

MANDATORY CODE OF PRACTICE FOR TRACKLESS MOBILE MACHINERY

This Code of Practice has been drawn up in accordance with the guidelines of the Department of Minerals and Energy. Ref No DME 16/3/2/2/-A2

Mine Reference Number for Code of Practice:

This Code of Practice will be revised under the following conditions:

- Annually
- Whenever an incident with a potential or actual serious loss occurs
- Whenever significant changes occur which can or will affect the task performance (such as materials used, process or design alterations, area changes, personnel and / or equipment changes)

SUMMARY

- All operators of mobile machinery should be trained, tested and found competent to operate a specific type of trackless mobile machine.
- Records must be kept regarding training, competence testing and appointment of operators; all of which should be acknowledged by the relevant operators.
- Unauthorised usage of trackless mobile plant should be minimised by effective key control and the locking up of machines at night and over weekends.
- Disciplinary action must be taken against operators who do not adhere to this Code of Practice.
- All mobile machinery must be equipped with an effective braking system i.e. a service brake and a parking brake whether it be a handbrake or a blade which can be lowered onto the ground.
- Appropriate personal protective equipment must be used by operators.
- Where required (poor visibility and at night) effective lights must be provided and used.
- Trackless mobile machinery may only be used when in a good state of repair.

1. NUMBER OF MACHINES IN USE

OWN VEHICLES

Description

Model type

CONTRACTORS' VEHICLES

Description

Model type

This list of vehicles cannot be defined precisely as different contractors and vehicles are used. Construction contractors may use other vehicles which may not be separately identified in this Code of Practice, but which will be subject to the general terms therein.

2. STATUS OF MANDATORY CODE OF PRACTICE

This is a Mandatory Code of Practice in terms of Section 9(2) and 9 (3) of the Mine Health and Safety Act (Act 29 of 1996) This Code of Practice was drawn in accordance with the Guideline of the Department Mineral and Energy, Reference Number DME 16/3/2/2 – A2 issued by the Chief Inspector of Mines.

This Code of Practice can be used in an accident investigation / inquiry to ascertain compliance and also to establish whether the Code of Practice is effective and fit for purpose, The Code of Practice also supersedes all previous relevant Codes of Practice and managerial instructions or recommended procedures and standards on the relevant topic.

3. MEMBERS OF THE DRAFTING COMMITTEE:

Name	Title
Name	Title

4. GENERAL INFORMATION

4.1 Description of mine.

The mine is situated on ...

4.2 Description of mining method.

Clay is opencast mined using a bulldozer and stockpiled. Loaders load the clay into tipper trucks which transport the clay to the factory area where it is milled and extruded into bricks.

5. TERMS AND DEFINITIONS

- LDV : Light Delivery Vehicle
- FEL : Front End Loader
- FL : Forklift

6. RISK MANAGEMENT

The Risk Assessment process which is followed at the mine consists of an ongoing analysis of the risk from hazardous activities and conditions, making a rational valuation of their significance and summarising to provide input to a decision making process. All relevant information such as accident statistics, research reports, DME newsletters and manufacturers specifications have been used in carrying out this process.

Separate risk assessment studies will need to be conducted as circumstances (new machinery, processes, etc) change. An additional risk assessment will need to be carried out when:

- ❑ a new type of machine is introduced ;
- ❑ a system of work or operation is changed;
- ❑ after an injury or a “near miss” has occurred; and
- ❑ as new knowledge comes to light and information is received which may influence the level of risk to employees at the mine or works.

7. SAFE USE AND OPERATION OF TRACKLESS MOBILE MACHINERY

BULLDOZER (Any bulldozer used by any contractor)

SAFE OPERATION RULES

The following rules will apply for the safe use and operation of all bulldozers:

- ❑ Daily completion of pre – use checklist before machine is used
- ❑ Only competent and authorised operators are allowed to drive the bulldozer
- ❑ Blade must be lowered to the ground when not travelling
- ❑ Never leave vehicle unattended without properly shutting down
- ❑ Do not attempt to board a moving vehicle
- ❑ No horse play on or with vehicle
- ❑ Signals to be used to guide bulldozer in difficult position
- ❑ Operator must sit on the seat whilst operating bulldozer
- ❑ No passengers whilst in operation and in transit
- ❑ Always use lockout procedure of machine
- ❑ Use trestles or blocks to support the blade when working on blade or when replacing cutting edges
- ❑ The operator of the bulldozer must not leave the bulldozer unattended or in a position that might cause the bulldozer to move forward, backwards or topple over
- ❑ Operation of the bulldozer on slopes should preferably take place in an up and down movement rather than along the contour

BRAKES

- ❑ Main braking system - must comply with the standard specification of the manufacturer of the machine

PROTECTION OF THE OPERATOR AND OTHER PERSONS

- ❑ Nobody is allowed near the bulldozer when in operation. Safe radius from the bulldozer is 6 meters
- ❑ Bulldozer gets right of way at all times
- ❑ Operator to wear kidney belt, dust mask and hearing protection at all times

MAINTENANCE OF BULLDOZER

The following maintenance schedule to be observed:

- ❑ Daily pre – use checks will be completed by the operator
- ❑ Planned maintenance schedule - services to be carried out every 250 hours

FRONT END LOADERS

SAFE OPERATION RULES

The following rules will apply for the safe use and operation of all front end loaders:

- ❑ Daily completion of pre – use checklist before machine is used
- ❑ Only competent and authorised operators are allowed to drive the loaders
- ❑ Bucket must be lowered to the ground when not travelling
- ❑ Never leave vehicle unattended without properly shutting down
- ❑ Do not attempt to board a moving vehicle
- ❑ No horse play on or with vehicle
- ❑ Hand signals given by a competent person must be used to guide loaders in difficult positions
- ❑ Operators must sit on the seat whilst operating loaders
- ❑ No passengers whilst in operation and in transit
- ❑ Always use lockout procedure of machine
- ❑ If persons and/or equipment are being carried in the bucket, the operator must exercise extreme caution at all times; must only travel backwards, must not exceed 5 km/h and must ensure that the bucket is kept close to the ground
- ❑ Extreme caution must be exercised when working in wet or slippery conditions
- ❑ Operators must not leave the loaders unattended or in a position that might cause the machine to move forward, backwards, sideways or topple over
- ❑ Front and rear lights must be fitted to all loaders which are used at night
- ❑ Flashing hazard lights to be fitted to all loaders
- ❑ Any loaders being used on public roads must be properly licenced

BRAKES

- ❑ Main braking system - must comply with the standard specification of the manufacturer of the machine

PROTECTION OF THE OPERATOR AND OTHER PERSONS

- ❑ Nobody is allowed near any loaders when in operation. Safe radius from any loader is 4 meters
- ❑ Operators to wear kidney belts at all times and hearing protection and dust masks, if necessary

MAINTENANCE OF FRONT END LOADERS

The following maintenance schedule to be observed:

- ❑ Daily pre – use checks will be completed by operators
- ❑ Planned maintenance schedule – minor services to be carried out at 250, 500 and 750 hours and major services to be carried out at 1000 hours

TIPPER TRUCKS

SAFE OPERATION RULES

The following rules will apply for the safe use and operation of all tipper trucks:

- ❑ Daily completion of pre – use checklist before machine is used
- ❑ Only competent and authorised, and where necessary appropriately licensed, operators are allowed to drive the tipper trucks
- ❑ The tipper load body must be lowered into position before moving the trucks
- ❑ No horse play on or with tipper truck
- ❑ Hand signals given by a competent person must be used to guide tipper trucks when reversing in difficult positions
- ❑ Always use lockout procedure of machine
- ❑ Tipping must only be done on level surfaces or when the rear of the truck is facing uphill
- ❑ Tipping must never be attempted on sloping or slippery surfaces
- ❑ Tipping must never be done under, or within 15 metres, of overhead power lines
- ❑ Operators are responsible for ensuring that their trucks are correctly loaded and NOT overloaded
- ❑ Operators must not leave the tipper trucks unattended or in a position that might cause the vehicle to move forward, backwards, sideways or topple over
- ❑ All lights and indicators must be in working order at all times
- ❑ Operators must obey all road signs
- ❑ Tipper trucks which operate on public roads must be properly licensed

BRAKES

- ❑ Main braking system - must comply with the standard specification of the manufacturer of the machine

PROTECTION OF THE OPERATOR AND OTHER PERSONS

- ❑ Nobody is allowed near any tipper trucks when in operation. Safe radius from any tipper truck is 4 meters
- ❑ Operators to wear kidney belts at all times

MAINTENANCE OF TIPPER TRUCKS

The following maintenance schedule to be observed:

- ❑ Daily pre – use checks will be completed by operators
- ❑ Planned maintenance schedule – minor services to be carried out at 250, 500 and 750 hours and major services to be carried out at 1000 hours

FORKLIFTS (Linde)

SAFE OPERATION RULES

The following rules will apply for the safe use and operation of all forklifts:

- ❑ Daily completion of pre – use checklist before machine is used
- ❑ Only competent and authorised operators are allowed to drive the forklifts
- ❑ Mast must be lowered to the ground when not travelling
- ❑ Never leave forklift unattended without properly shutting down
- ❑ Do not attempt to board a moving forklift
- ❑ No horse play on or with forklift
- ❑ Signals to be used to guide forklifts in difficult positions
- ❑ Operators must sit on the seat whilst operating forklifts
- ❑ No passengers whilst in operation and in transit

- ❑ Always use lockout procedure of machine
- ❑ Operators must not leave the forklift unattended or in a position that might cause the forklift to move forward, backwards or sideways
- ❑ Front and rear lights are to be fitted to forklifts which are used at night
- ❑ Flashing hazard lights to be fitted to all forklifts

BRAKES

- ❑ Main braking system - must comply with the standard specification of the manufacturer of the machine

PROTECTION OF THE OPERATOR AND OTHER PERSONS

- ❑ Nobody is allowed near any forklift when in operation. Safe radius from any forklifts is 3 meters
- ❑ Operators to wear kidney belt and hearing protection at all times and dust masks, if necessary

MAINTENANCE OF FORKLIFTS

The following maintenance schedule to be observed:

- ❑ Daily pre – use checks will be completed by operators
- ❑ Planned maintenance schedule – minor services to be carried out at 250, 500 and 750 hours and major services to be carried out at 1000 hours

GRADER (Coega Brick)

SAFE OPERATION RULES

The following rules will apply for the safe use and operation of all graders:

- ❑ Daily completion of pre – use checklist before machine is used
- ❑ Only competent and authorised operators are allowed to drive the grader
- ❑ Blade must be lowered to the ground when not travelling
- ❑ Never leave grader unattended without properly shutting down
- ❑ Do not attempt to board a moving vehicle
- ❑ No horse play on or with vehicle
- ❑ Signals to be used to guide grader in difficult position
- ❑ No passengers whilst in operation and in transit unless being trained
- ❑ Always use lockout procedure of machine
- ❑ The operator must not leave the grader unattended or in a position that might cause the grader to move forward, backwards or topple over

BRAKES

- ❑ Main braking system - must comply with the standard specification of the manufacturer of the machine

PROTECTION OF THE OPERATOR AND OTHER PERSONS

- ❑ Nobody is allowed near the grader when in operation. Safe radius from the grader is 4 meters
- ❑ Operator to wear kidney belt and hearing protection at all times and dust masks, if necessary

MAINTENANCE OF GRADER

The following maintenance schedule to be observed:

- ❑ Daily pre – use checks will be completed by the operator
- ❑ Planned maintenance schedule - services to be carried out every 250 hours

DELIVERY TRUCKS

SAFE OPERATION RULES

The following rules will apply for the safe use and operation of all delivery trucks: (generally owned and operated by independent contractors)

- ❑ Only competent, authorised and appropriately licensed operators are allowed to drive delivery trucks
- ❑ No horse play on or with delivery trucks
- ❑ Hand signals given by a competent person must be used to guide delivery trucks when reversing in difficult positions
- ❑ Always use lockout procedure of machine
- ❑ Operators are responsible for ensuring that their trucks are correctly loaded
- ❑ Operators must not leave the delivery trucks unattended or in a position that might cause the vehicle to move forward, backwards or sideways or topple over
- ❑ Speed limit in working areas is 20 km/h
- ❑ All lights and indicators must be in working order at all times
- ❑ Operators must obey all road signs and only drive on designated roads
- ❑ Where possible, loading assistants should sit in the cab and not on the load body

BRAKES

- ❑ Main braking system - must comply with the standard specification of the manufacturer of the machine

LIGHT DELIVERY VEHICLES (BAKKIES)

SAFE OPERATION RULES

The following rules will apply for the safe use and operation of all LDVs:

- ❑ Only competent, authorised and appropriately licensed operators are allowed to drive LDVs
- ❑ Do not attempt to board a moving LDV
- ❑ No horse play on or with vehicle
- ❑ Operators must not leave LDVs unattended without switching off and engaging the hand brake

BRAKES

- ❑ Main braking system - must comply with the standard specification of the manufacturer of the machine

PROTECTION OF THE OPERATOR AND OTHER PERSONS

- ❑ Operators of LDVs are to give right of way to all other vehicles
- ❑ Passengers must not sit on the edge of the load body, but inside
- ❑ Seat belts must be worn on public roads

MAINTENANCE OF LDVs

The following maintenance schedule to be observed:

- ❑ Planned maintenance schedule - services to be carried out every 5,000 kilometres

OIL/FUEL DELIVERY TRUCKS(Unitrans/Caltex)

SAFE OPERATION RULES

The following rules will apply for the safe use and operation of all Oil and fuel delivery trucks: (generally owned and operated by Unitrans and Caltex respectively)

- ❑ Only competent, authorised and appropriately licensed operators are allowed to drive coal delivery trucks
- ❑ No horse play on or with delivery trucks
- ❑ Hand signals given by a competent person must be used to guide delivery trucks when reversing in difficult positions
- ❑ Always use lockout procedure of machine
- ❑ Operators are responsible for ensuring that their trucks are correctly and safely offloaded
- ❑ Operators shall not leave the delivery trucks unattended or in a position that might cause the vehicle to move forward, backwards, sideways or topple over
- ❑ All lights and indicators must be in working order at all times
- ❑ Operators must obey all road signs and speed limits

BRAKES

- ❑ Main braking system - must comply with the standard specification of the manufacturer of the machine

8. PERSONAL PROTECTIVE EQUIPMENT

The wearing of personal protective equipment is mandatory, unless specified otherwise. The company will make the following personal protective equipment available:

- Overalls – every employee will be issued with one overall per year; drivers and maintenance staff will be issued with a second overall after six months. All employees must wear their overalls in the workplace.
- Safety boots – every employee will be issued with a pair of PVC safety boots per year. Workshop staff and supervisors and above will be issued with a pair of leather safety boots. All issues will be paid for at 50% by the company and the balance by the employee. Employees may choose to upgrade to leather boots at their cost. All employees must wear their boots in the workplace.
- Eye protection – all workshop staff will be issued with appropriate eye protection equipment e.g. welding helmet, goggles etc. All other employees are entitled to request dust goggles when required.
- Hearing protection – ear muffs are issued to all drivers of forklifts, loaders, graders and bulldozers and employees working in high noise areas. Ear plugs are issued to employees who choose not to wear ear muffs. It is compulsory for persons who are issued with hearing protection to wear these whenever in high noise areas.
- Dust masks – disposable dust masks are issued to all employees on request. Higher grade FF1 and FF2 dust masks are issued to employees working in high dust areas.
- Gloves – welding gloves are issued to workshop staff. Rubber gloves are available for employees working with acid or other noxious materials. Employees handling bricks generally prefer to make gloves using tube.
- Kidney belts – issued to all drivers employed by the company and compulsory to wear.

THIS CODE OF PRACTICE WAS FIRST DRAWN UP IN ... AND WAS APPROVED BY BOTH MANAGEMENT AND THE DRAFTING COMMITTEE. ALL EMPLOYEES, CONTRACTORS AND VISITORS ARE SUBJECT TO THIS CODE OF PRACTICE. DISCIPLINARY OR LEGAL ACTION MAY BE TAKEN AGAINST EMPLOYEES OR CONTRACTORS NOT COMPLYING WITH THIS CODE OF PRACTICE.

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