

APPENDIX K: FIRE MANAGEMENT PLAN

TNG LIMITED

**FIRE MANAGEMENT
PLAN**

**DARWIN PROCESSING
FACILITY**

DARWIN, NORTHERN
TERRITORY

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LIST OF ABBREVIATIONS

Abbreviation	Meaning
EMS	Environmental Management System
FMP	Fire Management Plan
APM	Animal Plant Mineral Pty Ltd
Project	Darwin Processing Facility
TNG	TNG Limited

1 INTRODUCTION

This Fire Management Plan (**FMP**) has been prepared by Animal Plant Mineral Pty Ltd (**APM**) with regard to the construction and operation of the Darwin Processing Facility (**Project**) on behalf of TNG Limited (**TNG**).

The FMP has been informed by the outcomes of technical studies and a risk assessment undertaken during preparation of the Environmental Impact Statement. It is one element of TNG's environmental management system (**EMS**), pertaining specifically to the management of fire risk associated with the Project, and response to fires at the Project.

Implementation and operation of the EMS more generally (i.e. those EMS elements not specific to managing fire risk and responding to fires but rather applicable to management of all Project environmental aspects) is described in the Project Environmental Management Plan.

The FMP presented considers the risk of fire during construction and operations, but does not seek to replace any mandated fire suppression design approvals or requirements as directed by the Northern Territory Government or fire suppression agencies.

2 MANAGEMENT

Table 2-1: Fire Management Measures

Objectives	<ul style="list-style-type: none"> • Reduction of bushfire risk prior to bushfire season. • Effectively manage potential risks from offsite bushfires or incidental onsite fires. • Minimise fuel loads adjacent to Project infrastructure. • Minimise potential for spread of fire at the Project.
Management Measures	Site Induction
	<ul style="list-style-type: none"> • Site induction includes the following components for fire management: <ul style="list-style-type: none"> ▪ Awareness of potential bushfire risks across the Project; ▪ Requirements for reporting bushfires or incidental fires in close proximity to the Project; ▪ Hot works permitting system; and ▪ Management procedures/ stop work requirements.
	General Management
	<ul style="list-style-type: none"> • Permanent site personnel to undertake fire control training, including the correct use of extinguishers and/or fixed fire suppression equipment. • All buildings/ work areas will be equipped with at least one each of water and dry powder extinguishers. Kitchens where deep fryers are present will be equipped with wet chemical extinguishers and fire blankets. • All vehicles to carry fire extinguishers and UHF radios. <ul style="list-style-type: none"> ▪ Pre-fire season planning between Darwin Processing Facility Management Team, Bushfires NT (Darwin Head Office 08 8922 0844) and Northern Territory Emergency Service – Darwin Volunteer Unit. • Storage of flammable and combustible materials will be in accordance with the Hazardous Substances Management Plan. Open flame or other ignition sources are prohibited within 20 m of bulk flammable storage areas, fuel dispensing vehicles or refuelling operations and activities in hazardous atmospheres. • If “hot work” is to be undertaken in any area where a potential fire hazard exists or in areas designated as a potential fire risk by Contractor in the risk assessment, a ‘Hot Works’ permit is required. In addition, a fire watcher or fire warden shall remain on watch for a minimum of 30 minutes after completion of the hot works. • The “hot work” risk assessment will use Australian Standard AS 1674.1 <i>Safety in welding and allied processes – Fire precautions</i> to determine the required controls to be implemented. • Firefighting equipment will be maintained and inspected Monthly or in accordance with manufacturer specifications, whichever frequency is greater. • Inspections of waste storage and disposal areas to identify potential accumulation of combustible materials and associated risks prior to April. • Fire wardens to be nominated for designated buildings and undertake the relevant training.
	Bushfire
	<ul style="list-style-type: none"> • Monitor fire Danger Rating for Darwin (http://www.bom.gov.au/nt/forecasts/fire.shtml). • In the event of a bushfire the following measures should be taken: <ul style="list-style-type: none"> ▪ If you see smoke or fire in the immediate area, alert all onsite personnel and provide regular updates; ▪ Contact the Site Manager / Construction Manager who will monitor the radio for any changes and determine best course of action, whether to work or not work; ▪ If the bushfire is threatening, ensure your own safety and Contractors by evacuating to the Gatehouse; ▪ If injuries have occurred attend to and assist injured personnel; ▪ Contact the Site Manager using the Emergency Communication Procedure as follows: <ul style="list-style-type: none"> ○ Call “Emergency, Emergency, Emergency” over UHF channel 12; ○ Response is given directly to the reportee acknowledging the call;

- Describe the nature of the emergency including number of people involved, details and nature of the incident; and
- Continue to stay close to your source of communication.
- Site Manager to call 000 and attend with onsite firefighting equipment and personnel, if safe to do so.

Building Structure Fire

- In the event of a building fire, the following measures should be taken:
 - If you hear a smoke alarm or see smoke, raise the alarm and evacuate the building;
 - The nominated Fire Warden to aid in evacuating the building to the muster point;
 - Fire Warden support officers to inspect (if safe to do so) that there are no personnel remaining in the building.
 - Contact the Site Manager / Fire Warden using the Emergency Communication Procedure as follows:
 - Call “Emergency, Emergency, Emergency” over UHF channel 12;
 - Response is given directly to the reportee acknowledging the call;
 - Describe the nature of the emergency including number of people involved, details and nature of the incident; and
 - Under direction of the Site Manager attempt to extinguish the fire with fire hoses and fire extinguishers, if safe to do so.
 - Site Manager to call 000 and attend with onsite firefighting equipment and personnel, if safe to do so.

Machinery / Plant Fire

- In the event of plant fire, the following measures should be taken:
 - If you see smoke or fire and it’s safe to do so, immediately notify control room to turn off plant to avoid getting close to the source of ignition;
 - Ensure your own safety by evacuating plant and moving yourself to a safe distance;
 - Alert people working in the area of the fire;
 - Attempt to extinguish the fire with fire suppression system and fire extinguishers, if safe to do so;
 - Contact the Site Manager using the Emergency Communication Procedure as follows:
 - Call “Emergency, Emergency, Emergency” over UHF channel 12;
 - Response is given directly to the reportee acknowledging the call;
 - Describe the nature of the emergency including number of people involved, details of accident and nature of the injuries; and
 - Under direction of the Site Manager attempt to extinguish the fire with fire hoses and fire extinguishers, if safe to do so.
 - Site Manager to call 000 and attend with onsite firefighting equipment and personnel, if safe to do so.
 - If smoke is observed from a seized conveyor roller it is important to immediately notify the control room in order to immediately notify maintenance. It is VERY IMPORTANT NOT TO TURN OFF THE CONVEYOR, as a moving conveyor is dissipating heat and stopping the conveyor catching alight. Dose the area with water until maintenance are ready to replace the roller. At no time is the conveyor to be turned off without maintenance input.
- Vehicles maintained and serviced at regular intervals to reduce potential of fire related to engines or exhausts.

Fire breaks

- Maintain a clear and continuous firebreak of 10 m minimum around infrastructure including:
 - Processing Plant; and
 - Gatehouse.

	Controlled Burns			
	<ul style="list-style-type: none"> Controlled burns should only be undertaken following consultation with key stakeholders; Do not undertake controlled burns when fire rating is High or above; Do not undertake controlled burns during windy conditions; Ensure applicable firefighting equipment is available and accessible during controlled burns; Ensure all personnel are notified of the controlled burn prior to commencement. 			
	Fire register to be completed following any fire related incident.		At all times	
	Firefighting equipment will be maintained and inspected.		Monthly/ manufacturer specifications	
	Firefighting equipment will be tested.		Annually/ manufacturer specifications	
Monitoring and reporting	Firebreaks, active working areas and fuel storage locations will be regularly inspected to determine if they are increasing fire risk.		As required or Monthly	
	Inspections of waste storage and disposal locations to identify potential accumulation of combustible materials and associated risks during the bushfire season.		Prior to April	
	Annual Fire Management Plan performance review.		Annual	
Performance Indicators	Compliant	Level 1	Level 2	Level 3
	Firebreaks maintained. Equipment sufficiently maintained. No bushfires or planned fires within the vicinity of the Project.	Trigger: Inspection identifies elevated risk due to activities or firebreaks not maintained.	Trigger: Bushfire within the vicinity of the Project.	Trigger: Unplanned fire at the Project.
Responsibility	Compliant	Level 1	Level 2	Level 3
Site Personnel	Maintain awareness of potential bushfire risks across the Project. Maintain vigilance against potential outbreaks of fire in work areas.	The onsite personnel should: <ul style="list-style-type: none"> If a work specific risk, the Contractor should mitigate the situation to reduce/eliminate the risk; and Notify the Site Manager of the elevated risk on UHF Channel 12. 	The onsite personnel should: <ul style="list-style-type: none"> Maintain safe distance from bushfire Report bushfire to Site Manager on UHF Channel 12. 	Contact the Site Manager using the Emergency Communication Procedure as follows: <ul style="list-style-type: none"> Call "Emergency, Emergency, Emergency" "over UHF Channel 12 Response is given directly to the reportee acknowledging the call. Describe the nature of the emergency including number of people involved, details of accident and

				<p>nature of the injuries.</p> <ul style="list-style-type: none"> ▪ Under direction of the Site Manager attempt to extinguish the fire with fire hoses and fire extinguishers, if safe to do so.
<p>Site Manager</p>	<p>Maintain a clear and continuous firebreak of 10 m minimum around infrastructure. Vehicles maintained and serviced at regular intervals. Continue controlled burns of landfill. Firefighting equipment will be inspected, maintained and tested annually. Inspections of waste storage and disposal areas to identify potential accumulation of combustible materials. Active working areas and fuel storage locations regularly inspected to determine if they are increasing fire risk.</p>	<p>Maintain a clear and continuous firebreak of 10 m minimum around infrastructure. Firefighting equipment will be inspected, maintained and tested. Log incident.</p>	<p>Monitoring bushfires through internet sources and on ground inspection to determine risk to site personnel. Provide updates to personnel within vicinity of the bushfire and inform of requirements (i.e. stop work). Log incident.</p>	<p>Call 000 fire response. Utilise firefighting equipment at incident if safe to do so. Undertake incident investigation and support the implementation of corrective and preventive actions.</p>

3 FIRE MANAGEMENT PLAN PERFORMANCE AND REVIEW

The FMP will be reviewed and updated annually.