: N/A Are the proposed activities/ land use compatible with the PDWSA (refer to <u>WQPN 25</u>)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Groundwater is considered fresh (5mbgl). Water is not used for potable purposes but is used for stock water supplies and irrigation purposes. |
| Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004</i> , <i>Environmental Protection (Controlled Waste) Regulations 2004</i>) | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Yards will be cleaned annually with clean soil. Manure will be regularly collected for disposal as fertilizer on Yeeda Stations irrigation area. The location needs to be confirmed, but it looks like any waste that may be deemed as Controlled Waste will not be transported via public roads and will remain within the pastoral lease. |
| Is the Premises within an Environmental Protection Policy (EPP) Area? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | N/A |
| Is the Premises subject to any EPP requirements? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | N/A |
| Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ? | Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> | Classification: N/A Date of classification: N/A |