

Environmental Assessment  
Report  
**Boiler Replacement**  
*Smithton*  
Greenham Tasmania Pty  
Ltd

*April 2020*



ENVIRONMENT PROTECTION AUTHORITY

## Environmental Assessment Report

Proponent	Greenham Tasmania Pty Ltd
Proposal	Replacement of existing Boiler
Location	2 & 4 Bacon Factory Road, Smithton
NELMS no.	PCE. 258183
Permit Application No.	DA 2019/081 Circular Head Council
Electronic Folder No.	EN-EM-EV-DE-258183
Document No.	M615628
Class of Assessment	2A

## Assessment Process Milestones

11 July 2019	Permit Application submitted to Council
23 July 2019	Referral received by the Board
22 August 2019	Guidelines Issued
22 February 2020	Start of public consultation period
10 March 2020	End of public consultation period
6 April 2020	Date draft conditions issued to proponent
20 April 2020	Statutory period for assessment ends

## Acronyms

Air EPP	<i>Environment Protection Policy (Air Quality) 2004</i>
Air NEPM	<i>National Environment Protection Measure for Ambient Air Quality</i>
Board	Board of the Environment Protection Authority
CO	Carbon monoxide
DPIPWE	Department of Primary Industries, Parks, Water and Environment
EER	Environmental Effects Report
EIA	Environmental impact assessment
EMPC Act	<i>Environmental Management and Pollution Control Act 1994</i>
EMPCS	Environmental management and pollution control system
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
LUPA Act	<i>Land Use Planning and Approvals Act 1993</i>
Noise EPP	<i>Environment Protection Policy (Noise) 2009</i>
Nm <sup>3</sup>	Cubic metres of dry gas at 0°C and 101.325kPa
NO <sub>x</sub>	Nitrogen oxides
PM <sub>10</sub>	Particulate matter of particle size less than 10µm in diameter.
RMPS	Resource management and planning system
SD	Sustainable development

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## Report Summary

This report provides an environmental assessment of a boiler replacement at Greenham Tasmania Pty Ltd's abattoir at 2 & 4 Bacon Road, Smithton. It involves installation of a new wood chip fired boiler, which will burn fuel at a rate of up to 4 tonnes of woodchips per hour, replacing an existing coal/pyrethrum fired boiler.

This report has been prepared based on information provided in the permit application and Environmental Effects Report (EER). Relevant government agencies and the public were consulted, and their submissions, representations and comments considered as part of the assessment.

Further details of the assessment process are presented in section 1 of this report. Section 2 describes the statutory objectives and principles underpinning the assessment. Details of the proposal are provided in section 3. Section 4 reviews the need for the proposal and considers the alternatives. Section 5 summarises the public and agency consultation process. The detailed evaluation of environmental issues is contained in section 6. The report conclusions are contained in section 7.

Appendix 1 contains a list of commitments made by the proponent. Appendix 2 contains the environmental permit conditions for the proposal

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## I Approval Process

An application for a permit under the *Land Use Planning and Approvals Act 1993* (LUPA Act) in relation to the proposal was submitted to Circular Head Council on 11 July 2019.

The proposal is defined as a 'level 2 activity' under clause 7(a), schedule 2 of the *Environmental Management and Pollution Control Act 1994* (EMPC Act), being the operation of a boiler burning woodchips at a rate of up to approximately 4 tonnes per hour. The proposal is for replacement of an existing boiler which is currently regulated as a level 2 activity. An application for a permit under LUPAA is required because the proposed boiler will be located on a different land parcel to the existing boiler, will be burning a different material, has a greater fuel burning capacity, and will have new emission points.

Under section 25(1) of the EMPC Act, Council was required to refer the application to the Board of the Environment Protection Authority (the Board) for assessment under the Act. The application was received by the Board on 23 July 2019.

The assessment has been undertaken by the Director, Environment Protection Authority under delegation from the Board.

The Board required that information to support the proposal be provided in the form of an Environmental Effects Report (EER) prepared in accordance with guidelines issued on 22 August 2019.

Several drafts of the EER were submitted to EPA Tasmania for review against the guidelines before it was finalised. The EER was released for public inspection for a 14-day period commencing on 22 February 2020. An advertisement was placed in *the Advocate* and on the EPA website. The EER was also referred to relevant government agencies for comment. No representations were received.

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## 2 SD Objectives and EIA Principles

The proposal must be considered by the Board in the context of the objectives of the Resource Management and Planning System of Tasmania (RMPS), and in the context of the objectives of the Environmental Management and Pollution Control System (EMPCS) (both sets of objectives are specified in Schedule 1 of the EMPC Act). The functions of the Board are to administer and enforce the provisions of the Act, and to use its best endeavours to further the RMPS and EMPCS objectives.

The Board must assess the proposal in accordance with the Environmental Impact Assessment Principles defined in Section 74 of the EMPC Act.

The assessment has been undertaken by the Director, Environment Protection Authority under delegation from the Board.

### 3 The Proposal

The proposal is to operate a 10MW woodchip boiler at Greenham Tasmania Pty Ltd’s abattoir in Smithton. The boiler will replace an existing 10MW boiler, fuelled by coal and pyrethrum briquettes, which is approaching the end of its working life. The current proposal required assessment as it is on a different land parcel to the existing boiler it is to replace, will be burning a different material to the existing burner, with a greater fuel burning capacity, and will have new emission points. The boiler will be used to produce steam for rendering plant cookers and hot water production for factory operations. The proposal will result in approximately 2 truck deliveries per day to supply woodchips from timber mills located in Smithton.

A backup boiler is also present on the adjoining abattoir site. A separate approval process will be undertaken for this boiler, and hence it does not form part of this assessment.

The main characteristics of the proposal are summarised in Table I. A detailed description of the proposal is provided in Section B of the EER.

**Table I: Summary of the proposal’s main characteristics**

Activity	
Operation of a boiler burning up to 4 tonnes of woodchips per hour.	
Location and planning context	
<b>Location</b>	2 & 4 Bacon Factory Road, Smithton
<b>Land zoning</b>	General Industrial
<b>Land tenure</b>	Freehold, CT 33432/4. The title is currently subject to consolidation of the titles with the main abattoir title 35716/1
Existing site	
<b>Land Use</b>	Currently used for dry goods storage and lies adjacent to the existing Greenham abattoir site.
<b>Infrastructure</b>	Two existing storage sheds (372m <sup>2</sup> and 334.1m <sup>2</sup> ) with gravel apron/hard stand, with one to be demolished for new boiler.
<b>Topography</b>	The surrounding land is gently undulating, with the main residential areas nearby on slightly higher ground to the north-north-west.
<b>Hydrology</b>	No waterways on the title or adjoining land parcels.
<b>Natural Values</b>	No permanent vegetation on site.
Local region	
<b>Climate</b>	Rainfall is approximately 1,107.9mm per annum. Wind direction predominately from the south west and north east, with least proportion of winds from the south east. Mean maximum temperature of 17°C and minimum temperature of 7.8°C.

<b>Surrounding land zoning, tenure and uses</b>	<p>The site is located within an industrial area and surrounded by land zoned as General Industrial to the east, south and west, light industrial to the north and commercial to the north-east.</p> <p>Four residences are located at 11, 12, 13 and 14 Bacon Factory Road, approximately 100m to the east, and are within the general industrial zone (Figure 2). The two closest residences (11 and 12 Bacon Factory Road) are owned by the proponent.</p> <p>Rural dwellings are located 400m to the north, 990m to the west, 900m to the south and 1,000m to the east-south-east.</p> <p>No reserved areas are located within or adjacent to the proposal site.</p>
<b>Proposed infrastructure</b>	
<b>Major equipment</b>	Justen Energetiknick 10MW wood chip fired steam boiler.
<b>Other infrastructure</b>	N/A
<b>Inputs</b>	
<b>Water</b>	No water inputs are detailed for the boiler.
<b>Energy</b>	Fuel (Diesel/Petrol) for transport of woodchips
<b>Other raw materials</b>	Wood chips to fuel boiler (approximately 11,863 tonnes per year)
<b>Wastes and emissions</b>	
<b>Liquid</b>	Blowdown water from the boiler
<b>Atmospheric</b>	<p>Particulate matter (PM10 and PM2.5) and combustion gases including oxides of nitrogen, (NO<sub>x</sub>), Carbon Monoxide (CO) and oxides of Sulfur (SO<sub>x</sub>)</p> <p>A backup oil fuelled boiler also exists as part of the adjoining abattoir site, which also produces combustion gases.</p>
<b>Solid</b>	Ash from the boiler operations.
<b>Controlled wastes</b>	Waste lubricants/oils from machinery use.
<b>Noise</b>	Noise emissions will primarily be from fans associated with the boiler.
<b>Greenhouse gases</b>	Estimates found a net reduction in greenhouse gas emissions from operation of the existing boiler, based on the combined values of the emissions from the new boiler fuel and change in transport emissions.
<b>Construction, commissioning and operations</b>	
<b>Proposal timetable</b>	<p>Construction of civil works expected to take 3 months.</p> <p>Installation and commissioning of boiler expected over 4 week period.</p> <p>Once commissioned, the existing pyrethrum fuelled boiler will be decommissioned.</p>
<b>Operating hours (ongoing)</b>	<p>The abattoir operates 5 days per week,</p> <p>The proposed boiler will operate 23 hours a day</p>

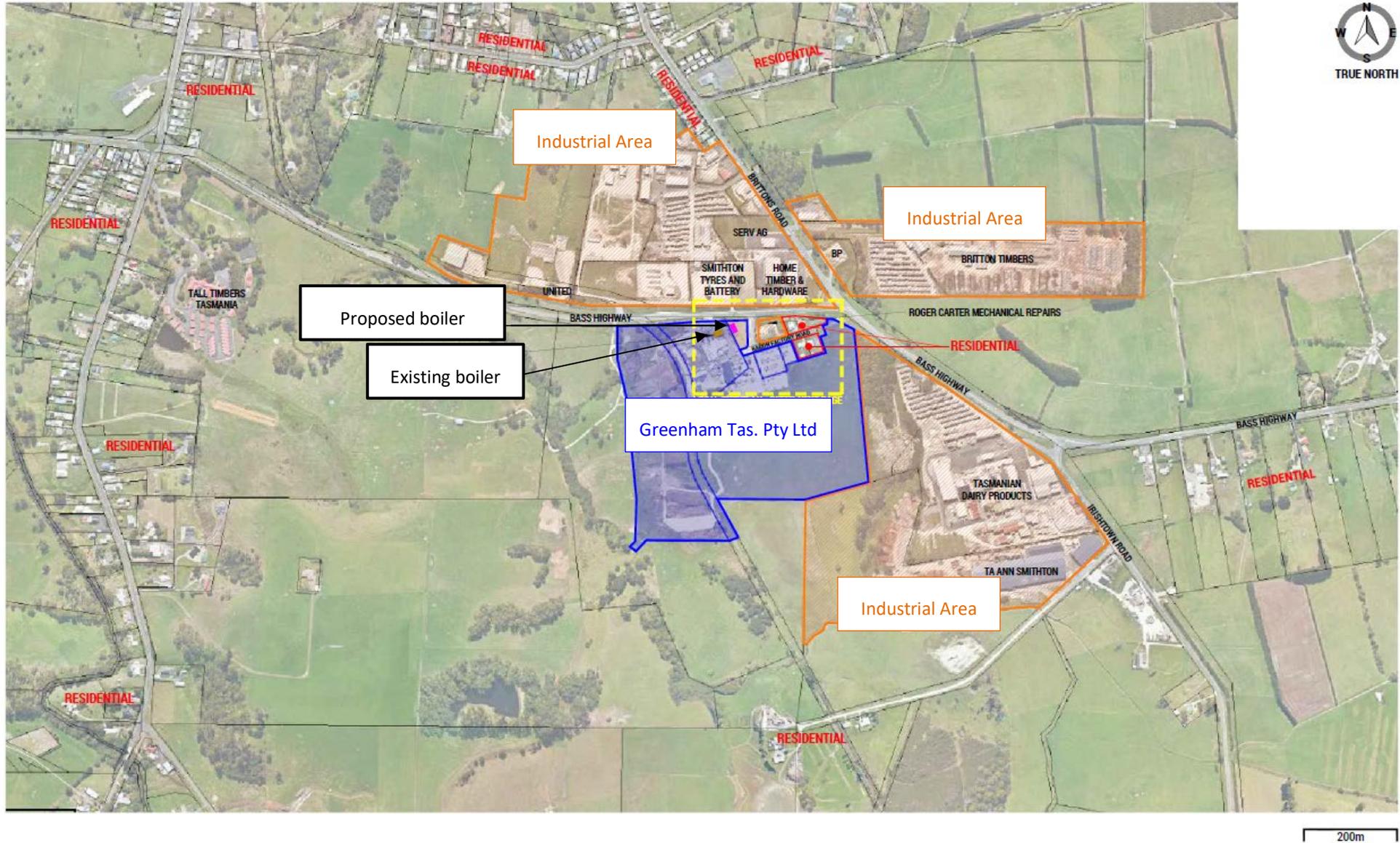


Figure 1: Location Plan of Bacon Factory Road and surrounds. Adapted from *Greenham Tasmania Pty Ltd Proposed Boiler Replacement EER V3 (Appendix 6)*, 2020

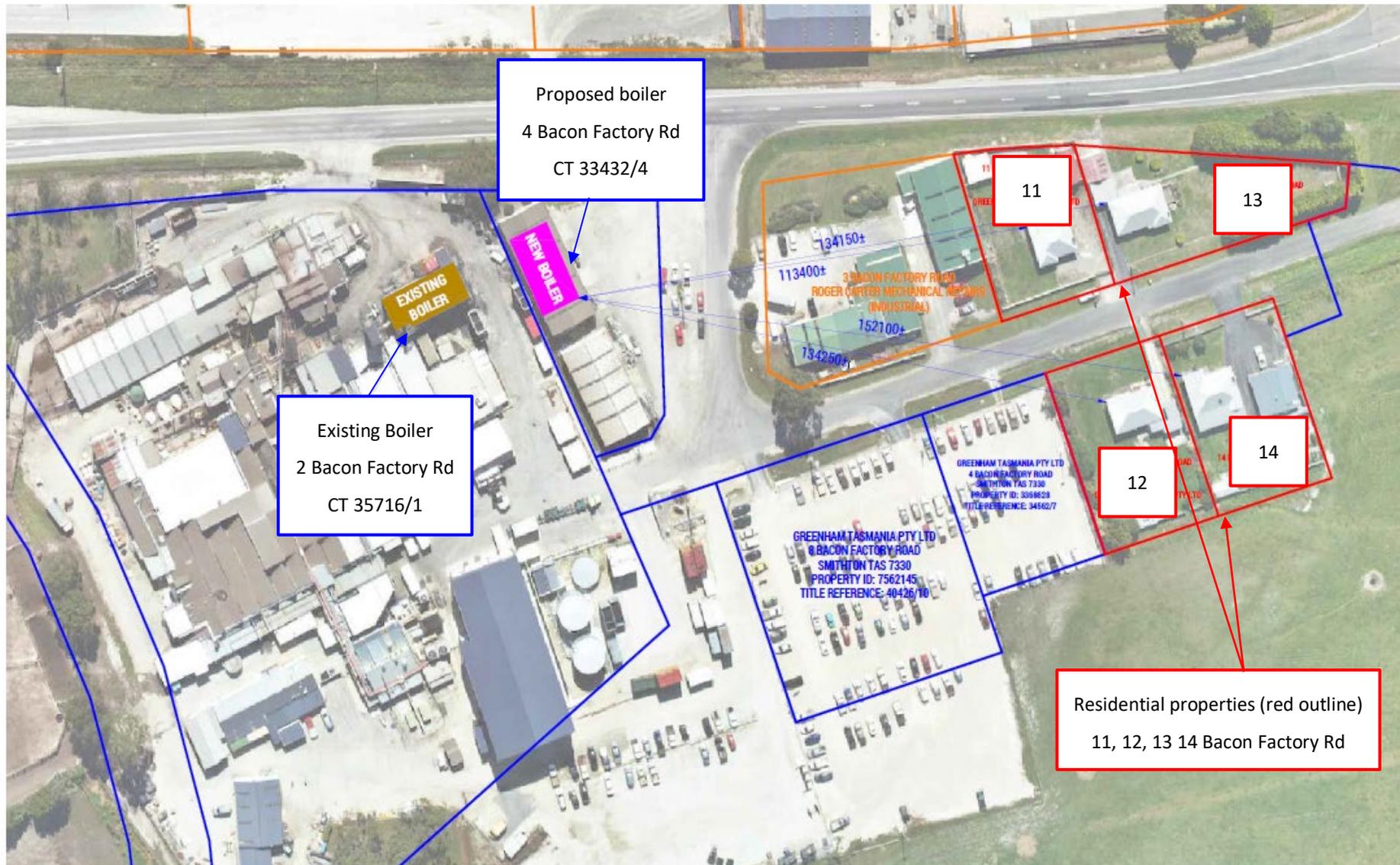


Figure 2 : Site Plan. Adapted from *Greenham Tasmania Pty Ltd Proposed Boiler Replacement EER V3 (Appendix 6)*, 2020



Figure 3 Site Plan detail. Adapted from *Greenham Tasmania Pty Ltd Proposed Boiler Replacement EER V3* (Appendix 6), 2020

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## 4 Need for the Proposal and Alternatives

The new boiler is proposed to replace an existing pyrethrum and coal fuelled boiler which is approaching the end of its working life at the adjoining abattoir site. The EER states that immediate replacement is required to ensure continuity of plant operation. Several options were considered, including boilers fuelled by LPG, coal, pyrethrum and oil. The boiler is necessary for heating water for abattoir operations.

The proponent selected a woodchip fuelled boiler based on the local availability of an ongoing supply of fuel. The pyrethrum fuelled option was rejected due to supply risk, and the fossil fuel fired options were rejected due to the proponent's preference for a renewable fuel source. The use of woodchips as a fuel source also provided benefit due to nearby proximity of woodchips (4km round trip), compared with pyrethrum (240km round trip), reducing transport requirements.

## **5 Public and Agency Consultation**

No public representations were received.

The following Divisions/areas of the Department of Primary Industries, Parks, Water and Environment provided advice on the EER:

- Regulatory Officer, EPA Tasmania
- Air Specialist, EPA Tasmania
- Noise Specialist, EPA Tasmania

## 6 Evaluation of Environmental Issues

EPA Tasmania has evaluated environmental issues considered relevant to the proposal. Details of this evaluation, along with the permit conditions required by the Director, are discussed below:

The following issues are discussed:

1. Air emissions
2. Noise emissions
3. Solid wastes and wastewater disposal
4. Environmentally hazardous substances
5. Decommissioning and Rehabilitation

### General conditions

The following general conditions will be imposed on the activity:

**G1** Access to and awareness of conditions and associated documents

**G2** Incident response

**G3** No changes without approval

**G4** Change of responsibility

**G5** Change of ownership

**G6** Complaints register

### Legal obligations

The following legal obligations are detailed in the permit:

**L02** EMPCA

**L03** Storage and handling of dangerous goods, explosives and dangerous substances

### Other information:

Other information included in the permit

**O11** Waste Management hierarchy

**O12** Notification of incidents under section 32 of EMPCA

## Issue 1: Air Emissions

### Description of potential impacts

Wood fired boilers emit combustion products such as particulate matter (PM), oxides of nitrogen (NO<sub>x</sub>), carbon monoxide (CO), oxides of sulphur (SO<sub>x</sub>) and volatile organic compounds (VOCs) from wood and bark. There is also the potential for the boiler to cause nuisance dust from woodchips and ash. The proposed 10MW wood fired boiler has the potential to cause an environmental nuisance and to impact human health through the discharge of these pollutants if not appropriately managed. The proposal site is located within an existing industrial area, with nearest residences located approximately 100m to the east within the general industrial zone (Figure 2).

The air emissions assessment commissioned by the proponent provided the following emission rates for the proposed boiler (adapted from Table 2, Appendix I of the EER).

Emitted Substance	Proposed boiler in-stack emission concentration (mg/m <sup>3</sup> )	Air EPP in stack concentration limit (mg/m <sup>3</sup> )
Total particulate matter	48	100
NO <sub>x</sub> (as NO <sub>2</sub> )	483	500
CO	1,931	Not specified
SO <sub>2</sub>	97	Not specified

These results are presented in relation to in-stack limits specified in Schedule 1 of the *Environment Protection Policy (Air Quality) 2004* Air EPP, which are expected to be achievable using acceptable modern technology.

The air emissions assessment commissioned by the proponent predicted the following worst-case pollutant concentrations of substances emitted from the boiler beyond the site boundary (adapted from Table 4, Appendix I of the EER):

Emitted Substance	Prediction - Highest conc beyond site boundary		Air EPP design criterion	Proportion of design criterion	
	Backup and proposed boiler	Proposed boiler only		Backup and proposed boiler	Proposed boiler only
Total Particulate matter (24 hour average)*	24µg/m <sup>3</sup>	3.7µg/m <sup>3</sup>	150µg/m <sup>3</sup>	16%	2%
NO <sub>x</sub> (1 hour average)	110µg/m <sup>3</sup>	80µg/m <sup>3</sup>	0.16ppm or 330ug/m <sup>3</sup>	33%	24%
CO (8 hour average)	1400µg/m <sup>3</sup>	260µg/m <sup>3</sup>	9 ppm or 11250ug/m <sup>3</sup>	12%	2.3%
SO <sub>2</sub> (1 hour average)	20µg/m <sup>3</sup>	15µg/m <sup>3</sup>	0.2 ppm or 570ug/m <sup>3</sup>	3.5%	2.6%

These results are presented in relation to design criterion specified in Schedule 2 of the Air EPP.

### Management measures proposed in EER

- Undertake post commissioning Air Quality monitoring to ensure compliance with the Air EPP
- Undertake ongoing Air quality monitoring to ensure compliance with Air EPP
- Install system as designed to reduce emissions to ensure compliance with Air EPP. This includes a multicyclone and baghouse abatement systems and 18m stack, as detailed in Appendix I of the EER. Note that modelling assumes this system is in place.
- Install wood chip visual moisture monitoring. The woodchips will be housed inside a walking floor trailer that is completely covered and will not be affected by rainfall.
- The woodchips are a residue from milling operations, and will always be a consistent size

### Public and agency comment

No comment received

### Evaluation

This assessment applies specifically to the construction of a new wood chip fuelled boiler, however the use of the back-up oil fuelled boiler by the abattoir at the adjoining site should also be considered. The emissions report commissioned by the proponent assessed the emissions from the proposed boiler as well as the cumulative emissions to air from both boilers operating continuously, which is only expected for a short period each day. Therefore, the results presented for assessment of the proposed new boiler are considered to be conservative.

The Air EPP provides guidance for protection of the ambient air environment of Tasmania. It specifies limits (at reference conditions) on in-stack concentrations of wood fired boilers, expected to be achievable using accepted modern technology. The air emission assessment results (detailed above and in Figure 2 and Appendix I of the EER) indicate that operation of the new boiler is expected to result in in-stack concentrations below the limits.

The Air EPP also specifies a maximum ground level concentration for particulates and combustion gases associated with wood-fired boiler operation at or beyond the boundary of the Land. As summarised above, combustion products from the boiler are predicted to fall below the limits set by the design criteria, with a maximum percentage proportion of the set values of 16% for PM<sub>10</sub>, 33% for NO<sub>x</sub>, 12% for CO and 3.2% of SO<sub>2</sub>. This applies to the worst-case scenario when the proposed boiler and backup boiler are operating simultaneously, which is only considered likely for a limited period during operation. Residual emission compounds predicted in the air emissions assessment (detailed above and in Figure 4 and Appendix I of the EER) were found likely to fall significantly below any recommended values. Therefore, the predictions show that the identified substances emitted from the boiler are likely to comply with the Air EPP design criteria.

It is considered likely that reserve capacity for additional pollutant emissions in the surrounding airshed (area defined by natural or topographic features affecting air quality) will be maintained, as required by the Air EPP, based on the results presented.

Management measures proposed in the EER are considered appropriate. It should be noted that the modelling results presented assume that the system is installed according to manufacturer specifications, including features such as multicyclone and baghouse abatement systems and an 18m stack.

The proposed external Air Quality monitoring is supported, although not considered necessary given the results of the modelling which are considered to be conservative. Instead, the permit will impose atmospheric emission limits of in-stack concentrations for the proposed boiler in **Condition A1**, reflecting the limits specified in the Air EPP. It is expected that the boiler will comply with these limits, and stack tests specified in **Condition A2** will be required to demonstrate compliance, and must be carried out within 90 days of completion of commissioning, then annually thereafter unless otherwise approved by the Director. **Condition A3** ensures that appropriate stack testing facilities are to be available for stack testing as required by the permit conditions. Measures proposed in relation to wood chip moisture and dust are considered appropriate, no conditions will be required.

### Conclusion

The proponent will be required to comply with the following conditions:

**A1** Stack emission limits

**A2** Stack testing frequency

**A3** Stack testing facilities

## Issue 2: Noise Emissions

### Description of potential impacts

Excessive noise emissions can create an environmental nuisance if there are not adequate separation distances between noise generating equipment and sensitive receptors. The proposed wood fired boiler will result in noise emissions, most significantly from fans used to assist an efficient combustion process. The adjoining Greenham site has existing constant noise sources, such as refrigerator units, other plant, the existing boiler, and variable sources such as forklifts, trucks and employee cars. The proposal site is located in an existing industrial area, with nearest residences in other ownership located approximately 100m to the east in the general industrial zone (Figure 2). The two closest residences (11 and 12 Bacon Factory Road) are owned by the proponent.

The proponent commissioned an acoustic assessment for the EER for the proposed boiler replacement. The assessment measured existing noise levels at the site and considered potential noise effects at the nearby noise sensitive premises.

Noise emissions from the site occur over a 24 hour cycle, and vary depending on the time of day. Times of the day are divided into the following periods in the *Tasmanian Noise Measurements Procedures Manual (2008)*:

- (a) Day: 0700 hours to 1800 hours
- (b) Evening: 1800 hours to 2200 hours
- (c) Night: 2200 hours to 0700 hours the following day

The acoustic assessment found noise levels attributed to the Greenham site were within the range of 46-49 dB(A) Leq during the day, and 40-44 dB(A) Leq during the night period. The Leq, or equivalent noise level, is commonly used to describe the ‘average’ sound level, being the level of a continuous noise that has the same sound energy as the noise under investigation. When tonally adjusted according to the *Tasmanian Noise Measurements Procedures Manual (2008)*, the adjusted range for the night period was 42-46 dB(A).

L90 levels measured from the site were commonly in the 45-50 dB(A) range during the day and 40-45 dB(A) during the night. L90 measurements are used to describe noise exceeded 90% of the time and are representative of lower noise levels.

Noise levels attributable to the proposed new boiler alone, modelled at the nearest sensitive premises in other ownership (from Table 4 of Appendix 2 of the EER) are:

Noise sensitive premises	Day	Night
13 Bacon Factory Rd	38 dB(A)	22 dB(A)
14 Bacon Factory Rd	41 dB(A)	25 dB(A)

These modelled levels are representative of no mitigation measures (i.e. unlined boiler house and bare ID fan discharge point).

### Management measures proposed in EER

- Undertake post commissioning monitoring at sensitive receptors to ensure compliance with *Environment Protection Policy (Noise) 2009*

<p><b>Public and agency comment</b></p>
<p>No comment received.</p>
<p><b>Evaluation</b></p>
<p>Several principles of the <i>Environment Protection Policy (Noise) 2009</i> should be taken into account when assessing the noise impacts of this proposal. These include recognising shared responsibility for sources of noise, and considering cumulative impacts on particular receiving environments of noise generated by multiple activities and growth in noise output arising from intensification of use over time. The EER notes there is no history of complaints in relation to existing noise from the site.</p> <p>Noise emissions from the boiler will vary over the 24 hour period of operation of the boiler, with reduced noise output during the night period as fans slow in response to demand. The L<sub>90</sub> measurements provided in the acoustic assessment are considered a realistic indicator of plant noise considering the acoustic environment. Measurements from the acoustic assessment indicate that noise levels at the nearest sensitive premises in other ownership, taking into account the existing boiler noise and acoustic environment, are likely to result in L<sub>90</sub> levels of:</p> <ul style="list-style-type: none"> <li>• 52 dB(A) between 0700 hours and 1800 hours (Day time)</li> <li>• 46 dB(A) between 1800 hours and 2200 hours (Evening time)</li> <li>• 42 dB(A) between 2200 hours and 0700 hours (Night time)</li> </ul> <p>EPA Tasmania’s noise specialised advised that on this basis, noise levels from the proposed boiler without mitigation measures, as detailed in the above table (from Table 4 of Appendix 2 of the EER), will be significantly below existing levels at the nearest sensitive premises. Therefore the boiler will not result in significant additional noise sources from the current operation.</p> <p>To confirm that actual noise levels from the proposed new boiler are as predicted in the above table (from Table 4 of Appendix 2 of the EER), the proponent will be required to show that noise from the boiler, following commissioning, agrees with the assumed sound power outputs in the noise modelling for this assessment. The permit will require a post commissioning noise report in <b>condition NI</b> to confirm that noise emission levels from the boiler during operation do not exceed 45 dB(A) during the day, 35 dB(A) in the evening, and 30 dB(A) at night. This is reflected by proponent’s proposed management measure, to carry out post commissioning monitoring.</p>
<p><b>Conclusion</b></p>
<p>The proponent will be required to comply with the following conditions:</p> <p><b>NI</b> Post commissioning noise survey requirements</p>

Issue 3: Solid Wastes and Wastewater Disposal
<p><b>Description of potential impacts</b></p>
<p>Wastewater (effluent) from boiler operations has the potential to impact on surface water quality if discharged to the environment. Wastewater currently produced on site is managed via a wastewater treatment plant for pre-treatment prior to discharge to the sewerage system. Operation of the boiler will produce wastewater in the form of blowdown water, which will be treated by the existing wastewater treatment plant.</p> <p>Excessive waste accumulation and generation can increase the risk of environmental contamination and result in unnecessary disposal to landfill. Ash from burning woodchips in the proposed boiler will result in solid wastes. Expected ash production from the boiler operation is 116.5 kg per annum, based on an estimated 1% ash yield dry weight.</p>
<p><b>Management measures proposed in EER</b></p>
<ul style="list-style-type: none"> <li>• Use ash within composting operations as a carbon source (sic).</li> </ul>
<p><b>Public and agency comment</b></p>
<p>No comment received.</p>
<p><b>Evaluation</b></p>
<p>The treatment of blowdown water from the boiler by the existing wastewater treatment plant is considered suitable. The EER states that the existing trade waste pre-treatment plant has adequate capacity for current wastewater loads, and the expected load is not expected to change after commissioning the new boiler. It also states that wastewater from the existing boiler is discharged according to an agreement with TasWater. To ensure this continues, <b>Condition E1</b> requires that water can only be discharged to sewer with approval of the operator of the sewage system. <b>Condition E2</b> requires that wastewater from the boiler must be directed to sewer.</p> <p>The proposed management measures are considered appropriate to deal with the volume of waste produced from the activity. No conditions for solid wastes are considered necessary, however the Permit details the waste management hierarchy, <b>O11</b>, in the information section, for best practice waste management.</p>
<p><b>Conclusion</b></p>
<p>The proponent will be required to comply with the following conditions:</p> <p><b>E1</b> Discharges to Sewer</p> <p><b>E2</b> Wastewater management</p> <p>Other information included in the permit.</p> <p><b>O11</b> Waste management hierarchy</p>

<b>Issue 4: Environmentally Hazardous Substances</b>
<b>Description of potential impacts</b>
Environmentally hazardous substances such as oils and lubricants can cause significant environmental damage if released to the environment. The EER states that the proposed boiler does not use or store quantities of hazardous substances likely to cause serious or material environmental harm if released to the environment, however does state that some lubricants/oils will be used in machinery.
<b>Management measures proposed in EER</b>
<ul style="list-style-type: none"> <li>The EER states that any minor leaks from machinery (ie lubricants) will be handled in accordance with environmental requirements.</li> </ul>
<b>Public and agency comment</b>
No comment received.
<b>Evaluation</b>
It is considered unlikely that the volumes of hazardous substances required for operation of the boiler will be at a level which will cause environmental harm through accidental release to the environment. However, to ensure potential environmental harm is minimised, <b>Condition H1</b> requires that when used, any hazardous materials are stored in containment systems and managed to prevent discharge or emission to the environment, and this is reflected by the proposed management measures in the EER.
<b>Conclusion</b>
The proponent will be required to comply with the following conditions: <b>H1</b> Storage and handling of hazardous materials

<b>Issue 5: Decommissioning and rehabilitation</b>
<b>Description of potential impacts</b>
Industrial activities have the potential to cause ongoing environmental impacts after cessation if not appropriately decommissioned, through release of contaminants to the environment. The lifespan of the boiler is expected to be approximately 20 years.
<b>Management measures proposed in EER</b>
No measures are detailed for the end of life for the proposed boiler. The existing pyrethrum/coal boiler will be decommissioned and removed from the site.
<b>Public and agency comment</b>
No comment received.
<b>Evaluation</b>
Management of decommissioning and rehabilitation is necessary at the end of the proposed boiler's life and will be required by permit <b>conditions DC1</b> and <b>DC2</b> . <b>Condition DC1</b> requires that the Director is notified of planned cessation of the activity. <b>Condition DC2</b> requires that a Decommissioning and Rehabilitation Plan (DRP) is submitted to the Director within 30 days of the Director being notified of the planned cessation of the activity. <b>Condition DC3</b> is required to ensure that the Land is rehabilitated following the permanent cessation of the activity and <b>condition DC4</b> requires notification where a temporary suspension of the activity is likely to occur.
<b>Conclusion</b>
The proponent will be required to comply with the following conditions: <b>DC1</b> Notification of cessation <b>DC2</b> DRP requirements <b>DC3</b> Rehabilitation following cessation <b>DC4</b> Temporary suspension of activity

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## 7 Report Conclusions

This assessment has been based on the information provided by the proponent, Greenham Tasmania Pty Ltd, in the permit application and the case for assessment (the EER).

This report incorporates specialist advice provided by EPA Tasmania scientific specialists and regulatory staff.

It is concluded that:

1. the RMPS and EMPCS objectives have been duly and properly pursued in the assessment of the proposal;
  2. the assessment of the proposed activity has been undertaken in accordance with the Environmental Impact Assessment Principles; and
  3. the proposed activity is capable of being managed in an environmentally acceptable manner such that it is unlikely that the objectives of the *Environmental Management and Pollution Control Act 1994* (the RMPS and EMPCS objectives) would be compromised, provided that the Permit Conditions - Environmental No. 10240 appended to this report are imposed and duly complied with.
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## 8 Report Approval

**Environmental Assessment Report and conclusions, including environmental conditions, adopted:**



**DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY**

**Acting under delegation from the Board of the Environment Protection Authority**

Date: 22 April 2020

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## 9 References

Greenham Tasmania Pty Ltd, Environmental Effects Report V3, Proposed Boiler Replacement, 2 &4 Bacon Factory Road, Smithton, Tasmania

Tasmanian Noise Measurements Procedures Manual, 2008, Second Edition, Environment Division, Department of Environment, Parks, Heritage and the Arts

Environment Protection Policy (Air Quality) 2004, Environment Division, Department of Primary Industries, Water and Environment

## 10 Appendices

Appendix 1 Table of proponent management measures

Appendix 2 Permit conditions

## Appendix I – Table of proponent management measures

Item	Commitment	Due date
Air Quality	Undertake post commissioning Air quality monitoring to ensure compliance with Air EPP 2004	Within 3 months post commissioning
Air Quality	Undertake ongoing Air quality monitoring to ensure compliance with Air EPP	Annually
Design Management Measures	Install system as designed to reduce emissions to ensure compliance with Air EPP	Prior to construction
Design Management Measures	Install wood chip visual moisture monitoring	Ongoing
Noise	Undertake post commissioning monitoring at sensitive receptors to ensure compliance with Noise EPP	Within 3 months of commissioning
Solid waste	Use ash within composting operations as a carbon source.	ongoing
Monitoring	A complaints register to monitor and address any dust, noise or other compliance will be maintained	Ongoing
Monitoring	Follow manufacturer's recommendations of quarterly multi-cyclone inspections and annual servicing.	Quarterly/Annual

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## Appendix 2 – Permit conditions – Environmental



ENVIRONMENT PROTECTION AUTHORITY