



Bourke Small Stock Abattoir (operated by Darling River Goat Exports Pty Ltd)

DRGE EPL Monitoring Manual

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1. Context

- 1.1 The DRGE EPL Monitoring Manual ('The Manual') is prepared for Darling River Goat Exports Pty Ltd (DRGE) – the operating entity of Bourke Small Stock Abattoir (BSSA). The Manual contains EPL annual review process, a comparison of EPL requirements between DRGE and CAPRA Pty Ltd (CAPRA) and EPL one-off implementation requirements for DRGE.
- 1.2 This document is updated as at 14 August 2019. All compliance requirements are up-to-date for EPA annual return period 1 May 2019 to 30 April 2020.
- 1.3 This is the first version (i.e. Version 1.0) of The Manual, and is prepared for DRGE by JPAbusiness Pty Ltd, in conjunction with DRGE management team. This document is a working manual and should be regularly reviewed and updated should there are any changes in EPL regulations. Any queries should be directed to James Price on **0439 601 207** or email **james@jpabusiness.com.au**.

2. EPL Annual Review Process

- 2.1 As the licensee of EPL No.20918 (issued on 18 September 2018), DRGE is authorised to carry out livestock processing activities within a maximum scale of 30,000 Tonne annual processing capacity.
- 2.2 DRGE is required to comply with requirements and obligations outlined in Section 3 and Section 4 of this document.
- 2.3 The reporting period of EPA annual return is 1 May to 30 April. DRGE is required to lodge an annual return to EPA by 30 June (or nearest working day) each year for the previous reporting period.
- 2.4 The annual return is prepared and lodged by JPAbusiness on behalf of DRGE. Supporting documentations (listed in Section 2.4) should be provided by DRGE plant manager when requested.
- 2.5 DRGE plant manager should ensure the below requirements are met and relevant records are kept during the return period. Detailed supporting documentations and/(or) information required for EPL compliance are as follows:
 - Updated checklist of one-off EPL implementation requirements as listed in Section 4.
 - Evidence of regular environmental monitoring as listed in Section 3.
 - URL of a publicly accessible website that DRGE uses to publish its pollution monitoring data as outlined in EPL requirements 7 and 8 of Section 3.
 - Records of any non-compliance events and complaints and mitigation actions taken and/(or) to be taken.
 - Records of regular inspections and maintenance of plant and equipment.
 - Records of regular site audits undertaken by a third party to assess compliance with environmental legal requirements and assess conformance to the requirements of any documented environmental practices, procedures and systems in place. **At least one site audit should be completed by no later than 1 April 2020.**
 - Records of staff training on environmental issues that may arise from operational activities.
 - A documented environmental review of operational activities to identify any aspects that have a potential to cause environmental impacts and operational controls implemented.
 - Testing and review dates and results of an environmental improvement or management plan.
 - Testing and review dates and results of PRIMP (Pollution Incident Response Management Plan). **At least one testing and review of PRIMP should be completed by no later than 1 April 2020.**
 - Any additional commentary to support DRGE's EPL compliance.

3. EPL Requirements Comparison

3.1 Below please find EPL requirement comparison for ongoing pollution monitoring and system requirements between CAPRA and DRGE.

EPL Requirements	CAPRA (Construction Phase)	DRGE (Full Operation)	Monitoring Frequency
<p>1. Air Monitoring</p>	<p>No requirement on types of weather data should be monitored.</p> <p>Measures should be taken to minimise the emission into the air of air pollutants (such as dust).</p> <p>No emission of offensive odour should be caused beyond the premise boundary.</p>	<p><input checked="" type="checkbox"/> Ongoing weather monitoring data should capture electronic records of below parameters using sampling method AM-1, AM-2 and AM-4:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Rainfall <input checked="" type="checkbox"/> Wind direction at 10 metres <input checked="" type="checkbox"/> Wind speed at 10 metres <input checked="" type="checkbox"/> Sigma theta (the standard deviation of wind direction) <p><input checked="" type="checkbox"/> Measures should be taken to minimise the emission into the air of air pollutants (such as dust).</p> <p><input checked="" type="checkbox"/> No emission of offensive odour should be caused beyond the premise boundary.</p>	<p>Continuous monitoring; refer to Operational Environmental Management Plan (OEMP) Section 6.8 (p. 72) for more climate monitoring requirements.</p> <p>Fortnightly inspections; refer to OEMP Section 5.9 (p.50) for details of dust control measures.</p> <p>Fortnightly inspections; refer to OEMP Section 5.10 (p. 52) for details of odour inspections and odour management.</p>

EPL Requirements	CAPRA (Construction Phase)	DRGE (Full Operation)	Monitoring Frequency
	<p>No requirement on the upkeep of an odour complaints logbook.</p>	<p><input checked="" type="checkbox"/> Odour should be monitored by recording any complaints received on the Complaints Register. A summary of any odour complaints, causes and corrective actions should be provided in the EPA annual return.</p>	<p>Upon compliant or incident. Only required if there is an odour complaint. Refer to OEMP Section 5.14 (pp.57-58) for recording complaints and Appendix E Waste Management Plan Section 2.3 (p.131) for more details on odour control measures.</p>
<p>2. Noise Monitoring</p>	<p>Noise generated at the premises that is measured at each noise monitoring point established under this licence must not exceed the noise levels specified below:</p> <ul style="list-style-type: none"> ✓ Noise level during the day measured using LAeq method should not exceed 35 dB(A) over the time period of 15 minutes. ✓ The maximum noise level at night measured using LAmx method should not exceed 45 dB(A). 	<p><input checked="" type="checkbox"/> Noise generated at the premises that is measured at each noise monitoring point established under this licence must not exceed the noise levels specified below:</p> <ul style="list-style-type: none"> ✓ Noise level during the day measured using LAeq method should not exceed 35 dB(A) over the time period of 15 minutes. ✓ The maximum noise level at night measured using LAmx method should not exceed 45 dB(A). 	<p>Upon compliant or incident. Only required if there is a noise complaint; refer to OEMP Section 5.11 (p.53) for noise monitoring processes, Section 6.9 (p.73) for more detailed monitoring limits and timeframe requirements and Section 5.14 (pp.57-58) for recording complaints.</p>

EPL Requirements	CAPRA (Construction Phase)	DRGE (Full Operation)	Monitoring Frequency
	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Noise should be monitored by recording any complaints received on the Complaints Register. <input checked="" type="checkbox"/> A summary of any noise complaints, causes and corrective actions should be provided in the EPA annual return. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Noise should be monitored by recording any complaints received on the Complaints Register. <input checked="" type="checkbox"/> A summary of any noise complaints, causes and corrective actions should be provided in the EPA annual return. 	<p>Upon compliant or incident; refer to OEMP Section 5.14 (pp.57-58) for recording complaints.</p> <p>Upon compliant or incident; refer to OEMP Section 7.2 (p.76) for noise complaints, causes and corrective actions to be included in the EPA annual return.</p>
3. Water and land Monitoring	<p>Surface water monitoring is required and total suspended solids should not exceed the 100-percentile concentration limit of 50 milligrams per litre.</p> <p>No requirement on groundwater monitoring.</p>	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Surface water monitoring is required and total suspended solids at the designated discharge point should not exceed the 100-percentile concentration limit of 50 milligrams per litre. <input checked="" type="checkbox"/> Groundwater monitoring is required in the following locations and relevant parameters should be analysed: <ul style="list-style-type: none"> ✓ MW1 Up hydraulic gradient, western site boundary within irrigation area, and ✓ MW2 Down hydraulic gradient, eastern site boundary 	<p>Daily samples should be collected, subject to discharge occurring; refer to OPEM Section 6.6 (pp.70-71) for more surface water monitoring requirements.</p> <p>Annual monitoring when groundwater is detected in the monitoring wells; refer to OEMP Section 6.7 (pp.71-72) for ground water monitoring location maps and parameters required.</p>

EPL Requirements	CAPRA (Construction Phase)	DRGE (Full Operation)	Monitoring Frequency
	<p>No requirement on water supply monitoring.</p> <p>No requirement on water cycle monitoring.</p> <p>No effluent quality measurement is required. No requirement on portable water or pond water testing.</p> <p>Soil monitoring is not required prior to the site being fully operational.</p>	<ul style="list-style-type: none"> <li data-bbox="1010 197 1473 296">☑ Ensure that adequate potable water supply is available for stock consumption. <li data-bbox="1010 352 1473 655">☑ Six flow meters (potable water meter, raw water meter, raw effluent flow meter downstream of primary solids removal, irrigation pump meter, tailwater pump meter and stormwater retention pond pump meter) are required to be monitored regularly. <li data-bbox="1010 711 1473 871">☑ Effluent quality from the irrigation pond. Ensure effective portable water and pond water testing is in place and relevant parameters are analysed. <li data-bbox="1010 1054 1473 1318">☑ Soil monitoring will be undertaken across the main irrigation main area at soil reference points Boreholes 1,2 and 3; Boreholes 11,12 and 13; Boreholes 6,7 and 8 by analysing relevant parameters from topsoil samples. 	<p>Daily and as required; refer to OEMP Section 5.8 (p.49) for detailed procedures.</p> <p>Every second Thursday monitoring; refer to OEMP Section 5.1 (p.34) for detailed procedures and Section 6.2 (p.69) for corresponding meter numbers.</p> <p>Quarterly monitoring for the first year of operation after commissioning and then reduced to biannually; refer to OEMP Section 6.3 (p.69) for effluent quality sampling details and parameters required.</p> <p>Annual monitoring in September; refer to OEMP Section 6.5 (p.70) for soil sampling details and parameters required.</p>

EPL Requirements	CAPRA (Construction Phase)	DRGE (Full Operation)	Monitoring Frequency
<p>5. Waste Monitoring</p>	<p>All drains generally free of solids and operating efficiently.</p> <p>All solids should be stored within designated areas.</p> <p>Any waste materials removed from the site must only be disposed of at a waste management facility or premises lawfully permitted to accept the materials.</p> <p>The licensee must ensure that any liquid and/or non-liquid waste generated and/or stored at the premises is assessed and classified in accordance with the EPA's Waste Classification Guidelines as in force from time to time.</p> <p>Maintain and update waste register and waste removal log on site.</p>	<p><input checked="" type="checkbox"/> All drains generally free of solids and operating efficiently.</p> <p><input checked="" type="checkbox"/> All solids should be stored within designated areas.</p> <p><input checked="" type="checkbox"/> Any waste materials removed from the site must only be disposed of at a waste management facility or premises lawfully permitted to accept the materials.</p> <p><input checked="" type="checkbox"/> The licensee must ensure that any liquid and/or non-liquid waste generated and/or stored at the premises is assessed and classified in accordance with the EPA's Waste Classification Guidelines as in force from time to time.</p> <p><input checked="" type="checkbox"/> Maintain and update waste register and waste removal log on site.</p>	<p>Weekly or as specified; refer to OEMP Section 5.3 (pp.38-40) for detailed procedures.</p> <p>Weekly or as specified; refer to OEMP Section 5.3 (pp.38-40) for detailed procedures.</p> <p>Weekly or as specified; refer to OEMP Section 5.3 (pp.38-40) for detailed procedures.</p> <p>Weekly or as specified; refer to OEMP Section 5.3 (pp.38-40) for detailed procedures.</p> <p>Weekly or as specified; refer to OEMP Section 5.3 (pp.38-40) for detailed procedures.</p>

EPL Requirements	CAPRA (Construction Phase)	DRGE (Full Operation)	Monitoring Frequency
6. Crop Monitoring	No requirement on crop monitoring.	<input checked="" type="checkbox"/> Crops will be monitored for signs of soil toxicity or degradation within the effluent irrigation area. At least two representative crop samples during harvest will be analysed for moisture content, nitrogen, phosphorous and potassium.	Annual monitoring during harvest; refer to OEMP Section 6.10 (p.74) and Appendix G Irrigation Management Plan Section 3.5.6 (p.181) for sampling and testing details.
7. PRIMP (Pollution Incident Response Management Plan)	Not required to prepare and implement PRIMP during construction phrase.	<input checked="" type="checkbox"/> Must prepare and implement PRIMP with a review at least once every 12 months. The next review and testing should be completed by no later than 1 Apr 2020. <input checked="" type="checkbox"/> A register for testing and updating the PRIMP must be kept on site and update regularly. <input checked="" type="checkbox"/> All staff should be capable of identifying potential pollution incidents and be familiar with the requirements and procedures in the PRIMP.	At least once a year review; refer to EPA website in footnote 1. ¹ At least once a year testing; refer to EPA website in footnote 1 and OEMP 7.2.3 (p.77) for non-compliance response. At least once a year testing; refer to OEMP Section 5.15 (p.59) for detailed responses to all incidents and OEMP 7.2.3 (p.77) for non-compliance response to be included in EPA annual return.

¹ EPA website: <https://www.epa.nsw.gov.au/licensing-and-regulation/legislation-and-compliance/about-the-poeo-act/protection-of-enviro-leg-amendment-act-2011/faqs-new-requirements-for-pirmps>

EPL Requirements	CAPRA (Construction Phase)	DRGE (Full Operation)	Monitoring Frequency
		<ul style="list-style-type: none"> <li data-bbox="1010 199 1487 363">☑ Ensure material safety data sheets (MSDS) are up to date for each chemical or dangerous food and all MSDS are easily accessible to employees. <li data-bbox="1010 395 1487 662">☑ Information from PRIMP outlined below are required to be published on a publicly accessible website. Details of the relevant legislations can be found in POEO Act 1997 Section 153 C (a) and POEO Amendment 2012 Clause 98 C. <ul style="list-style-type: none"> <li data-bbox="1106 703 1487 799">✓ The owners or occupiers of BSSA and their contact details. <li data-bbox="1106 807 1487 970">✓ Bourke Council (the local authority) and any (possible) pollution affected area and their contact details. <li data-bbox="1106 978 1487 1141">✓ Any persons or authorities required to be notified should there is a pollution incident and their contact numbers. <li data-bbox="1106 1149 1487 1311">✓ Community engagement protocol that includes procedures for notifying people in the affected area. <li data-bbox="1106 1319 1487 1377">✓ Contact details of EPA, Dubbo Regional Office 	<p data-bbox="1512 199 1883 347">Fortnightly inspections; refer to OEMP Section 5.13 (p.56) for detailed actions required.</p> <p data-bbox="1512 395 1883 619">Continuous publishing and ensure all contacts are up-to-date; refer to POEO Act 1997 and POEO Amendment 2012 for full legislative requirements.</p>

EPL Requirements	CAPRA (Construction Phase)	DRGE (Full Operation)	Monitoring Frequency
		and Public Health Office of The Ministry of Healthy, SafeWork NSW and Fire and Rescue NSW.	
8. Pollution Monitoring Data Publishing	<p>No requirement on listing pollutant quantity onsite.</p> <p>Pollution monitoring data required for the licensee (as listed above) should be monitored. There is no requirement on publishing pollution monitoring data; however, the licensee must be able to provide a copy of the monitoring data to any person who requests as specified in the EPA's written requirements for publishing monitoring data.</p>	<p><input checked="" type="checkbox"/> The maximum quantity of any pollutant that is likely to be stored or held at particular locations (including underground tanks) at or on BSSA is required to be listed on site.</p> <p><input checked="" type="checkbox"/> Pollution monitoring data required for the licensee (as discussed above in the EPL Requirements 1-6 and detailed in relevant sections in OEMP) should be monitored and published on a publicly accessible website. Note the following:</p> <ul style="list-style-type: none"> ✓ The timeframe for publishing or providing data is 14 working days. ✓ Data can be published in either number format or graph format. ✓ Only the date obtained the data needs to be published. 	<p>Continuous publishing; refer to EPA website in footnote 2 for detailed legislative amendment and publishing requirements².</p> <p>Continuous publishing; refer to EPA website in footnote 2 for detailed legislative amendment and publishing requirements.</p>

² EPA website: <https://www.epa.nsw.gov.au/licensing-and-regulation/legislation-and-compliance/about-the-poeo-act/protection-of-enviro-leg-amendment-act-2011/faqs-new-requirements-for-pirmps/poeo-public-consultation-outcomes>

EPL Requirements	CAPRA (Construction Phase)	DRGE (Full Operation)	Monitoring Frequency
		✓ Up to four years of data must be published.	
9. Complaints	<p>The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.</p> <p>The record of a complaint must be kept for at least 4 years after the complaint was made.</p> <p>The record must be produced to any authorised officer of the EPA who asks to see them.</p>	<p><input checked="" type="checkbox"/> The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.</p> <p><input checked="" type="checkbox"/> The record of a complaint must be kept for at least 4 years after the complaint was made.</p> <p><input checked="" type="checkbox"/> The record must be produced to any authorised officer of the EPA who asks to see them.</p>	<p>Upon compliant or incident. Only if there is a complaint; refer to OEMP Section 5.14 (pp.57-58) for detailed response procedures.</p> <p>Upon compliant or incident; refer to OEMP Section 5.14 (pp.57-58) for detailed response procedures.</p> <p>Upon compliant or incident; refer to OEMP Section 5.14 (pp.57-58) for detailed response procedures.</p>
10. Environmental Management System (EMS)	Not required to have an ISO 14001 certified EMS or establish a fully operational system that EPA considers is equivalent to an ISO 14001 certified EMS.	<input checked="" type="checkbox"/> Not compulsory to have an ISO 14001 certified EMS but a fully operational system that EPA considers is equivalent to an ISO 14001 certified EMS must be established, and the following actions are required to undertake and document:	Continuous system; refer to Risk-Based Licensing Environmental Management System Guidelines (RBL) Section 1.3 (p.4) accessed via EPA website in footnote 3. ³

³ EPA website: <https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/licensing/19p1758-environmental-management-systems-guidelines.pdf?la=en&hash=C63D33F329B6516C1D00166DDD94BEF661F438C5>

EPL Requirements	CAPRA (Construction Phase)	DRGE (Full Operation)	Monitoring Frequency
		<ul style="list-style-type: none"> ✓ Conduct an environmental review of operational activities to identify any aspects that have a potential to cause environmental impacts and implement operational controls to address such impacts. ✓ Develop and review a plan that includes routine operation and maintenance procedures containing both preventative and corrective maintenance. ✓ Ensure record keeping of regular site inspections and maintenance carried out on plant and equipment. ✓ Regular site audits that are conducted by a third party during the annual return period to assess compliance with environmental legal requirements (i.e. environmental practices, 	<p>Annual review; refer to RBL Table 2 (p.12).</p> <p>Annual review; refer to RBL Table 2 (p.13).</p> <p>Continuous record keeping; refer to RBL Table 2 (p.13).</p> <p>At least once a year; refer to refer to RBL Table 2 (pp.13-14).</p>

EPL Requirements	CAPRA (Construction Phase)	DRGE (Full Operation)	Monitoring Frequency
		<p>procedures and systems) at BSSA.</p> <ul style="list-style-type: none"> ✓ Establish and implement an environmental improvement or management plan. Ensure annual auditing and review of the plan. ✓ Ensure staff training on environmental issues that may arise from operational activities and their understanding of their responsibilities and responses to such issues. 	<p>Annual review; refer to refer to RBL Table 2 (pp.14-15).</p> <p>Continuous training; refer to refer to RBL Table 2 (p.15).</p>

4. EPL One-Off Implementation Requirements

4.1 Below is a checklist of one-off implementation required by EPL for DRGE to comply.

EPL Requirements	CAPRA (Construction Phase)	DRGE (Full Operation)	Installed and Operational (Yes/No)	Reference to OEMP
Air Monitoring	Onsite weather station is not required to be installed and operational.	<input checked="" type="checkbox"/> Onsite weather station is required to be installed and operational.	Yes	OEMP Section 6.8 (p.72).
Security Monitoring	CCTV is not required to be installed and operational.	<input checked="" type="checkbox"/> CCTV is required to be installed onsite and operational.	Yes	OEMP Appendix C Form 1 (p.86).
	Gate and fences security are not required.	<input checked="" type="checkbox"/> Secured gates and fences are required.	Yes	OEMP Appendix C Form 1 (p.86).
Water and land Monitoring	The location of each monitoring and discharge point is required to be marked by signs that indicate the point identification number used in this licence and be located as close as practical to the point.	<input checked="" type="checkbox"/> The location of each monitoring and discharge point must be clearly marked by signs that indicate the point identification number used in this licence and be located as close as practical to the point.	Yes	EPL General Conditions 3 (also can be found in OEMP p.396).
	A stormwater management scheme must be prepared for all aspects of the construction phase of the development and must be	<input checked="" type="checkbox"/> Stormwater management scheme is in place. Ensure stormwater retention pond has adequate capacity and	Please write "Yes" or "No". If your answer is "No", please provide reasons and actions for non-compliance.	OEMP Section 5.6 (p.46)

EPL Requirements	CAPRA (Construction Phrase)	DRGE (Full Operation)	Installed and Operational (Yes/No)	Reference to OEMP
	<p>implemented. Where a stormwater management plan has not yet been prepared the scheme should be consistent with the guidance contained in Managing Urban Stormwater: Control Handbook.</p> <p>All effluent, contaminated and stormwater structures internal surfaces must have an equivalent to, or better than, a clay liner of permeability of 1×10^{-9} m/s over a minimum depth of 900mm or an equivalent alternative. When an alternative liner is proposed a minimum of 600mm of compacted base material must be used to protect the liner.</p>	<p>the pump is working correctly.</p> <p><input checked="" type="checkbox"/> All effluent, contaminated and stormwater structures internal surfaces must have an equivalent to, or better than, a clay liner of permeability of 1×10^{-9} m/s over a minimum depth of 900mm or an equivalent alternative. When an alternative liner is proposed a minimum of 600mm of compacted base material must be used to protect the liner.</p>	<p>Please write "Yes" or "No". If your answer is "No", please provide reasons and actions for non-compliance.</p>	<p>EPL Operation Conditions 6.3 (also can be found in OEMP p.391)</p>
Waste Monitoring	Disposal/faeces pit is not required be installed and operational on site.	<p><input checked="" type="checkbox"/> Disposal/faeces pit should be installed on site to process mass carcass disposal.</p>	No. Please advise when this is expected to be installed.	OEMP Emergency Disposal and Biosecurity Protocol Section 2.2.4 (P.108)

EPL Requirements	CAPRA (Construction Phrase)	DRGE (Full Operation)	Installed and Operational (Yes/No)	Reference to OEMP
Complaints	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence. The telephone line needs to be disclosed to the public.	<input checked="" type="checkbox"/> The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence. The telephone line needs to be disclosed to the public.	Please write "Yes" or "No". If your answer is "No", please provide reasons and actions for non-compliance.	OEMP Section 5.14.2 (p.57)