



# Heavy Plant

## Operational Protocol

### Scope

This Operational Protocol provides a framework for the use and engagement of Heavy Plant by the NSW Rural Fire Service (RFS) and applies to all Heavy Plant under the control of the RFS during emergency and non-emergency operations.

This Operational Protocol does not:

- apply to vehicles in the RFS fleet management system;
- prevent local/public authorities and occupier/owners of land from fulfilling their duties under the [Rural Fires Act 1997](#);
- preclude the use of Heavy Plant supplied on a “without remuneration or reward” basis; or
- interrupt the provision of assistance to neighbours during emergencies.

### Protocol

#### Operational Objectives

Heavy Plant plays an important role in fire suppression and mitigation work. The use of Heavy Plant will be clearly justified by operational requirements, used responsibly and solely for achieving incident objectives during an emergency operation, or to complete approved non-emergency work.

Prior to making a decision to use Heavy Plant, consider:

- whether the proposed Heavy Plant strategy will achieve its operational objectives;
- the suitability of Heavy Plant for the intended tasks;
- available alternative strategies, particularly with respect to the environmental impacts associated with the use of Heavy Plant;
- the mitigation of risks posed by the use of the Heavy Plant;
- the localised proximity of Heavy Plant to an incident or task; and
- justification for expenditure.

Heavy Plant operations are conducted in accordance with the minimal impact suppression guidelines in *BFCC Policy 2/2006 Management of Bush Fire Operations*.

The management of Heavy Plant by the RFS is conducted in consultation and co-operation with other agencies, in particular the National Park & Wildlife Service NSW (NPWS) and the Forestry Corporation of NSW (FCNSW), where this occurs on NSW public tenures.

#### Supervision and Mutual Support

Heavy Plant requires adequate supervision and the level of supervision will be commensurate with the risk. Risk increases:

- with the presence of environmental hazards, e.g. fire;
- with the number of Heavy Plant requiring supervision, and the area over which supervision needs to occur;
- with the scale of Heavy Plant engagements and the complexity of each task; and
- proportional to the level of operator experience.



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Responsibility for ensuring adequate supervision rests with:

- › the Incident Controller during engagements for fire and other emergencies;
- › the District Manager, or a designated Project Manager, during non-emergency engagements;

Supervision during fire engagements should be undertaken by:

- › the Incident Controller, or designated Field Officer, for a small scale incident; or
- › a Heavy Plant Supervisor (HPS) when three (3) or more Heavy Plant are tasked for a fire incident;
- › a Plant Operations Manager (POM) within the Incident Management Team (IMT) when five (5) or more Heavy Plant are (or are to be) tasked for a fire incident.

For fire work, a mutual support firefighting appliance must be assigned to accompany the Heavy Plant, for the purpose of protecting the Operator and equipment should fire conditions escalate, with:

- › One (1) firefighting appliance for each Heavy Plant for tasks where there is any risk of being impacted by fire;
- › One (1) firefighting appliance per up to five (5) Heavy Plant for tasks where there is negligible risk of being impacted by fire, such as in clean up.

Additional resources should be considered where vast distances or local conditions require additional firefighting support. The above is a minimum requirement and local conditions should be assessed.

## Special Considerations

### Procedures for Engagement and Tasking

Approved Heavy Plant contractors are engaged using RFS procurement systems.

- › For fire work, ARENA HP is used to engage and task Heavy Plant Contractors.
- › Coupa is used to engage Heavy Plant Contractors in urgent circumstances and/or for low risk non-fire work.

Refer to Appendix [One](#) and [Two](#) for Heavy Plant Engagement and Tasking Workflows.

### Engagement/Tasking through ARENA HP

ARENA HP is the first point of reference to identify appropriate Heavy Plant for fire work. Tasking for fire work will be on the following basis:

- › For immediate engagement/tasking, the most appropriate Heavy Plant closest to the incident.
- › For a subsequent tasking, or other planned engagement, the most cost effective suitable Heavy Plant within a designated search radius.

Engagement/tasking must be undertaken by a person nominated by the District Manager or Incident Controller. A tasker will be:

- › set up as a unique user in ARENA HP (shared logins are prohibited); and
- › trained in how to identify and task suitable Heavy Plant in ARENA HP.

The terms of engagement and operation for fire work are in accordance with the *Heavy Plant Services Conditions of Agreement*.

Refer to Appendix [Three](#) for the Heavy Plant Tasking Procedure.



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### Approval of Heavy Plant Engagement/Tasking through ARENA HP

- The incident must be in ICON for fire work tasking to be approved.
- Verbal approval must be received from the State Duty Operations Officer prior to proceeding with tasking. Verbal approval will still be followed up with approval through ARENA HP.

Table 1 describes the roles responsible for tasking approval in various circumstances. Financial delegation is in accordance with *NSW RFS Policy P4.1.1 Financial Delegations*.

Table 1 Heavy Plant Approvals

Criteria	Incident Class	Approval by	Up to the estimated value of \$
All heavy plant taskings regardless of number of shifts/days.	1 or 2	District Manager* Area Capability Manager Area Commander	20,000
		State Duty Operations Officer	50,000
		State Operations Controller	250,000
All heavy plant taskings regardless of number of shifts/days.	3 (s.44)	Incident Controller or Deputy Incident Controller	20,000
		State Duty Operations Officer	50,000
		State Operations Controller	250,000
Requirement exceeds the delegations above.	1,2 or 3 (s.44)	Deputy Commissioner Field Operations	Unlimited

\*If the District Manager is not available, neighbouring District Managers can approve on their behalf with existing Arena HP configurations.

### Fire Work Engagement/Tasking Off ARENA HP

Fire work engagement/tasking off ARENA HP may only be done in urgent circumstances, limited to single shift engagements. The expectation is that an ARENA HP Contractor will be tasked for any fire work beyond the first day. Tasking should be documented using Off ARENA HP forms.

For Heavy Plant tasking off ARENA HP, the responsible Manager must ensure risks are assessed and mitigation applied. Refer to [Risk Management](#).

The Incident Controller must be satisfied that the critical requirement to engage a Heavy Plant Contractor under these circumstances is balanced against the risk of delaying the engagement of Heavy Plant.

Refer to Appendix [Four](#) for the Off ARENA HP Tasking Workflow.

#### ➤ Approval of an off ARENA HP Tasking

Approval of a fire work tasking off ARENA HP is on the following basis:

- the use of Heavy Plant is considered immediately critical by the Incident Controller;
- a suitable Heavy Plant Contractor is not available in ARENA HP (including where an existing contractor needs to travel a significant distance);
- the Heavy Plant Contractor satisfies standards outlined in Appendix [Five](#) and [Six](#); and
- the District Manager (If the District Manager is not available, neighbouring District Managers can approve on their behalf with existing Arena HP configurations) (Class 1 & 2 incident) or Incident Controller (Class 3 incident) is notified of, and approves, this decision.



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The approver must ensure:

- all risks and hazards have been considered and mitigations applied;
- tasking is for a single shift only; and
- approval is within delegation.

The Incident Controller will ensure that a Heavy Plant Contractor is sourced through ARENA HP to replace the contractor engaged off ARENA HP as soon as possible during a task, and not exceeding 24 hours.

### Non-Fire Work Engagement/Tasking

Non-fire work tasking will generally be done through Coupa after locating a suitable Heavy Plant Contractor in ARENA HP. Non-fire tasking will generally have a lower risk profile and there is usually the opportunity to negotiate a lower cost for the work.

If engaging a Heavy Plant Contractor who is not in ARENA HP, opportunity should be taken to encourage the Contractor to register in ARENA HP for future engagements.

If approving the tasking of Heavy Plant off ARENA HP, all risks and hazards have been considered and mitigated, and is within Delegation.

### Risk Management

The keys areas of risk in the use of Heavy Plant by the RFS are:

- Operational Risk – Health and Safety of Personnel
- Operational Risk – Environmental (Make Safe)
- Organisational Risk

### Operational Risk - Health and Safety of Personnel

#### ➤ Identified Risks

Heavy Plant poses particular risks to the Heavy Plant Operator, and to others in the vicinity of Heavy Plant being loaded, unloaded or operated.

Operating Heavy Plant on a fire ground (or other incident ground) introduces further risk related to the working environment.

#### ➤ Mitigation

Contractual requirements to manage Operator related risks include:

- Operators must meet certain capability and experience standards, and are equipped with personal protective clothing and equipment; and
- Heavy Plant must meet certain standards.
- Operational requirements to manage Operator related risks include:
  - confirming Operator and equipment suitability, verified during the Operator briefing;
  - ensuring suitable supervision and mutual support; and
  - detailed briefings by Field Commanders and/or HPS to crew leaders/crews working in the vicinity of Heavy Plant, on risks related to working around Heavy Plant.

Refer to Appendix [Five](#) and [Six](#) for Standards for Heavy Plant and Operators Engaged for Fire Work.



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### Operational Risk - Environment (Make Safe)

#### > Identified Risks

Heavy Plant poses particular risks to the environment. Whilst during an emergency the risk to people and property is the priority, consideration of environmental risks and post incident restoration must be considered at the outset of engagement.

Environmental considerations include:

- > the protection of trees that are culturally significant to Aboriginal people (for example scared trees, and carved trees), trees with historic significance and carvings (for example Explorer trees or Surveyor trees), and significant trees (such as trees identified with the National Trust Register or Council);
- > soil and erosion protection measures, including but not limited to, basic drainage features, to all work conducted on fire trails and construction of control lines and drainage features to a new fire trail;
- > breaking up windrows;
- > crossing fence lines in a manner that allows later repair; and
- > activities consistent with *BFCC Policy 2/2006 Management of Bush Fire Operations*.

#### > Mitigation

Environmental related risks are managed by assigning trained HPS who are aware of considerations, including:

- > selection of the appropriate Heavy Plant for the task;
- > supervising Heavy Plant operations, especially when an operator may be less familiar with the specific work to be performed (e.g. creating a control line versus building a road); and
- > taking the opportunity to task Make Safe works during the incident.

Any Heavy Plant tasking related to bush fire suppression has the potential to become Make Safe work. The approval and management of the tasking depends on which phase of the incident (emergency or non-emergency):

- > If **before** the revocation of an s44 declaration, tasks are managed by the IMT.
- > If **after** the revocation of an s44 declaration, remaining, outstanding tasks will form the basis of a Make Safe plan.

A Make Safe plan will be developed prior to s44 revocation, in liaison with the Manager Emergency Management, and recommended by the Incident Controller for approval by Deputy Commissioner Field Operations.

### Organisational Risk

#### > Identified Risks

Failure to abide by the Service's Code of Conduct and Ethics, as provided in *Service Standard 1.1.7 Code of Conduct and Ethics*, can result in behaviours that fall short of the values and expectations of the service. This can bring the Service into disrepute and can lead to disciplinary and/or legal action being taken.

#### > Mitigation - Logistical and Administrative Demands

The Service has developed systems to meet the logistical and administrative demands. These include ARENA HP, Coupa, and the Emergency Logistics System (ELS).

All Heavy Plant tasking for fire work will be undertaken through ARENA HP where possible.



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Districts and the Heavy Plant Logistics team each have roles of ensuring suitable approved HP Contractors are maintained in ARENA HP for tasking as required.

### > **Mitigation - Ethical Conduct**

The Heavy Plant Services Conditions of Agreement with Contractors include requirements for ethical conduct including:

- > Contractor's personnel must observe and comply with the provisions of the Agreement and in an ethical, professional and lawful manner,
- > Contractor must notify the Service of any real or perceived conflict of interest,
- > Contractor is not to self-deploy.

The process for engaging a new Contractor includes a process for identifying and recording any real or perceived conflict of interest.

## **Roles and Responsibilities**

### **Heavy Plant Contractors and Operators**

The Agreement under which Heavy Plant contractors are engaged describes the contractors obligations with regards to equipment, operations and operators, including training and experience operators are required to have to be deployed.

### **Field Commanders**

Field Commanders, including Class 1 Incident Controllers, Sector Leaders and Divisional Commanders, are responsible for the safe, efficient and effective use of Heavy Plant under their chain of command on the incident ground. This includes tasking Heavy Plant Contractors, monitoring their progress and effectiveness within scope, and ensuring the logistical and welfare needs of Heavy Plant Contractors are met. Field Commanders may request and task Heavy Plant, but not approve engagements.

### **Heavy Plant Supervisor**

The Heavy Plant Supervisor (HPS) is responsible at the tactical level for supervising the tasking, deployment and safe operation of Heavy Plant in the field. The HPS reports to the field commander responsible for task to be undertaken; i.e. Sector Commander, Divisional Commander, or in a smaller Class 1 incident, to the Operations Officer or Incident Controller. In the absence of an appointed HPS, the applicable Field Commander bears these responsibilities.

Refer to *IMP 3.16 Role Statement - Heavy Plant Supervisor*.

### **Plant Operations Manager**

Also known as the Heavy Plant Manager, the Plant Operations Manager (POM) is a role within the IMT responsible for setting priorities and tasks for Heavy Plant and major equipment deployed at an incident, including planning, engaging, and ending engagements. The POM reports to the Operations Officer.

The POM will liaise with the HPS and may request and task Heavy Plant, including amending a tasking, however the POM cannot approve engagements.

Refer to *IMP 3.15 Role Statement - Heavy Plant Manager*.

### **District Duty Operations Officer**

During a Class 1 or 2 incident, of a level not deemed to warrant the appointment of a POM, the District Duty Operations Officer (DDOO) or Operations Officer may fulfil the role of





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POM. The Operations Officer may request and task Heavy Plant, but not approve engagements.

Refer to *OMP 3.01.13 Role Statement – District Duty Operations Officer*.

### **District Manager**

Prior to the start of the Bush Fire Danger Period, the District Manager will ensure that Heavy Plant resourcing requirements have been reviewed in line with *OMP 2.01 State Operations Coordination, Operational Readiness and Alert Level Status* and their Bush Fire Management Committee Plan of Operations.

The District Manager, in collaboration with the Area Capability Manager, is responsible for identifying and supporting the development of HPS and POM, where there is a recognised gap for qualified and experienced personnel in these roles, as well as working with local Heavy Plant contractors to support their engagement through ARENA HP.

### **Area Capability Manager**

The Area Capability Manager, in collaboration with District Managers, is responsible for identifying and supporting the development of HPS and POM, where there is a recognised gap for qualified and experienced personnel in these roles. The Area Capability Manager will also review the adequacy of Heavy Plant coverage across their area command, and work with District Managers to address any coverage shortfalls.

### **Incident Controller**

During an incident, the Incident Controller (IC) will ensure that engagement and use of Heavy Plant is undertaken in accordance with this Protocol. Ultimately, the IC is responsible for Heavy Plant contractors on the incident ground, as with all other personnel in their chain of command.

The Incident Controller is responsible for the appointment of a suitably qualified POM to the IMT and HPS to the field.

### **State Duty Operations Officer**

The State Duty Operations Officer (SDOO) will approve Heavy Plant tasking subject to verifying the tasking satisfies the requirements of this Protocol, including financial delegation.

### **State Operations Controller**

The State Operations Controller (SOC) will approve Heavy Plant tasking subject to verifying the tasking satisfies the requirements of this Protocol, including financial delegation. The SOC will also consider broader factors related to the current and emerging circumstances in making a decision to approve.

### **Deputy Commissioner Field Operations**

The Deputy Commissioner Field Operations (DCFO) will approve Heavy Plant tasking subject to verifying the tasking satisfies the requirements of this Protocol, including financial delegation. The DCFO will also consider broader factors related to the current and emerging circumstances in making a decision to approve.

### **Heavy Plant Logistics**

Heavy Plant Logistics is a business unit within the Logistics function, under the Director Logistics and Equipment within the Preparedness and Capability Directorate.

The Supervisor Heavy Plant is responsible for:



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- ensuring Heavy Plant preparedness and capability; that there is adequate Heavy Plant available on ARENA HP for tasking to incidents as and when required;
- that there are sufficient HPS and POM trained for deployment to incidents;
- providing support to Heavy Plant operations; that on call operational support is provided during periods of state-wide heightened alert;
- the approval of new Heavy Plant Contractors to ARENA HP; and
- the development and management of Heavy Plant systems and processes;
- providing annual reports to Capability Managers of plant in their areas; and
- training of users in ARENA HP.

### RFS Finance

RFS Finance is responsible for paying contractors within the agreed payment terms, and for resolving any unmatched or disputed invoice within a timely manner.

### Finance and Funding

#### Procurement

The engagement of Heavy Plant must be conducted in accordance with RFS procurement processes and financial delegations. The expenditure associated with the use of the Heavy Plant shall always be reasonable, fit for purpose, appropriate and justifiable.

This is a legislative requirement under the *Government Sector Finance Act 2018*.

Users must be aware of the appropriate financial delegation based on the activity required and in accordance with the associated delegations under *Policy P4.1.1*. This includes:

- Emergency procurement processes during a Class 1, 2 or 3 fire, when engaged through ARENA HP or off ARENA HP through State Logistics.
- Standard procurement processes for the non-emergency use of Heavy Plant with engagement through Coupa.

#### Funding for Heavy Plant Work

In the RFS, expenditure can be considered in terms of two different types: emergency procurement or business as usual (BAU) procurement.

Emergency procurement is subject to specific approval processes.

BAU expenditure is subject to RFS policy, *P4.1.1 Financial Delegations* and *P4.1.3 Procurement*. All authority to commit or incur expenditure in the RFS is subject to the availability of budget of the organisational unit for which the delegate is responsible. Further, all payment details must be correctly recorded in the RFS finance system.

Note that *P4.1.1 Financial Delegations, Appendix 3 - Special Delegations F7* deals with Disaster Resilience and Bush Fire Mitigation delegation limits.

Where a local/public authority or land owner/occupier utilises Heavy Plant in performing their duties under s63 *Rural Fires Act 1997*, they are liable for their own costs, unless funds are provided through mitigation programs.

#### Invoicing and Payment

The RFS promotes the use of and prompt payment to local and small business contractors. It is important that the RFS communicates the expected invoicing requirements to Heavy Plant contractors.

- Contractors submit their invoices and timesheets for fire work through ARENA HP.





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- Contractors engaged off ARENA HP are to submit their purchase order, invoice and Off ARENA HP Documentation (which includes the signed timesheet) to RFS Accounts Payable.

Note: the payment of invoices for tasking prior to any s44 declaration is the responsibility of the tasking agency.

### Training and Qualification

#### Heavy Plant Supervisor Qualification (HPS19)

The expectation is that those appointed as a HPS will have completed the RFS Heavy Plant Supervisor qualification, or hold equivalent experience.

#### ARENA HP Training

The expectation is that those required to task, or approve tasking, in ARENA HP will have completed ARENA HP Training, provided by Heavy Plant Logistics. Refer to Appendix [Three](#).

#### ARENA HP System and Support

ARENA HP is supported within the Service by the Heavy Plant Logistics team. Contact details are email [heavy.plant@rfs.nsw.gov.au](mailto:heavy.plant@rfs.nsw.gov.au), phone (02) 8867 7954.

ARENA HP is developed and maintained by the National Aerial Firefighting Centre. The Supervisor Heavy Plant will ensure arrangements are in place to ensure the availability of technical support should escalation of technical issues be required.

### Documents and Records

#### Document Control

Documents used to specify and/or communicate the requirements and/or operation of Heavy Plant will be subject to appropriate control to ensure information is up to date.

Current documents are located on the Heavy Plant site on ONE RFS. HPS are issued with a compendium of documents and are responsible for keeping their compendium up to date.

#### Records

Records are maintained by the Heavy Plant Logistics unit as follows:

Record Description	Retention (Hard Copy & Electronic)
Records supporting the awarding of a unit of competency under the scope of the RTO	Retain minimum of 30 years after assessment, then destroy.
Other learning and training materials	Retain minimum of 5 years after superseded, then destroy.
Contractor Agreements	Retain minimum of 12 years after expiry or termination of agreement or after action completed, whichever is later, then destroy.
Systems and development specifications	Retain minimum of 10 years after action completed, then destroy.
Operational Log Books	Retain minimum of 25 years after action completed, then destroy.
Plant Inspection Checklist	Retain minimum of 7 years after inspection, then destroy.
Site / Task (Risk) Assessment form	Required as State archives.
SITREP of Heavy Plant fire ground activities	Retain minimum of 3 years after action completed, then destroy.



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### Related Information

Heavy Plant operations under the control of the RFS will be undertaken in accordance with the following legislation:

- › [Biodiversity Conservation Act 2016](#)
- › [Community Land Development Act 1989](#)
- › [Environmental Planning and Assessment Act 1979](#)
- › [Heavy Vehicle National Law \(NSW\) No 42a 2013](#)
- › [Independent Commission Against Corruption Act 1989](#)
- › [Local Government Act 1993](#)
- › [Local Land Services Act 2013](#)
- › [National Parks and Wildlife Act 1974](#)
- › [Rural Fires Act 1997](#)
- › [Standards for Registered Training Organisations \(RTOs\) 2015](#)
- › [State Emergency and Rescue Management Act 1989](#)
- › [Strata Schemes Development Act 2015](#)
- › [Work Health and Safety Act 2011](#)

Heavy Plant operations are conducted with reference to the following RFS requirements:

- › [BFCC Policy 1/2007 Section 44 Payment and Reimbursement Criteria and Procedures](#)
- › [BFCC Policy 2/2006 Management of Bush Fire Operations](#)
- › [Factsheet: Heavy Plant During Wildfire Operations](#)
- › IMP 3.15 Role Statement – Heavy Plant Manager
- › IMP 3.16 Role Statement – Heavy Plant Supervisor
- › [NSW RFS Heavy Plant Services Conditions of Agreement](#)
- › [NSW RFS Policy P4.1.1 Financial Delegations](#)
- › [NSW RFS Policy P4.1.3 Procurement](#)
- › [OMP 3.01.13 DTZDOOOM](#)
- › [OMP 2.01 State Operations Coordination, Operational Readiness and Alert Level Status](#)
- › [RFS OPG - Chainsaw Operations](#)
- › [RFS OPG - Hazardous Trees](#)
- › [Service Standard 1.1.7 Code of Conduct and Ethics](#)

Further reference and guidance materials for RFS personnel are available:

- › On the [Heavy Plant page on the One RFS website](#)
- › By contacting [heavy.plant@rfs.nsw.gov.au](mailto:heavy.plant@rfs.nsw.gov.au) | phone 02 8867 7954.

Reference materials for potential and current Heavy Plant Contractors are available on the:

- › [RFS public website](#)



### Definitions

<b>ARENA HP</b>	The specialised online program used by the RFS for the management of Heavy Plant and contractors.
<b>Combat agency</b>	As defined in the <i>Rural Fires Act 1997</i> .
<b>Contractor</b>	A supplier that has entered into an agreement with the RFS for the supply of their Heavy Plant services.
<b>Coupa</b>	The program used by the RFS for the management of suppliers and procurement.
<b>Under the control of the RFS</b>	Where the RFS is the combat or responsible agency.  As defined in the <i>State Emergency and Rescue Management Act 1989</i> : 4 (1) Emergency means an emergency due to an actual or imminent occurrence (such as fire, flood, storm, earthquake, explosion, terrorist act, accident, epidemic or warlike action) which: (a) endangers, or threatens to endanger, the safety or health of persons or animals in the State, or (b) destroys or damages, or threatens to destroy or damage, property in the State, or (c) causes a failure of, or a significant disruption to, an essential service or infrastructure, being an emergency which requires a significant and co-ordinated response. 4 (2) For the purposes of the definition of emergency, property in the State includes any part of the environment of the State. Accordingly, a reference in this Act to: (a) threats or danger to property includes a reference to threats or danger to the environment, and (b) the protection of property includes a reference to the protection of the environment.
<b>Emergency</b>	
<b>Emergency services organisation</b>	As defined in the <i>State Emergency and Rescue Management Act 1989</i> .
<b>Fee for service</b>	Work by contractors where remuneration or reward is sought. This may be per the conditions of a formal agreement or by direct negotiation.
<b>Field Officer</b>	Incident Controller or delegated field leadership role at an incident.
<b>Heavy Plant</b>	Powered mobile plant, typically: <ul style="list-style-type: none"><li>➤ earth-moving machinery</li><li>➤ timber harvesting machinery</li><li>➤ agricultural tractors</li><li>➤ non-RFS bulk water carriers.</li></ul> This includes all plant/vehicles in ARENA HP.



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<b>Heavy Plant Services Conditions of Agreement</b>	<p>The executed legal agreement between the RFS and a contractor for the supply of their Heavy Plant and related services.</p>
<b>Make Safe</b>	<p>Critical action that needs to be undertaken, post emergency, and usually prior to the handover of land back to an owner in a safe condition. It specifically relates to damage to public or private land and/or infrastructure that has occurred from suppression works undertaken through a coordinated firefighting effort during a S44 Declaration.</p>
<b>Members</b>	<p>Staff and/or Volunteers of the RFS.</p>
<b>Mutual support</b>	<p>The teamwork between the Heavy Plant contractor(s) and the supporting firefighting crew(s) to enable tasks to be completed safely and efficiently. The prime responsibility of a mutual support fire crew is the protection of the operator and machine if fire conditions escalate.</p>
<b>Non-emergency work</b>	<p>Work to be undertaken other than during an emergency, such as mitigation activities, fire trail maintenance or make safe works.</p>
<b>Officer</b>	<p>As defined in the <i>Rural Fires Act 1997</i>.</p>
<b>Officer-in-charge</b>	<p>As defined in the <i>Rural Fires Act 1997</i>.</p>
<b>Occupier of land</b>	<p>The person who has the management or beneficial use of the land (whether resident on the land or not), or if the land is a public reserve or park – the trustees or any person having the care, control and management of the land.</p> <p>In relation to Crown land, means the Crown and includes:</p> <ol style="list-style-type: none"><li>(1) a lessee of land from the Crown, and</li><li>(2) a person to whom the Crown has lawfully contracted to sell the land but in respect of which the purchase price or other consideration for the sale has not been received by the Crown, and</li></ol> <p>In relation to land other than Crown land, includes:</p> <ol style="list-style-type: none"><li>(3) every person who jointly or severally, whether at law or in equity, is entitled to the land for any estate of freehold in possession, and</li></ol>
<b>Owners of land</b>	<ol style="list-style-type: none"><li>(4) every such person who is entitled to receive, or is in receipt of, or if the land were let to a tenant would be entitled to receive, the rents and profits of the land, whether as beneficial owner, trustee, mortgagee in possession, or otherwise, and</li><li>(5) in the case of land that is the subject of a strata scheme under the <i>Strata Schemes Development Act 2015</i>, the owners corporation under that scheme, and</li><li>(6) in the case of land that is a community, precinct or neighbourhood parcel within the meaning of the <i>Community Land Development Act 1989</i>, the association for the parcel, and</li></ol>



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(7) every person who by said Act is taken to be the owner, and

In relation to land subject to a mining lease under the *Mining Act 1992*, the holder of the lease.

A public authority is defined in section 3 of the *Independent Commission Against Corruption Act 1989* and can include:

### Public authority

- a government agency, administrative office or teaching service
- a statutory body representing the Crown; or
- a local government authority.

### Supplier

Businesses, local or public authorities and individuals that supply their services to the RFS which includes the supply of Heavy Plant on a fee-for-service, or without reward/remuneration basis.

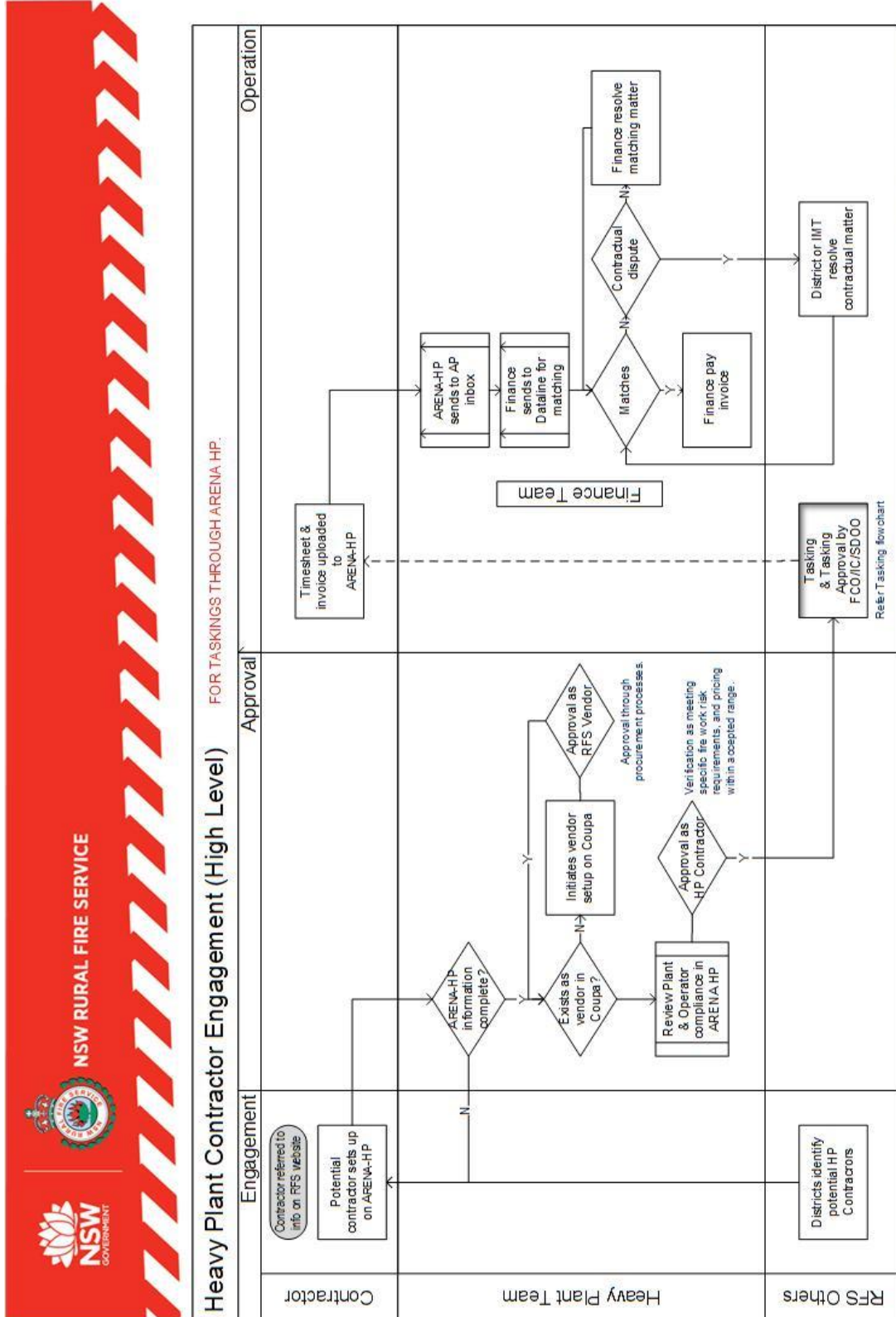


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### Appendix One

#### Heavy Plant Engagement (High Level) Workflow





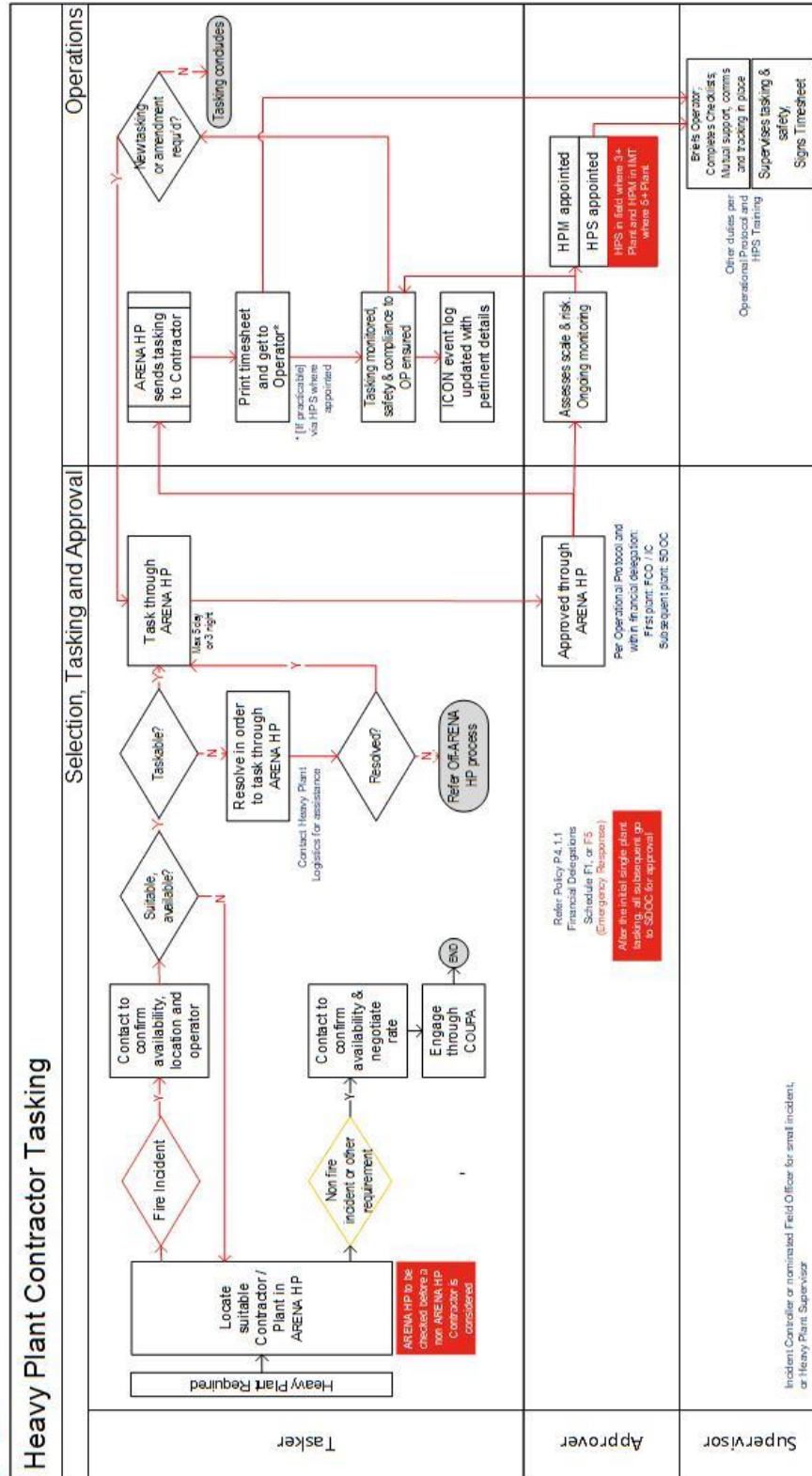


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### Appendix Two

### Heavy Plant Tasking Workflow





### Appendix Three

#### ARENA HP Procedure

ARENA HP is the system used to engage and task Heavy Plant Contractors. ARENA HP also supports:

- approval of an engagement/tasking;
- subsequent amendment to an engagement/tasking;
- emailing the Tasking/Purchase Order to the Contractor, once the engagement is approved; and
- receiving the Contractors timesheet and Invoice, and forwarding these to finance for matching and payment.

#### Contractor Registration in ARENA HP

Heavy Plant Contractors register themselves, their Heavy Plant and their Operators in ARENA HP and, upon meeting all contractual requirements, are approved as a Heavy Plant Contractor by the RFS Heavy Plant Logistics team. As part of this, Heavy Plant Contractors have:

- agreed to having read and understood the Heavy Plant Service Conditions of Agreement, which includes safe guards to manage the risk of working on a fire-ground;
- agreed to comply with the NSW Supplier Code of Conduct and the RFS Statement of Business Ethics; and
- been set up and approved as a RFS Vendor, with details in Coupa and SAP.

#### RFS and IMT Personnel Access to ARENA HP

- All RFS operational (State Ops, Area and District) Staff will be provided tasking level access to Arena HP based on their position.
- District Managers, Area Commanders and State Ops Managers with financial delegation will be provided Approver level access based on your position in SAP
- State Duty Officers will be provided State level approver based on PRAS shifts
- All other RFS personnel with a legitimate need, will need to apply for Arena HP access through the ICT Service Desk.
- External agencies with a legitimate purpose may request access through the Heavy Plant Logistics team using the [Arena-HP User Activation Request](#) form.
- ARENA HP is accessed at <https://arenahp.nafc.org.au/>.
- Training can be arranged through the State Heavy Plant Logistics team.

#### Engagement/Tasking in ARENA HP

Heavy Plant is tasked in ARENA HP, except in extenuating circumstances when the off ARENA HP process is followed. Tasking in ARENA HP is for a maximum of five (5) twelve hour days, or three (3) twelve hour nights, at a time, extendable for as many five day or three night periods as necessary. A continuous 24-hour engagement requires two tasking entries, with separate operators identified for each tasking.

Heavy Plant Hourly Rate is a wet hire rate, and includes all costs: fuel, operator and 100km of transport to and from the incident location. An additional Excess Kilometre Rate is applied when Heavy Plant originates greater than 100km from the incident location.

Incidents in ICON show up in ARENA HP and an incident must be in ICON (and not set to 'Out') in order for a tasking to be created.

The first Heavy Plant tasked to an incident is ordinarily the closest, suitable Heavy Plant. Subsequent Heavy Plant tasked is the best value, suitable Heavy Plant. Where these guidelines are not applied, justification of decision is clearly documented within the tasking.

Approval of tasking should be carried out in a timely manner and prior to the formal engagement of any plant so the tasking can be issued to the Contractor. ARENA HP emails the tasking and



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timesheet to the Contractor once approved. The District Manager or Incident Controller ensures all necessary steps are taken to manage the risks related to Heavy Plant, the contracting arrangements, and its use on the fire ground.

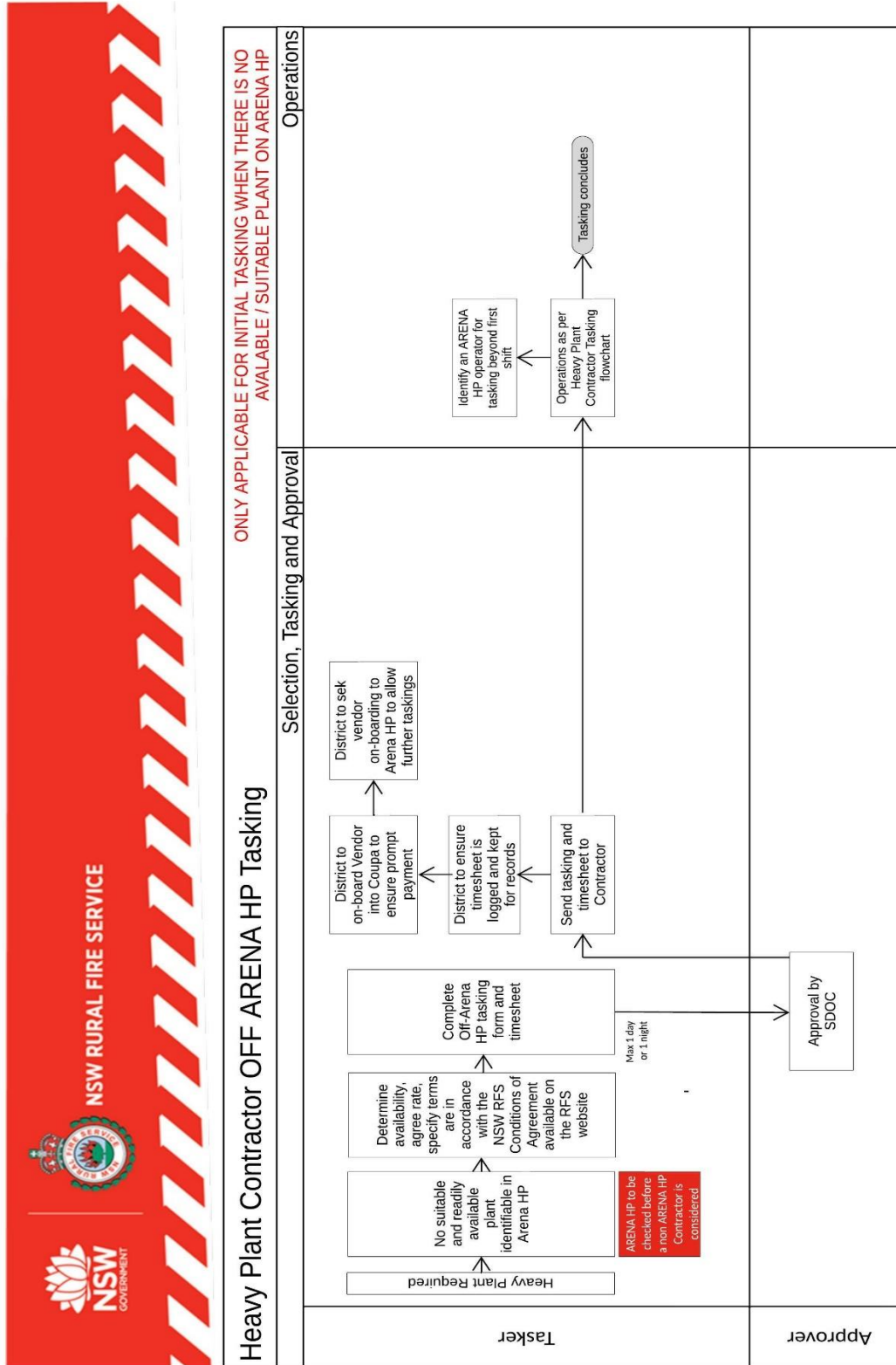
### **ARENA HP Maintenance**

District Managers will review ARENA HP at least annually to ensure there are adequate numbers of approved contractors and adequate Heavy Plant available within their District to undertake fire related work as and when required.



### Appendix Four

### Off ARENA HP Tasking Workflow





## Appendix Five

### Standards for Heavy Plant Engaged for Fire Work

#### Purpose

To describe the standards required for Heavy Plant, as stipulated in the Agreement between the RFS and Heavy Plant Contractors.

#### General Heavy Plant Requirements

Heavy Plant must be:

- a) be in good working order and maintained in accordance with the manufacturer's requirements;
- b) comply with all relevant legislation, statutory requirements and standards;
- c) have current certifications, licences, insurances and registrations;
- d) be comprehensively insured against damage or loss of this equipment;
- e) have an appropriate size first aid kit;
- f) have a UHF CB radio (and a mobile phone);
- g) carry sufficient quantities of drinking water and food/rations for all Personnel for the shift. If it is impractical to stow a cooler on the Heavy Plant, then it is to be carried on a support vehicle;
- h) Pre-start checklists, daily logs (or diaries), maintenance records, operating instructions, manuals, risk assessments and safe work method statements for the item of Heavy Plant must be current, available and able to be produced upon request; and
- i) Heavy Plant and vehicles with attachments or trailers are to be listed as a single item in the Heavy Plant Register (e.g. prime movers and semi-trailers listed as a combination).

#### Specific Requirements

Depending on the piece of Heavy Plant and the circumstances:

- a) Heavy Plant insurance policies should include coverage for fire suppression activities;
- b) A knapsack sprayer or 9 litre/kg fire extinguisher (water, foam or dry powder) must be carried;
- c) A woollen fire blanket must be carried where there is potential for exposure for fire entrapment. The blanket must be maintained in a clean and dry condition and be readily accessible. Blankets must comply with fire service standard issue or at least be 100% wool, approximately 2.3 m x 1.8 m in size; and
- d) Heavy Plant not fitted with suitable lights will not be permitted to work at night or in low light conditions.

#### Vehicles

- a) All vehicles used in provision of the Services must be registered, in a roadworthy condition and fitted with a functioning amber warning beacon.
- b) All heavy vehicles must be operated in accordance with Laws including Vehicle Laws. The "Exemptions in relations to emergencies" provisions within the NSW Road Transport (General) Regulation 2013 (NSW) and Heavy Vehicle National Law 2013 W) may be used only where approved by an authorised officer.
- c) Heavy Plant Support Vehicles should not be operated or parked in locations where there is the potential for exposure to radiant heat from the fire or fire overrun. Where these vehicles carry fuel tanks or drums for refuelling Heavy Plant, they must be free of fuel leaks, carry an appropriate fire extinguisher and fuel spill containment equipment.
- d) Bulk Water Carriers are used for supplying water to fire fighting vehicles, aircraft, portable dams and also for dust suppression around air bases, staging areas, base camps, along access roads and tracks.
- e) For this reason, Bulk Water Carriers that are off-road capable and fitted with dust suppression spray equipment are desirable. These vehicles must carry 75mm and 65mm Kamlok to Storz adaptors to enable transfer of water to fire tankers (the size and number of adaptors to be carried





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- is dependent upon the size and number of the outlets on the bulk water tanker).
- f) Bulk Fuel Tankers are typically required during large scale incidents (or emergencies) for refuelling diesel powered fire fighting vehicles, generators and Heavy Plant at Service Sites. These vehicles must:
    - (i) be licensed and comply with the applicable dangerous goods Laws for the carriage of Class 3 inflammable liquids (this includes the vehicle driver);
    - (ii) have a means for accurately recording and verifying all fuel dispensed (in keeping with standard commercial practices);
    - (iii) carry appropriate fire extinguisher(s) and fuel spill containment equipment; and
    - (iv) carry appropriate load and vehicle documentation (including Safety Data Sheet, dangerous goods manifest, current test and inspection certificates for the vehicle).
  - g) Contractors operating Heavy Plant Transport Vehicles must:
    - (i) comply with the Vehicle Law requirements for Oversize/Over-mass Vehicles and Loads including carrying the appropriate Oversize/Over mass notice and pilot vehicles;
    - (ii) be responsible for the selection and survey of routes to and from the Service Sites (and for any damage to road, drainage, bridge and overhead structures). This includes confirming the suitability for the unloading of Heavy Plant and that there is adequate turning and parking area for the transport vehicle;
    - (iii) ensure Heavy Plant is loaded in accordance with NSW Laws (and shall be responsible for any fines and/or infringement notices due to breaches of these Regulations);
    - (iv) ensure the driver is competent in the loading and operation of the vehicle; and
    - (v) where the vehicle is used to transport Heavy Plant other than the Contractor's, have additional insurance coverage for the loading, unloading, transporting the Heavy Plant and for damage to overhead structures.
  - h) Where Heavy Plant is required to be transported, the machine operator must be available to load and unload the Heavy Plant from the Heavy Plant Transport Vehicle.
  - i) Heavy Plant and vehicles used for chemical spraying (herbicides or for disinfecting Heavy Plant) shall be designed and constructed for this, be free of leaks, licensed (where required) and comply with Code of Practice for Safe Use and Storage of Chemicals (including pesticides and herbicides) in Agriculture, WorkCover NSW (now SafeWork NSW) (2006)  
[https://www.safework.nsw.gov.au/data/assets/pdf\\_file/0004/52870/Safe-use-and-storage-of-chemicals-including-pesticides-and-herbicides-in-agriculture.pdf](https://www.safework.nsw.gov.au/data/assets/pdf_file/0004/52870/Safe-use-and-storage-of-chemicals-including-pesticides-and-herbicides-in-agriculture.pdf)

### Earth-Moving Plant, Timber Harvesting Plant and Tractors

As a minimum standard, Heavy Plant must:

- a) comply with the equipment requirements and operating conditions specified in the NSW Roads and Maritime Services "Conditional Registration Guide" [www.rta.nsw.gov.au](http://www.rta.nsw.gov.au) (whether or not it is conditionally registered), and the following requirements;
- b) be free of obvious damage, including:
  - (i) significant corrosion (i.e. other than superficial or surface rust);
  - (ii) damage to the windscreen/cabin windows that impairs the operator's field of view; and
  - (iii) damage/excess wear to crawler tracks and running gear; or to tyres (e.g. deep cuts, bulges, exposed cords, etc...). Tyres should be rated for the load & wheel rim size and correctly inflated;
- c) have all attachments, hand rails, steps, covers and guarding securely fitted in place and be free of:
  - (i) significant oil leaks from the engine, transmission and hydraulic components;
  - (ii) leaks from the hydraulic tanks, engine coolant and fuel systems; and
  - (iii) accumulated combustible material, soil, weed material/seeds;
- d) be fitted with:
  - (i) the appropriate level of protective structures (refer to relevant subclause 4.5 of this Schedule);





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- (ii) seat belts and other occupant restraint devices;
  - (iii) rear view mirrors;
  - (iv) reverse alarms (and travel alarms for Heavy Plant where there is restricted operator vision);
  - (v) compulsory safety signage (e.g. hearing protection, SWL, left hand drive, etc.);
  - (vi) horn (exhaust and compression whistles, sirens or alternating tone horns are not acceptable);
  - (vii) amber warning beacon that is switched through the machine engine ignition circuit;
  - (viii) prominently labelled emergency stop devices and hydraulic safety interlocks;
  - (ix) engine fitted with spark arrestor and muffler;
  - (x) a 1.5 kg Dry Powder fire extinguisher within the cabin/canopy;
  - (xi) forward and reverse lights, work lights, tail lights/rear reflectors and side reflective tape (where to be used for night operation); and
  - (xii) "an "Anti-drop" valve for Heavy Plant used as a crane with a Safe Working Load greater than 3,000 kg;
- e) have correctly functioning:
- (i) brakes systems (service and park);
  - (ii) emergency stops, interlocks and guarding;
  - (iii) hydraulic systems (including steering or travel levers);
  - (iv) engine i.e. must not emit visible smoke for more than 10 seconds (as per the Protection of the Environment Operations Act 1997 (NSW));
  - (v) controls and switches;
  - (vi) cabin seating, doors, locks/latches and air conditioning system (where fitted);
  - (vii) electrical systems including lighting (where fitted or required); and
  - (viii)hydraulic hitches for excavators (refer to relevant subclause); and
- f) have on hand:
- (i) log books, daily diaries/inspection check sheets completed for that shift;
  - (ii) the timesheet book issued by the Contractor;
  - (iii) Safe Work Method Statements (SWMS) where appropriate and required for the work; and
  - (iv) copies of certificates of currency for insurance policies.

### Protective Structures Requirements and Guarding

- a) The requirement and standard of protective structures fitted to mobile Heavy Plant (earthmoving plant, timber harvesting plant and agricultural tractors) to provide reasonable protection for the machine operator is dependent upon the risks identified for the supply of Services at the Service Site (i.e. operating environment).
- b) As required by the Work, Health and Safety Act 2011 (NSW), all mobile Heavy Plant must be fitted with protective structures as per Table 1.

TABLE 1: Summary of Requirements for Protective Structures for mobile plant	Roll-Over Protective Structures (ROPS)	Falling Object Protective Structures (FOPS)	Operator Protective Guards (OPG)
General work e.g. work in open environments (where no risk of falling objects)	✓	NR	MAY
Work involving risk of falling objects, work in forest environment	✓	✓	MAY
Tree felling operations (e.g. pushing/felling hazardous trees)	✓	✓	MAY

✓ - Mandatory, NR = Not required, MAY = May be required, depending upon the potential for objects or debris to penetrate the cabin



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- c) The following Heavy Plant are exempt under the WHS Act from requiring ROPS (unless the risk assessment for the individual works requires it):
  - (i) earth-moving plant having a mass less than 1,500 kg or more than 100,000 kg;
  - (ii) tractors with a mass less than 560 kg and more than 15,000 kg;
  - (iii) hydraulic excavators; and
  - (iv) road rollers or compactors with a mass less than 2,700 kg.
- d) Machines fitted with ROPS must have suitable operator restraining devices or seat belts.
- e) Where work involves Tree Felling Operation ROPS and FOPS are required with the risk assessment determining whether OPGs are required (and to what standard). If there is doubt about the suitability of any protective structure, then the Heavy Plant must not be used for the task.
- f) Sweeps fitted to bulldozers and tractors (for protecting the machine from damage when operating in a forest environment) that are not certified to any standard should not interfere with the function of ROPS or FOPS.
- g) Where there is a requirement for Heavy Plant fitted with FOPS and OPG, preference should be given to using Heavy Plant fitted with Protective Structures certified to comply with AS2294.1 - Supplement 1 (2003).
- h) The pre-use assessment for the standard of protective structures required for the task must consider the land management agency policies and standards.

### Heavy Plant Hygiene Guidelines

- a) Earthmoving plant is to be washed down prior to moving from an area known to be infected with soil borne disease or weeds.
- b) Where this has not been practical, this is to be reported and the Heavy Plant washed down in an approved location.
- c) Heavy Plant is to be free of rocks, clods of earth and other debris prior to transport.



## Appendix Six

### Standards for Heavy Plant Operators Engaged in Fire Work

#### Purpose

To describe the training and personal protective clothing / equipment (PPC/E) requirements for operators of Heavy Plant engaged in fire work.

#### Training Requirements

The Heavy Plant Contractor must ensure Operators assigned for fire work meet the “IMSAFER” standard as expected for others on a fire ground. The Operator must be experienced with the type of Heavy Plant and with its operation in the environment in which the tasking is to be carried out. The Operator must have completed, as a minimum, Bush Fire Awareness training.

#### PPE/C Requirements

Contractual arrangements with Heavy Plant Contractors describes the personal protective clothing and equipment (PPC/E) required for operators of Heavy Plant engaged for fire work, and other high risk emergency work.

Operators must be equipped with the minimum equipment, and don equipment based on the circumstances and task being performed.

Minimum standards for PPC/E, in accordance to SafeWork NSW and industry Standards is as follows:

Protective clothing consisting of single-piece overalls, or two piece garment, which comply with either AS/NZS 4824:2006 Protective clothing for Wildland firefighters, or AS/NZS 4501.2:2006 Occupational protective clothing - General requirements, *and* worn over natural fibre clothing and under garments;

**High visibility clothing** complying with AS/NZS 4602.1:2011 High visibility safety garments - Garments for high risk applications;

**Protective boots** complying with AS/NZS2210.1:2010 Safety, protective and occupational footwear - Guide to selection, care and use, *or* AS/NZS4821:2006 Protective footwear for fire fighters - Requirements and test methods;

**Helmet** complying with AS/NZS1801:1997;

**Hearing protection** complying with AS/NZS1270:2002: Acoustics - Hearing protectors;

**Protective mask** of a disposable particle filter type (Class P2), complying with AS/NZS1716:2012.

**Protective eyewear** with wide vision goggles as complying with AS/NZS1337:1992;

**Protective (flash) Hood** complying with NFPA1971 -2000 standard;

**Protective gloves** complying with AS2161.6-2003 Protective gloves for Wildland firefighters;

Other protective clothing and equipment may be required for other specific high risk activities. Operators engaged for their experience with such activities must be equipped with the PPC/E appropriate for the task to be performed.

PPC/E must be maintained in a clean and serviceable condition.