

OPAL VALE SALT VALLEY ROAD CLASS II LANDFILL

LOT 11 CHITTY ROAD, TOODYAY

FIRE MANAGEMENT PLAN



Prepared for

OPAL VALE PTY LTD

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Revision:	Final
Date of Issue:	30 Apr '15

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1. Introduction

Opal Vale Pty Ltd operates a Salt Valley Road Class II Landfill facility at Lot 11 Chitty Road, Hoddy's Well, Toodyay. Related activities on site have the potential to result in a fire and hence, fire management is an ever-present concern.

This Fire Management Plan (FMP) has been developed to manage fires originating from on-site activities as well as fires from neighbouring properties.

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

Opal Vale takes the responsibility associated with fire management extremely seriously.

2. Purpose

The purpose of this Plan 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 Toodyay Firebreak Orders & Fuel Hazard Reduction.*
- *Bush Fires Act 1954 (as amended).*

4. Approval

The development of this FMP is a requirement of the State Administrative Tribunal (SAT) Planning Approval and the Department of Environment Regulation (DER) Works Approval. This Plan has been developed to the satisfaction of the Shire and the DER.

5. Distribution

This Plan is distributed to:

- All employees involved in the management and operation of the landfill site.
- The Shire of Toodyay.
- Department of Environment Regulation.
- Landowner.
- Austral Bricks (adjacent clay extraction operation).
- BGC (adjacent clay extraction operation).
- Any other relevant parties/stakeholders.

6. Definitions

Customer - means a person driving a vehicle, which either delivers or removes material (waste or recyclable materials) from the site.

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 site. The person with control is the site supervisor or, when he is not on site, his nominated representative.

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 – The Prescribed Boundary within Lot 11 Chitty Road, Hoddy's Well, Toodyay – Salt Valley Road Class II Landfill Facility.

Site Operator - means a person undertaking the operational activities of the site.

7. Site Background

Lot 11 Chitty Road is within the Shire of Toodyay, approximately 65 km northeast of Perth and 13 km south of the town site of Toodyay. The total property is 619 ha in size, however, the landfill operations occupy approximately 50 ha in the south east corner of the site. A large portion of the site has previously been cleared for grazing, including the immediate surrounds of the landfill operational area.

8. 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 FMP will assist in the management of fires as well as the protection of life and property.

9. Fire Mitigation Strategies

There are a number of fire mitigation strategies that will 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.

9.1. Prevention Strategies

9.1.1. Training

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

All Site 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.

9.1.2. 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.

9.1.3. Site Security

The maintenance of adequate site perimeter fencing to restrict unauthorised site access and potential vandalism.

9.1.4. Fire Breaks

The construction and maintenance of adequate firebreaks is an essential activity as well as a requirement under the *Shire of Toodyay Firebreak Orders & Fuel Hazard Reduction*.

Firebreaks, of a minimum 3 m wide, 3 m vertical clearance and four wheel drive accessible, are to be constructed and maintained along the complete landfill Prescribed Boundary within 10 m of the boundary and within 7 m around any buildings, or fuel storage areas. The firebreaks are to be maintained during the period 1 November through to 30 April of each year

Should firebreaks not be able to be installed within 10 m of the Prescribed Boundary, then a Variation to Firebreak is to be applied for to the Shire of Toodyay. This application is required before 1 October each year.

The firebreaks around the site boundary (Lot 11) are the responsibility of the landowner.

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

9.1.5. 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 1 November through to 30 April of each year.

9.1.6. Landfill 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;
- Not placing significant quantities of flammable material in a single area within the landfill (piles of tyres); and,
- Not drawing excessive oxygen into the waste mass through the landfill gas extraction system.

9.1.7. 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.

TO REPORT A FIRE DIAL 000

For SMS notifications on Total Fire Bans register at 9395 9500

Shire Office – General Enquiries

9574 2258

Shire Ranger Service – General Enquiries

9574 4555

Toodyay Police Station

9574 9555

Chief Bush Fire Control Officer

0448 284 258

Deputy Chief Bush Fire Control Officers

Mick Rogers – 0428 583 954

Mark Briggs – 0419 048 773

Craig Stewart – 0438 742 037

Community Emergency Services Manager

0458 042 104

Morangup District

Captain Jeff Venn – 0417 714 798

Kim Maddrell – 0477 471 323

Craig Stewart – 0438 742 037

Dieter Bartels – 0428 111 701

Department of Fire and Emergency Services website – www.dfes.wa.gov.au

9.2. On Site Fires

9.2.1. Landfill Fires

There is a risk associated with spontaneous combustion of materials placed within the landfill. Due to the mixed nature of the waste there is potentially material in the waste that if they come into contact, will spontaneously combust, resulting in a landfill fire. These landfill fires are a more common occurrence on the surface of the landfill, but occasionally, occur as subterranean fires.

9.2.2. 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.

9.2.3. 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.

9.3. Off-Site Fires

The Site Operators have little influence over the source of off-site fires; however, they do have an 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.

9.4. Fire Fighting Equipment

9.4.1. Equipment

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

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

9.4.2. Water Cart

The water tanker doubles as a dedicated fire-fighting unit and will be the primary fire fighting piece of equipment.

9.4.3. Fire Extinguishers

Portable fire extinguishers are to be readily available to extinguish equipment fires and fuel storage area fires.

10. 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 a 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 Shire Ranger and Emergency Services 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 Shire Ranger and Emergency Services to determine the extent of the fire and the possible need to evacuate the site.

11. Evacuation Procedure

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.

12. 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 DER. Typically these will relate to fires directly on the landfill.

A Significant Fire is to be immediately reported to the Shire Ranger 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.

13. Responsibility

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

- Implement, maintain and update this FMP;
- Ensure that the fire prevention strategies are appropriately maintained;
- Ensure adequate appropriate training of Site 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 fire fighting equipment and PPE;
- Maintain adequate supplies of appropriate fire fighting spares on-site;
- Ensure the safety of all visitors to site in the event of a Significant Fire;
- Report fires to the Shire, DER and police as required by this Plan; and,
- Ensure that this FMP is regularly reviewed.

Site Operator(s) has a duty of care to:

- Be aware of the site fire management strategies;
- Ensure that fire management strategies are utilized as appropriate in the event of a fire;
- Report faulty or inefficient fire fighting 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 fire fighting equipment; and,
- Completely the appropriate Fire Incident Report as necessary and pass on to the Person in Control.

14. Awareness Training

Information and training is to be provided on an as needed basis to Site Operators, Customers, 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.

14.1. Site Operators

The fire management awareness training is to include:

- The purpose of the training;
- The potential fire sources;
- Available fire mitigation strategies;
- Basic fire fighting techniques;
- The trainees' roles and responsibilities under the FMP;
- 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; and,
- Provision of a copy of the FMP.

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; and,
- Every three years.

14.2. 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. Review

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

Appendices

Appendix No 1 – Firebreak and Assembly Point Site Plan



Appendix No 2 – Fire Incident Report

Opal Vale Pty Ltd Lot 11 Chitty Road, Hoddy's Well, Toodyay Salt Valley Road Class II Landfill Facility Licence Number XXX Fire Incident Report No.		
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"/>
	DER	<input type="checkbox"/>
	Other	<input type="checkbox"/> Specify
Description of Incident:		
Person Responsible for Coordinating Activities Name: Designation:		
Activities Undertaken:		
Future Preventative Measures Adopted:		
Site Supervisor (Person in Control) Name: Signature: Date Report Filed:		