

AMG WA Pty Ltd

Peel Landfill Facility, Lot 3 Buller Road Waroona

Class I Landfill Facility and Sorting and Recycling Facility

Fire Management Procedure

Procedure Number 003 – Revision 0

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Reviewed: TBA

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DRAFT

1. Introduction

This draft procedure is to be finalised once the facility operating licence has been issued to reflect any additional fire related conditions.

The AMG WA Pty Ltd (AMG), Lot 3 Buller Road, Waroona waste management facility incorporates a Class I landfill and a waste sorting and recycling facility at the Facility. This Fire Management Procedure (FMP) relates to the management of fires at both of these two facilities.

Related activities on site have an extremely low risk of causing a fire; however, fire is an ever-present concern. This Fire Management Procedure has been developed to manage fires originating from on-site activities as well as fires from neighbouring properties.

The objective of this Fire Management Procedure is to increased awareness of the potential dangers of fires as well as minimise the impact of fires.

AMG takes the responsibility associated with fire management extremely seriously.

2. Purpose

The purpose of this procedure is to:

- Identified potential on-site sources of fires.
- Provide guidance to the Site Operators on how best to prevent fires.
- Provide guidance to the Site Operators on how best to manage fires.
- Ensure appropriate fire management procedures are carried out.
- Protect life and property.
- Maintain the rural character of the Shire.

3. Reference

- *Shire of Waroona Fire Control Information 2020/21*
- *Bush Fires Act 1954 (as amended)*

4. Approval

This procedure has been developed to the satisfaction of the Department of Water and Environmental Regulation (DWER) and the Shire of Waroona.

5. Distribution

This Procedure is distributed to:

- The Facility Operator.
- All employees and contractors involved in waste management activities within the Facility.
- Department of Water and Environmental Regulation.
- Shire of Waroona.
- Customers as applicable.
- Any other relevant parties.

6. Definitions

Customer - means an individual or company, responsible for, or delivering waste material to the Facility.

Facility – means the Class 1 landfill facility and the sorting and recycling facility.

Facility Operator - means a person undertaking the operational activities of the Facility.

Facility Owner – is AMG WA Pty Ltd.

Minor Fire - means a fire that originates on-site and is able to be immediately extinguished by Site Operators.

Person in Control - means a person who has control of the Facility. The person with control is the Facility Manager.

Significant Fire – means a fire that originates on-site and is NOT able to be immediately extinguished by Site Operators. This is a fire that requires off-site assistance in order to bring it under control.

Site – means Lot 3 Buller Road, Waroona.

7. Responsibility

The Facility Owner has the duty of care to:

- Compile, maintain and update this Fire Management Procedure.
- Ensure that fire prevention strategies are appropriately maintained.
- Ensure that all employees have a copy and are aware of the content of the Fire Management Procedure.
- Ensure that where appropriate, the employees are complying with the Fire Management Procedure.

The Person in Control of the Facility has a duty of care to:

- Implement, maintain and update this FMP.
- Ensure adequate, appropriate training of Facility Operators.
- Assess the effectiveness of the various fire management strategies implemented on site.

- If necessary, develop measures to improve the fire management strategies utilised on site (may include obtaining specialist technical assistance).
- Ensure the appropriate maintenance of firefighting equipment and PPE.
- Maintain adequate supplies of appropriate firefighting spares on-site.
- Ensure the safety of all visitors to site in the event of a Significant Fire.
- Report fires to the Shire, DWER and police as required by this Procedure.
- Ensure that this fire management plan is regularly reviewed.

Facility Operator has a duty of care to:

- Operate with due care to minimise the potential of a fire.
- Be aware of the site fire management strategies.
- Ensure that fire management strategies are utilised as appropriate in the event of a fire.
- Report faulty or inefficient firefighting equipment to the Person in Control.
- Inspect incoming waste for possible ignition sources.
- Notify the Person in Control of any fires that are detected on site or in the immediate area surrounding the site (neighbouring properties).
- In conjunction with the Person in Control, assess the condition of any fires and implement the appropriate fire management procedures.
- Utilise appropriate PPE and firefighting equipment.
- Complete the appropriate Fire Incident Report as necessary and pass on to the person in Control.

Customer:

- To be aware of site evacuation procedure.
- Comply with site instructions.

8. Site Background

Lot 3 Buller Road is within the Shire of Waroona, approximately 140 km south of Perth and 7.7 km east south east of the town site of Waroona. The property is approximately 218 ha in size. Approximately 9 ha have previously been cleared of natural vegetation for sand extraction, with a further approximately 10 ha yet to be cleared as part of ongoing sand extraction and the remainder of the site (approximately 190 ha) is either good quality natural bush or being rehabilitated into natural bush.

9. Implementation Rationale

The rationale for the implementation of fire management strategies is to:

- Reduce the risk of fires occurring on site.
- Reduce the damage caused by fires.
- Reduce the risk of fires damaging neighbouring properties.
- Reduce the potential for off-site fires to cross the site boundary.
- Should a fire be present on-site or within the immediate area, this Fire Management Procedure will assist in the management of fires as well as the protection of life and property.

10. Fire Mitigation Strategies

There are a number of fire mitigation strategies that can be employed in order to reduce the risk of fires occurring on-site as well as minimise the impact of fires. The mitigation strategy is a function of the type and size of the fire.

10.1 Preventative Strategies

Training - Fire awareness training is an essential activity to reduce the occurrence and improve the management of fires.

All Facility Operators are to undergo appropriate fire awareness training. This fire awareness training is to cover all aspects relating to the potential occurrence of fires on site as well as the appropriate management of the various types of fires (ordinary combustibles, electric fires, hydrocarbon fires).

Customers, contractors and visitors are to be provided with sufficient information to enable awareness of potential fire sources as well as appropriate evacuation procedures.

Signage – appropriate signage is to be installed on site in order to ensure sufficient fire awareness information is available to users of the site. Typical signage would include:

- Evacuation assembly points.
- No smoking signs.
- On-site fires prohibited.
- Fire extinguisher/equipment positions.
- Emergency contact details (during working hours and after hours).
- Additional signs as required.

Site Security – the maintenance of adequate site perimeter fencing to restrict unauthorised site access and potential vandalism.

Firebreaks - the construction and maintenance of adequate firebreaks is an essential activity as well as a requirement under the *Shire of Waroona – Fire Control Information 2020/21 (as amended and updated)*.

Firebreaks, of a minimum 3 m wide, 4 m vertical clearance and four-wheel drive accessible, are to be constructed and maintained along the complete property boundary and within 20 m around any buildings, or fuel storage areas. The firebreaks are to be maintained during the period 30 November through to 30 April of each year.

Appendix 1 – Firebreak & Assembly Point Site Plan provides details of the firebreaks around the site.

Fire Hazard Reduction – in addition to the construction and maintenance of appropriate firebreaks, it is essential to reduce the potential fire hazard by removing excess dead vegetation matter (fire fuel) from site as well as ensure the appropriate containment (landfilling) of flammable waste materials. This activity is to continue during the period 30 November through to 30 April of each year.

Adherence to DWER Waste Acceptance Criteria – waste accepted for landfilling will be strictly in accordance with the DWER Class I waste acceptance criteria (*Landfill Waste Classification and Waste Definitions 1996 - as amended - revised Dec 19*). This will ensure that the waste landfilled will have minimal potential to ignite and sustain a fire, as the vast majority of the incoming waste will be incombustible inert material.

Landfill Facility Operations – a range of landfill operational activities will also improve the fire resistance of the landfilled waste. These include:

- Appropriate waste compaction.
- Application of adequate waste cover.
- Spreading out combustible material (tyres/plastics) and covering with incombustible material.

Sorting and Recycling Facility Operations – a range of operational activities will also improve the fire resistance of the waste sorting and recycling operation. These include:

- Minimising unprocessed and process combustible materials.
- Processing combustible materials as soon as possible after arrival on site.
- Removal of combustible materials from site as soon as possible.
- Maintenance of mobile plant and equipment in accordance with manufacturer's recommendations.

Communication - the appropriate communication channels with the Shire, Fire and Emergency Services and local community is essential in the proactive management of fires within the immediate area.

Shire Office

9733 7800

Waroona Police Station

9733 7400

Chief Bush Fire Control Officer

John Twaddle – 0417 974 611

Deputy Bush Fire Control Officer

Brian Beadles – 0427 040 680

Fire Control Officers

Waroona West Fire Brigade

Gregory Lewis – 9739 1639 or 0409 885 970

Lake Clifton Fire Brigade

Gareth Davies – 9739 1290 or 0424 210 034

Preston Beach

Steve Thomas – 0431 941 716

Source:

https://www.waroona.wa.gov.au/Profiles/waroona/Assets/ClientData/Bush_Fire_Control_Officers.pdf

10.2 On-Site Fires

Landfill fires - there is a minor risk associated with spontaneous combustion of materials placed within the landfill. Due to the nature of the waste (large percentage of inert, incombustible material), it is not seen that this is a high-risk area or that the occurrence of a fire will cause significant damage. The main fuel source for landfill fires would be plastics or used vehicle tyres. As per the landfill operating procedures, "*flammable waste (plastic and vehicle tyres) should be evenly distributed throughout the waste mass to reduce the chance of a large, uncontrolled fire within the landfill*".

Stockpile fires - there is also a minor risk associated with spontaneous combustion of materials in the sorting and recycling facility. Processing incoming combustible materials as soon as possible, minimising the volume and height of combustible material stockpiles and removing combustible materials from site after processing all contribute to the reduction of fire risk at this facility.

Equipment fires - there is a risk associated with fires originating from mobile and static equipment on site. Typically, this will result from equipment failure such as electrical systems or hydraulic hoses.

Minor fires – there is a risk of minor fires occurring on site. These would typically be from the uncontrolled disposal of cigarette butts and other careless activities on-site.

10.3 Offsite Fires

The Site Operators have little influence over the source of offsite fires; however, they do have the ability to influence the on-site damage caused as a result of this type of fire.

Perimeter firebreaks are the primary mechanism to reduce the potential for off-site fires from entering the site. The effectiveness of firebreaks will be a function of the size of the neighbouring fire and prevailing weather conditions.

Reducing the quantity of combustible material (dead vegetation) on site will significantly reduce the impact of an off-site fire should it breach the perimeter firebreaks.

10.4 Firefighting Equipment

Equipment - the availability, maintenance and knowledge of the use of appropriate firefighting equipment is essential in being able to manage fires on-site.

Due to potential after-hours theft of firefighting equipment, all portable equipment will be locked up and secured at night. At the commencement of each day's operations, the Facility Operators are to ensure that this mobile firefighting equipment is readily available to immediately react to an on-site fire.

50 kL Water Tank, Booster Pump and Fire Hydrant - the water supply, pumping system and associated pipes and fire hydrant are available for immediate reaction to fires.

Water Cart - the water will be the backup firefighting piece of equipment. The water cart is to always be left full of water after dust suppression activities.

Fire extinguishers – portable fire extinguishers are to be readily available to extinguish equipment fires and fuel storage area fires.

11. Fire Identification Procedures

In the event of a fire, the person first identifying the fire is to report the fire to the Person in Control. The Person in Control is to determine whether the fire is deemed a Minor Fire or Significant Fire.

In the event of a Minor Fire, the site personnel are to fight the fire utilising on-site fire fighting equipment.

In the event of a Significant Fire, the Person in Control is to immediately report the fire to the Fire and Emergency Services and the Shire in order to obtain the necessary assistance to manage the fire.

In the event of a significant off-site fire, the Person in Control is to liaise with the Fire and Emergency Services and/or the Shire to determine the extent of the fire and the possible need to evacuate the site.

12. Evacuation Procedures

In the event of a Significant Fire on-site or within the immediate area threatening the site, all non-essential site personnel are to evacuate to the site emergency assembly point and await further instructions from the Person in Control.

Appendix 1 – Firebreak & Assembly Point Site Plan provides the location of the Site Assembly Point.

13. Reporting

As soon as is reasonable following the identification of a Significant Fire, the Person in Control is to report the fire to the appropriate authority. The reporting requirements will depend on the size and location of the fire.

The facility landfill operating licence will determine under which events a fire is required to be reported to the DWER. Typically, these will relate to fires directly on the landfill facility or within the sorting and recycling facility.

A Significant Fire is to be immediately reported to the Shire and the local bush fire brigade officer (Fire and Emergency Services).

A Minor Fire is not deemed as being reportable to any authority (unless the facility operating licence requires otherwise).

Any incidences of a fires suspected to have been caused by vandalism are to be reported to the local police.

14. Awareness Training

Information and training is to be provided on an as-needed basis to Site Operators, Vehicle Drivers, contractors and others who may be involved in on-site activities that have the potential to cause a fire.

If adequate in-house expertise is not available to undertake the training, suitable external training will be made available.

Site Operators

The fire management awareness training is to include:

- The purpose of the training.
- The potential fire sources.
- Available fire mitigation strategies.
- The trainees' roles and responsibilities under the Fire Management Procedure.
- Site evacuation procedures.
- Site operating licence conditions surrounding the management and reporting of fires on site.
- Where the facility's Fire Register is located and how Fire Incident Report forms can be accessed.
- The processes and procedures to be followed when completing the Fire Register and Fire Incident Report.
- Provision of a copy of the Fire Management Procedure.

As a minimum, Site Operators are to undergo fire awareness training:

- On commencement of operations on site.
- When a new potential fire hazard has been identified.
- Every three years.

Customers, Contractors and Visitors

The fire management awareness training is to include:

- Appropriate signage in areas of potential fire risk.
- Site evacuation procedures.
- Specific training as deemed appropriate by the Person in Control.

15. Procedure Review

This procedure is to be reviewed by the Person in Control at least every three years or more regularly if circumstances warrant.

Appendices

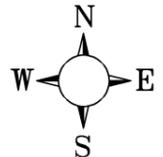
The following appendices are applicable to this Procedure:

Appendix No. 1 – Firebreak & Assembly Point Site Plan

Appendix No. 2 - Fire Incident Report

Appendix No. 1 – Firebreak & Assembly Point Site Plan

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FOR APPROVAL
22 APRIL 2021

LAYOUT PLAN
NOT TO SCALE

REVISIONS	No.	BY	DATE	DESCRIPTION	DRG. CHK.	I.W.
	C	S.B.Y.	22/04/21	GENERAL AMENDMENTS	DESIGN	I.W.
B	S.B.Y.	22/02/21	ISSUED FOR APPROVAL	DRAWN	S.B.Y.	02/21
A	S.B.Y.	15/02/21	CONCEPTUAL ONLY FOR DISCUSSION	DES. CHK.	I.W.	

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AMG WA PTY LTD
LOT 3 BULLER ROAD, WAROONA WA 6215
PEEL LANDFILL FACILITY
FIREBREAK AND ASSEMBLY POINT SITE PLAN

SCALE	AS SHOWN
SHEET	
DRG No.	PLF-SK7

REVISION C

Appendix No. 2 - Fire Incident Report

AMG WA PTY LTD Lot 3 Buller Road, Waroona Class I Landfill Facility and Sorting and Recycling Facility Licence Number XXX Fire Incident Report – Procedure No. 003	
Date & Time Incident Occurred: _____	
Type of Fire:	Minor <input type="checkbox"/> Significant <input type="checkbox"/> Off-Site <input type="checkbox"/> Other <input type="checkbox"/> Specify _____
Reported to:	Shire <input type="checkbox"/> FESA <input type="checkbox"/> DWER <input type="checkbox"/> Other <input type="checkbox"/> Specify _____
Description of Incident: _____ _____ _____	
Person Responsible for Coordinating Activities Name: _____ Designation: _____	
Activities Undertaken: _____ _____ _____ _____	
Future Preventative Measures Adopted: _____ _____ _____	
Facility Manager (Person in Control) Name: _____ Signature: _____ Date Report Filed: _____	