



WHS- 40 Mobile Plant and Machinery

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1.0	28/04/2014	n/a	Procedure approved and released
1.1	30/04/2014	Removed wording	Removed wording about EWP's and NT Fleet.
1.1	11/09/2014	Rebranding	Rebranding and recoding

1 Purpose

The purpose of this procedure is to provide guidance on the safe operation and inspection of mobile plant and equipment on Territory Generation controlled sites.

2 Scope

This procedure applies to all persons who operate mobile plant and equipment on Territory Generation controlled sites.

3 Roles and Responsibilities

Role / Title	Responsibility
Chief Executive Officer	Shall ensure that : <ul style="list-style-type: none"> • All personnel are aware of requirements of this procedure and its management in sites under Territory Generation control. • Initiates procedure review as required.
All Managers/Site Coordinators	Shall ensure that: <ul style="list-style-type: none"> • This procedure is put in place at all Territory Generation controlled power stations sites. • Personnel are advised and trained as necessary in the procedure to be followed. • Contractors are informed of and follow the procedure, where applicable. • Contribute to procedure reviews
Project Officers/Contract Managers	Shall ensure that: <ul style="list-style-type: none"> • Contractors under their control are informed of and follow the procedure, where applicable. • Contribute to procedure reviews
All Personnel	Shall ensure that: <ul style="list-style-type: none"> • This procedure is followed personally and by contractors/visitors under their control, where applicable • Contribute to procedure reviews
Document Owner	<ul style="list-style-type: none"> • The position responsible for the preparation, review and accuracy of this document.
Document Sponsor	<ul style="list-style-type: none"> • The position responsible for the approval and use of this document

4 Definitions

Approved	Means having appropriate Territory Generation endorsement in writing.
Authorised	Means a <i>competent person</i> with technical knowledge or sufficient experience who has been <i>approved</i> to act on behalf of Territory Generation to perform the duty concerned.
Competent Person	Means a person who has, through a combination of training, qualification and experience, acquired knowledge and skills enabling that person to correctly perform the specified task.
Crane	An appliance intended for raising or lowering a load and moving it horizontally, but does not include an <i>industrial lift truck</i> , earthmoving machinery, an amusement structure, a tractor, an industrial robot, a conveyor, a suspended scaffold or a lift.
Critical Component	Means a component whose failure would result in a risk to the health and safety of persons using the <i>telehandler</i> or to those in its vicinity.
Elevated Work Platform	Means a telescoping device, scissor lift or articulating device or any combination thereof used to position personnel, materials and equipment at work locations, and provide a working area for persons elevated by and working from the platform.
Forklift (AKA Industrial Fork Truck)	Means a powered industrial truck equipped with a mast and an elevating load carriage to which a pair of fork arms or other load holding attachments are affixed.
Functional Test	Means a Test performed to check the operation of controls or control systems of equipment.
Mobile Plant	Means cranes, forklifts, elevated work platforms (EWP's) and scissor lifts, backhoes, excavators/trenchers, graders, dozers, tractors, skid steer loaders and bobcats. (Excludes motor vehicles such as cars and trucks)
Shall	Mandatory requirement
Should	Advisory requirement
Telescopic Handler (AKA Variable reach truck, multi-purpose tool carrier or telehandler)	Means a piece of mobile plant that can be fitted with a range of attachments that include a hydraulic winch, hoisting block and hook, bucket, jib, bucket with grab, grab, earthmoving blade, concrete skip, earthmoving hoe, forks, elevating work platform, tyre handler and a man cage.
Vehicle	Means any car, truck, motorcycle, trailer or other motor powered vehicle other than mobile plant and equipment.

5 Records

Records of training and competency for the appropriate mobile plant shall be kept in the Training Management System (TMS) for Territory Generation staff and Rapid Induct for Contractors. This includes any High Risk Work Licensing requirements.

6 Training, Competence and Authorisation

6.1 Authorisation

All persons operating mobile plant and equipment on Territory Generation controlled sites *shall* be *authorised* by Territory Generation to do so.

6.2 Training and Competency

All persons who are required to operate mobile plant and equipment on Territory Generation controlled sites shall have had training and be deemed as competent for the appropriate mobile plant or machinery.

All persons who are required to operate mobile plant or equipment on Territory Generation controlled sites shall supply proof of certification and licensing or competency to their appropriate site supervisor or site contact/project manager.

6.3 General Mobile Plant and Equipment

For General mobile plant and equipment on Territory Generation sites, the person operating the machine shall have the appropriate certification/competency or High Risk Work License according the machinery being used.

6.4 Telescopic Handlers

For Telescopic Handlers (Telehandlers) the level of licensing requirement depends on what the telescopic handler is being for.

The following high risk license(s) are required depending on the machines use:

Attachment Fitted	License Required	Training Required
When machine is non-slewing and fitted with a jib or used as a crane with a rated capacity of 3 tonne or less	No Licence is specified by legislation.	Operators must be trained and instructed in the safe use of the plant. This training may incorporate competencies appropriate to non-slewing crane operation.
When machine is non-slewing and fitted with a jib or used as a crane with a rated capacity greater than 3 tonne	Operators must hold a non-slewing mobile crane Licence (code CN).	Operators must be trained and instructed in the safe use of plant and non-slewing mobile cranes.
When slewing and fitted with a jib or used as a crane of any description	Operators must hold a slewing mobile crane Licence appropriate for the rated capacity (for example a C2 licence allows for a rated capacity up to 20t)	Operators must be trained and instructed in the safe use of plant and slewing mobile cranes.
When machine is fitted with forks and similar attachments	No Licence is specified by legislation.	Operators must be trained and instructed in the safe use of plant. This training may

		incorporate competencies appropriate to forklift truck operation.
When machine is fitted with a loader bucket	No particular Licence is specified by legislation.	Operators must be trained and instructed in the safe use of plant. This training may incorporate competencies appropriate to front end loader operation.
When machine is fitted with a boom-type elevating work platform greater than 11m	Operators must hold a boom-type elevating work platform Licence (code WP)	Operators must be trained and instructed in the safe use of plant and boom-type elevating work platforms.

7 Mobile Plant and Machinery Basic Safe Operation Principles

7.1 In addition to complying with the requirements of the Northern Territory road rules, the operators of mobile plant and equipment shall:

- Have the appropriate licensing/certification and/or training for the operation of the mobile plant or equipment they are using – No mobile plant or equipment shall be operated on Territory Generation controlled sites without the required competency and authorisation
- Always wear seat belts (where fitted);
- NOT drive or operate mobile plant or equipment whilst under the influence of alcohol, illicit drugs or any other prohibited substance;
- NOT operate mobile plant or equipment whilst taking a prescribed drug or medication that could affect their ability to operate the mobile plant or equipment;
- NOT travel, or allow other personnel to travel, in the back or on any other section of the mobile plant or equipment which has not been designated to transport personnel;
- NOT smoke whilst operating the mobile plant or equipment, smoking on Territory Generation sites is only permitted in designated areas;
- NOT use mobile phones while operating mobile plant or equipment;
- Ensure they comply with the speed limit for the Territory Generation site they are on and obey any other sign posting on that site. The site speed limit does not apply to workshops, stores, turbine sheds etc. a 5km/h speed limit applies to these areas;

Failure to comply with road safety rules on Territory Generation controlled sites will be considered a serious safety breach and may result in withdrawal of your authority to operate mobile plant and equipment and, in the case of a contractor, may result in the withdrawal of site access.

7.2 Exclusion and separation

Mobile plant and equipment, including cranes, forklifts and trucks may use any of the roads on Territory Generation sites. Therefore pedestrians and drivers of other vehicles must always be aware of the presence of this equipment and be alert at all times while travelling around Territory Generation controlled sites.

7.3 Pedestrians:

Pedestrians are to stay well clear of all moving mobile plant and equipment. If a pedestrian needs to approach mobile plant or equipment, the following approach guidelines shall be followed:

- Wave and attract the attention of the operator.
- Only approach when you have been seen and the operator acknowledges your presence – DO NOT ASSUME THE OPERATOR HAS SEEN YOU.
- Do not approach from blind spots – if you can't see the operator, they can't see you.

7.4 Mobile Plant and Equipment Road Worthiness:

Before operating mobile plant or equipment, the operator is responsible for ensuring that all machine systems, indicators, warning devices and essential instruments are in a serviceable condition and the log book has been completed. If any defects are noted, the operator shall not the machine and shall detail the defect in the log book. The operator shall fill out an "Out of Service" Tag and attach it to the piece of plant and give the keys to their relevant supervisor should the defect be of a serious nature.

8 Inspection of Mobile Plant and Equipment

8.1 Mobile Cranes:

Inspections *shall* be as follows:

(a) Pre-operational

Before the commencement of each work shift, the crane shall be given a visual inspection and functional test. The inspection shall be recorded in the logbook. See attachment1 [WHS-40B Mobile Crane Pre-Start Log](#). All safety related problems shall be rectified prior to using the crane and recorded.

(b) Routine Inspection and Maintenance

Required routine inspection and maintenance shall be carried out in accordance with the manufacturer's recommendations. This is organised by NT Fleet as a part of the lease agreement of the equipment.

(c) Periodic

Inspection intervals shall not exceed 12 months. This is organised by NT Fleet as a part of the lease agreement of the equipment.

(d) Major Inspection to assess crane for suitability for continued use

Cranes that have reached the end of their design life shall be assessed to ensure their suitability for continued use. Where the designed life is unknown, this assessment should be carried out at 10-year intervals for the mechanical components and at 25-year intervals for the structure.

(e) Assessment for changed operation

Where there is an intended change in the operation of the crane, it shall be assessed by a competent person for suitability for its intended use.

(f) Third Party Inspection

Each crane should undergo a third party inspection to ensure that the level of maintenance and repairs complies with AS 2550.3 and the crane is in a safe condition for continued use. Cranes are also classified as Registered Plant under the NT Work Health and Safety (National Uniform Legislation) Regulations and must be registered with NT WorkSafe.

8.2 Elevated Work Platforms (EWP's)

Inspections *shall* be as follows:

(a) Pre-operational

At the beginning of each working shift the elevating work platform shall be given a visual inspection and functional test. The inspection shall be recorded in the logbook. See Attachment 2 [WHS-40C Elevated Work Platform Pre-Start Log](#)

All EWP's on hire shall have the log book(s) completed in accordance with the supplier requirements.

All safety related problems shall be rectified prior to using the elevated work platform, reported to your manager and recorded in the log book.

(b) Routine Maintenance

Routine maintenance shall be carried out at intervals of not more than 3 months, unless the machine is not in service. This is organised by the asset owner for sites that have EWP's or by the hire company as part of their maintenance requirements.

(c) Annual Inspection

Annual inspections are required not more than 365 days from date of previous annual inspection and maintenance. This is organised by the asset owner for sites that have EWP's, or by the hire company as part of their maintenance requirements.

(d) Major Inspection

Major inspections are required after a maximum 10 years of service and every 5 years thereafter.

8.3 Forklifts

Inspections shall be as follows:

(a) Pre-operational

Prior to operating the forklift it shall be given an inspection and functional test as per the requirements of the Log book. See attachment 3 [WHS-40A Forklift Pre-start Log](#). All checks conducted shall be recorded in the logbook located with the forklift.

All safety related problems shall be rectified prior to using the forklift and recorded.

(b) Periodic Inspection

Inspection intervals shall not exceed 12 months. This is organised by NT Fleet as a part of the lease agreement of the equipment.

(c) Periodic Maintenance

Periodic maintenance shall be conducted as per the manufactures recommendations. This is organised by NT Fleet as a part of the lease agreement of the equipment.

8.4 Telescopic Handlers

Inspections shall be as follows:

(a) Pre-operational checks

Before the commencement of each work shift, the telehandler *shall* be given a visual inspection and functional test. Such inspection and testing may be conducted by the operator and *shall* include the items in the logbook. See Attachment 4 [WHS-40C Telescopic Handler Pre-Start Log](#). All findings *shall* be recorded in the logbook along with the date of inspection, the registration number of the telehandler, the engine hours and the name of the person inspecting it.

All safety related problems *shall* be recorded, reported and resolved prior to using the *telehandler*.

(b) Routine Inspection

The frequency of Routine Inspection and maintenance *shall* be based upon the working environment, and the frequency and severity of use of the *telehandler* while in service. The inspection interval *shall* not exceed 3 months.

The inspection procedure *shall* include verification that the current logbook and operators manuals are available on the *telehandler* and that this documentation is up to date.

(c) Periodic Inspections

The frequency of periodic inspection *shall* be based on the working environment and the frequency and severity of use of the *telehandler*. The inspection interval *shall* not exceed 12 months.

The *telehandler shall* not be returned to service until all safety-related malfunctions and problems have been corrected.

(d) Enhanced Periodic Inspection

After the first 5 years of service, and every 5 years thereafter, periodic inspections shall be structured to ensure all *critical components* are inspected, and tested where appropriate, within a 5 year period.

(e) Major Inspection

The frequency of Major inspections of the *telehandler shall* be every 10 years. The major inspection *shall* involve the examination of those *critical components* identified by the manufacturer or a *competent person*. Where necessary, the *telehandler shall* be stripped down and paint, grease and corrosion removed from critical components to allow a complete and thorough inspection.

The *telehandler shall* not be returned to service until all safety-related malfunctions and problems have been corrected.

ATTACHMENT 1 – Mobile Crane Pre Start Log


MOBILE CRANE PRE-START LOG

Date: Checked by:

Registration Number..... Engine Hours.....

CHECKS CONDUCTED	YES	NO	ACTION REQUIRED			
1. Fluid Levels						
Engine oil						
Hydraulic oil						
Radiator fluid level						
Battery fluid level						
Fuel Level						
2. Electricals						
Head/tail & brake lights						
Indicators						
Flashing caution lights						
Horn						
Reversing siren/beeper						
3. Wheels and Tyres						
Rims – good condition						
Tyres – Good condition						
Tyre Pressures checked						
Wheel/lug nuts tight						
4. Brakes						
Foot brake works						
Hand brake works						
VISUAL INSPECTION				PASS	FAIL	N/A
Hydraulics – no leaks or weeps from hoses, rams etc.						
Air system – no audible leaks						
Boom – no damage, angle indicator working						
Wire rope – Free from dirt/excess lube/kinks. Spooled correctly						
Reeving correct						
Wedge sockets and wire rope clips not distorted/cracked/missing						
Block – No damage						
Ball and hook – Free to swivel						
Guards – In place and secure						
Engine – Belts and hoses secure; no leaks or debris						
Air brake tank – Good condition, water drained and drain valve closed						
Load charts/range diagrams visible						
Please list any problems or defects:						

ATTACHMENT 2 – Elevated Work Platform Pre start Log

				
ELEVATED WORK PLATFORM PRE-START LOG				
Date: Checked By:				
Serial Number: Engine Hours:				
Components Inspected		✓ = Serviceable	✗ = Broken/failed/low	C = Corrected
Ensure the operators manuals are complete, legible and in the storage container located in the platform.		Check for engine coolant leaks and proper level of coolant (remove the radiator cap on cool engines only)		
Ensure all safety decals, and all instruction placards are installed and legible		Check the battery(s) for fluid leaks and proper fluid level (add distilled water if needed).		
Check engine oil for oil leaks and proper oil level (add oil if needed).		Check for hydraulic oil leaks and proper oil level (add oil if needed)		
Check the following components or areas for damage, improperly installed or missing parts and unauthorised modifications:				
Electrical components, wiring and electrical cables		Hydraulic hoses, fittings, cylinders and manifolds		
Fuel and hydraulic tanks		Drive motors		
Wear Pads		Tyres and wheels for damage, bulging of tyres and pressure		
Engine and related components		Limit Switches		
Nuts, bolts and other fasteners		Platform entry gate		
Beacon and alarm (if fitted)		Brake release components		
Safety arm		Platform extension		
Scissor pins and retaining fasteners		Platform control joystick		
Generator if equipped		Outrigger housings and footpads (is equipped)		
Check entire machine for:				
Cracks in welds or structural components		Dents or damage to machine		
Ensure all structural and critical components are present and all associated fasteners and pins are in place and properly tightened		Side rails are installed and snap pins and bolts are fastened		
Please list any problems or defects:				

ATTACHMENT 3 – Forklift Pre start Log

FORKLIFT PRE-START LOG

Date: Checked by:

Registration Number: Engine Hours:

CHECKS CONDUCTED	YES	NO	ACTION REQUIRED
1. Fluid Levels:			
Engine Oil			
Transmission Oil			
Hydraulic Oil			
Radiator Coolant Level			
Battery Fluid Level			
Brake Fluid			
Fuel Level			
2. Electricals:			
Head and Tail Lights			
Indicators			
Flashing Caution Lights			
Brake Lights			
Horn			
Reversing Siren or Beeper			
3. Fork Mast and Tynes:			
Check Wear			
Locking Pins			
Chains			
Cables			
Hoses			
4. Brakes:			
Foot Brake Operational			
Park Brake Operational			
5. Tyres			
Condition – (no slits, cuts or other damage):			
Tyre Pressure Checked			
6. General			
Seat Belt			
Oil Leaks			

Please list any problems or defects:

ATTACHMENT 4 – Telehandler Pre Start Log



TELEHANDLER PRE-START LOG

Date: Checked By:

Registration or Serial Number: Engine Hours:

ON THE MACHINE, OUTSIDE THE CAB ✓ = Serviceable * = Broken/failed/low/missing C = Corrected NA = Not Applicable

Mirrors	Clean, not damaged, properly adjusted	
Windows	Clean, not damaged	
Windscreen Wipers	Arm and blade/rubber intact and operational	
Forks	No damage, cracks, misalignment, check welds, locking pins in place and secure	
Warning, safety and instructional decals	Not missing or damaged and are legible	
Tyres	Tyre pressure is correct, no damage or bulges on tyres	
Wheels	No loose lug bolts, bent rims or cracks	
Differentials	No oil leaks or cracks in housing(s)	
Guards and covers	Not damaged and are in place	
Steps and handrail	Not damage, clean of oils etc. and in place	
Battery and Terminals	Cable connections tight, battery fluid levels correct (top up with distilled water if low), terminals clean with no corrosion	
Stabilizer arms, Cylinders and Pads	No damage, oil leaks, missing bolts	
Overall machine	No loose or missing nuts and bolts or loose guards damaged parts and is clean.	

ENGINE COMPARTMENT ✓ = Serviceable * = Broken/failed/low/missing C = Corrected NA = Not Applicable

Engine Oil	Check fluid level (top up if low)	
Engine Coolant	Check fluid level (top up if low)	
Hydraulic Oil	Check fluid level (top up if low)	
Air filter	Restriction Indicator operating (where fitted)	
Radiator	No leaks, fin blockage or damage and is clean.	
All hoses	No cracks, bulges, wear spots or leaks	
All drive belts	Belts are all tight, not worn, no cracks or delamination	
Overall Engine Compartment	No debris or dirt build up, no other leaks.	

INSIDE THE CAB ✓ = Serviceable * = Broken/failed/low/missing C = Corrected NA = Not Applicable

ROPS or FOPS	No damage or loose bolts	
Seat	Adjustments works	
Seat belt and mounting	No damage, wear (fraying) retractor working, age of install, date of manufacture	
Fire Extinguisher	Still charged, unused, not damaged, inspection placard up to date	
Horn, reversing alarm, lights and wipers	All working correctly	
Controls and gauges and lenses	Working correctly, clean and visible	
Overall Cab Interior	Clean and free of rubbish and dirt/debris	

Please list any problems or defects