

# POLICY : HEALTH AND SAFETY AND TRAINING STRATEGY

ITEM A-MI (22-2003) MI: SW (03/01/012) : HEALTH AND SAFETY POLICY AND TRAINING  
CM 26.6.2003 STRATEGY : EKURHULENI METROPOLITAN MUNICIPALITY (MC 22-05-2003)

## RESOLVED:

1. **That** the report by the Executive Director: Municipal Infrastructure regarding the proposed Health and Safety Policy and Training Strategy for the Solid Waste Division, **BE NOTED**.
2. **That** the proposed Health and Safety Policy for the Solid Waste Division attached as **Annexure "A"** to the report, **BE ACCEPTED** and **APPROVED**.
3. **That** the proposed Training Strategy for the Solid Waste Division attached as **Annexure "B"** to the report, **BE ACCEPTED** and **APPROVED**.
4. **That** the necessary funding **BE PROVIDED** on the Solid Waste Division's Operational Budget for the implementation of the Health and Safety Policy and Training Strategy.



**Ekurhuleni**  
METROPOLITAN MUNICIPALITY

# **HEALTH AND SAFETY POLICY FOR SOLID WASTE DIVISION**

## PURPOSE OF THE POLICY

1. The purpose of the policy is to establish health and safety guidelines within the Solid Waste Division of the Ekurhuleni Metropolitan Municipality which will be in compliance with the Occupational Health and Safety Act (Act 85 of 1993) as amended, and which will fit into the broader Health and Safety Policy of the Ekurhuleni Metropolitan Municipality.
2. The policy will strive to ensure that as far as reasonably practicable a working environment that is safe and without risk to the health and safety of all employees are created and maintained.

## LEGALITIES

In order to fulfil the aim of this policy the following Acts and Regulations must be adhered to by the employer (Council).

- Occupational Health and Safety Act (Act 85 of 1993)
- Regulation 18, being the Driven Machinery Regulations (Regulation 18 of 1985)

The following broader requirements is applicable on the operations of the Solid Waste Division and accentuates the need for this policy and its recommendation.

Special emphasis should be placed on the following subsections as they have a direct bearing on the recommendation of this policy.

- (a) In terms of the provisions of the Occupational Health and Safety Act (Act 85 of 1993).

Section 8(1)  
 Section 8(2)(e)  
 Section 13(a)  
 Section 14(a)  
 Section 14©

- (b) Under the provisions of the Driven Machinery Regulations (Regulation 18 of 1985).

Definition of "Lift Truck"  
 Section 18(11)

## GUIDELINE: SAFETY — OPERATORS (not included in DMR 18111)

The Occupational Health and Safety Act (Act 85 of 1993) refers to the responsibility that exists between the Employer or user of machinery (the council) and their Employees when it comes to safety at work.

Section 8 refers:

### General duties of employers to their employees

- 8(1) **Every employer shall provide and maintain, as far as is reasonably practicable, a working environment that is safe and without risk to the health of his employees.**
- 8(2) Without derogating from the generality of an employer's duties under subsection 8(1), the matters to which those duties refer include in particular -

- 8(2)(a) the provision and maintenance of systems of work, plant and machinery that, as far as is reasonably practicable, are safe and without risks to health;
- 8(2)(b) taking such steps as may be reasonably practicable to eliminate or mitigate any hazard or potential hazard to the safety or health of employees, before resorting to personal protective equipment;
- 8(2)(c) making arrangements for ensuring, as far as is reasonably practicable, the safety and absence of risks to health in connection with the production, processing, use, handling, storage or transport of articles or substances;
- 8(2)(d) establishing, as far as is reasonably practicable, what hazards to the health or safety of persons are attached to any work which is performed, any article or substance which is produced, processed, used, handled, stored or transported and any plant or machinery which is used in his business, and he shall, as far as is reasonably practicable, further establish what precautionary measures should be taken with respect to such work, article, substance, plant or machinery in order to protect the health and safety of persons, and he shall provide the necessary means to apply such precautionary measures;
- 8(2)(e) **providing such information, instructions, training and supervision as may be necessary to ensure, as far as is reasonably practicable, the health and safety at work of his employees;**
- 8(2)(f) as far as is reasonably practicable, not permitting any employee to do any work or to produce, process, use, handle, store or transport any article or substance or to operate any plant or machinery, unless the precautionary measures contemplated in paragraphs 8(2)(b) and 8(2)(d), or any other precautionary measures which may be prescribed, have been taken;
- 8(2)(g) taking all necessary measures to ensure that the requirements of this Act are complied with by every person in his employment or on premises under his control where plant or machinery is used;
- 8(2)(h) enforcing such measures as may be necessary in the interest of health and safety;
- 8(2)(i) ensuring that work is performed and that plant or machinery is used under the general supervision of a person trained to understand the hazards associated with it and who have, the authority to ensure that precautionary measures taken by the employer are implemented; and
- 8(2)(j) causing all employees to be informed regarding the scope of their authority as contemplated in section 37(1)(b).

Section 13 refers:

### **Duty to inform**

- 13 Without derogating from any specific duty imposed on an employer by this Act, every employer shall-

- 13(a) **as far as is reasonably practicable, cause every employee to be made conversant with the hazards to his health and safety attached to any work which he has to perform**, any article or substance which he has to produce, process, use, handle, store or transport and any plant or machinery which he is required or permitted to use, as well as with the precautionary measures which should be taken and observed with respect to those hazards;
- 13(b) inform the health and safety representatives concerned beforehand of inspections, investigations or formal inquiries of which he has been notified by an inspector, and of any application for exemption made by him in terms of section 40; and
- 13(c) inform a health and safety representative as soon as reasonably practicable of the occurrence of an incident in the workplace or section of the workplace for which such representative has been designated.

Section 14 refers:

### **General duties of employees at work**

14. Every employee shall at work-
- 14(a) **take reasonable care for the health and safety of himself and of other persons who may be affected by his acts or omissions;**
- 14(b) as regards any duty or requirement imposed on his employer or any other person by this Act, cooperate with such employer or person to enable that duty or requirement to be performed or complied with;
- 14(c) **carry out any lawful order given to him, and obey the health and safety rules and procedures laid down by his employer or by anyone authorized thereto by his employer, in the interest of health or safety;**
- 14(d) if any situation which is unsafe or unhealthy comes to his attention, as soon as practicable report such situation to a health and safety representative or to his employer; and
- 14(e) if he is involved in any incident which may affect his health or which has caused an injury to himself, report such incident to his employer or to anyone authorized thereto by the employer, or to his health and safety representative, as soon as practicable but not later than the end of the particular shift during which the incident occurred, unless the circumstances were such that the reporting of the incident was not possible, in which case he shall report the incident as soon as practicable thereafter.

### **Driven Machinery Regulations**

#### Definitions

“block and tackle” means a lifting device consisting of one or more pulley blocks reefed with chains, wire or fibre ropes used solely for the raising and lowering of a load or moving a load horizontally;

“builder’s hoist” means an appliance used in connection with building work for the raising or lowering of material by means of a platform, skip, cage, or other receptacle on a fixed guide or guides;

“cradle” means a platform enclosed on all sides but open at the top, designed for the purpose of raising and lowering persons by means of a lifting machine;

“explosive powered tool” means a tool that is activated by an explosive charge and that is used for driving bolts, nails and similar object for the purpose of providing a fixing;

“goods hoist” means an appliance used for the transportation of goods by means of a car, cage, cradle or other receptacle in a hatchway on fixed guides and in which persons never travel;

“hatchway” means a vertical or inclined way in which a goods hoist is operated;

“jib-crane” means any crane of which the load is supported by a projecting horizontal or inclined member, known as a jib;

“landing” means any floor or platform which is an authorised stopping place for a goods hoist or builder’s hoist;

“lifting machine” means a power driven machine which is designed and constructed for the purpose of raising or lowering a load or moving it in suspension, and includes a block and tackle, hoist, crane, lift truck or jib-crane, but does not include an elevator, escalator, goods hoist or builder’s hoist;

“lifting tackle” means chain slings, rope slings, rings, hooks, shackles, swivels, spreaders or similar appliances;

**“lift truck” means a mobile lifting machine, but does not include-**

- 1.(a) a vehicle designed solely for the purpose of lifting or towing another vehicle;**
- 1.(b) a mobile earth-moving machine; or**
- 1.(c) a vehicle designed solely for the removal of a waste bin;**

“point of operation” means the place in a machine where material is positioned and where the actual work is performed;

“press” means a driven machine that shears, punches, forms or assembles metal or other material by means of cutting, shaping or combination dies attached to slides which have a controlled reciprocating motion but does not include binding brake presses, hot bending or hot metal presses, forging hammers, and riveting machines and similar types of fastener applicators;

“regional director” means the regional director as amended in regulation 1 of the General Administrative Regulations published by Government Notice R.2131 of 1990-09-07.

“transportation plant” means apparatus used for the transportation of material by means of an elevated conveyance suspended from and travelling along a catenary rope or chain where persons may pass or work below the path of the conveyance, or any such apparatus used for the transportation of persons.

### **Lifting machines and lifting tackle**

18. No user shall use or permit the use of a lifting machine unless-

- 18(1)(a) it has been designed and constructed in accordance with a generally accepted technical standard;

- 18(1)(b) it is conspicuously and clearly marked with the maximum mass load which it is designed to carry with safety: Provided that when this mass load varies with the conditions of use a table showing the maximum mass load with respect to every variable condition shall be posted up by the user in a conspicuous place easily visible to the operator, and
- 18(1)(c) it has at all times at least three full turns of rope on the drum of each winch which forms part of such a machine when such a winch has been run to its lowest limit.
- 18(2) The user shall, where practicable, provide every power driven lifting machine with-
- 18(2)(a) a brake or other device capable of holding the maximum mass load should the power supply fail, or which is such that it will automatically prevent the uncontrolled downward movement of the load when the raising effort is interrupted; and
- 18(2)(b) a limiting device which will automatically arrest the driving effort whenever any one of the following conditions occurs:
- 18(2)(b)(i) when the load reaches the highest and lowest safe position; or
- 18(2)(b)(ii) when the load is greater than the rated mass load of the machine.
- 18(3) The user shall cause every chain or rope which forms an integral part of a lifting machine to have a factor of safety as prescribed by the 1 standard to which such machine was manufactured: Provided that in the absence of such prescribed factor of safety, chains, steel wire ropes and fibre ropes shall have a factor of safety of at least four, five and ten, respectively, with respect to the rated carrying capacity of the lifting machine.
- 18(4) The user shall cause every hook or any other load-attaching device which forms an integral part of a lifting machine to be so designed or proportioned that accidental disconnection of the load under working conditions cannot take place.
- 18(5) The user shall cause the whole installation and all working parts of every lifting machine to be thoroughly examined and subjected to a performance test, as prescribed by the 1 standard to which the lifting machine was manufactured, by a person who has knowledge and experience of the erection and maintenance of the type of lifting machine involved or similar machinery and who shall determine the serviceability of the structures, ropes, machinery and safety devices, before they are put into use following every time they are erected, and thereafter at intervals not exceeding 12 months: Provided that in the absence of such prescribed performance test the whole installation of the lifting machine shall be tested with 110% of the rated mass load, applied over the complete lifting range of such machine and in such a manner that every part of the installation is stressed accordingly.
- 18(6) Notwithstanding the provisions of sub regulation 18(5), the user shall cause all ropes, chains, hooks or other attaching devices, sheaves, brakes and safety devices forming an integral part of a lifting machine to be thoroughly examined by a person contemplated in sub regulations 18(5) at intervals not exceeding six months.
- 18(7) The user shall cause the results of the examinations and tests prescribed in sub regulations 18(5) and 18(6) to be entered and signed by the person carrying out such examinations and tests, in a record book which shall be kept on the premises at all times.

- 18(8) No user shall permit or require persons to be raised or lowered by means of a lifting machine unless the permission of an inspector is obtained in writing.
- 18(9) No user shall use or permit any person to use a jib-crane with a lifting capacity of 5000 kg or more at minimum jib radius, unless it is provided with-
- 18(9)(a) a load indicator that will indicate to the operator of the jib-crane the mass of the load being lifted: Provided that such a device shall not require manual adjustment, from application of a load to the jib-crane until the release of that load, using any motion or combination of motions permitted by the crane manufacturer to ensure safe lifting; or
- 18(9)(b) a limiting device which will automatically arrest the driving effort whenever the load being lifted is greater than the rated mass load of the jib-crane, at that particular radius, using any motion or combination of motions permitted by the crane manufacturer to ensure safe lifting: Provided that such a device shall not arrest the driving effort when the jib-crane is being operated into a safer condition.
- 18(10) No user shall use or allow the use of any lifting tackle unless the following conditions are complied with, namely that-
- 18(10)(a) every item of lifting tackle is well constructed of sound material, is strong enough and is free from patent defects and is in general constructed in accordance with a generally accepted technical standard;
- 18(10)(b) every lifting assembly consisting of different items of lifting tackle is conspicuously and clearly marked with identification particulars and the maximum mass load which it is designed to lift with safety;
- 18(10)(c) ropes or chains have a factor of safety with respect to the maximum mass load they are designed to lift with safety or;
- 18(10)(c)(i) ten for natural-fibre ropes;
- 18(10)(c)(ii) six for man-made fibre ropes or woven webbing;
- 18(10)(c)(iii) six for steel-wire ropes except for double part spliced endless sling legs and double part endless grommet sling legs mad from steel-wire rope, in which case the factor of safety shall be at least eight;
- 18(10)(c)(iv) five for steel chains; and
- 18(10)(c)(v) four for high-tensile or alloy steel chains: Provided that when the load is equally shared by two or more ropes or chains the factor of safety may be calculated in accordance with the sum of the breaking strengths taking into consideration the angle of loading;
- 18(10)(d) steel-wire ropes are discarded and not used again for lifting purposes if the rope shows signs of excessive wear, too many broken wires, corrosion or other defects that have made its use in any way dangerous;



- 18(10)(e) such lifting tackle is examined at intervals not exceeding three months by a person contemplated in sub regulations 18(5) who shall enter and sign the result of each such inspection in a book kept for this purpose; and
- 18(10)(f) such lifting tackle is stored or protected so as to prevent damage or deterioration when not in use.
- 18(11) The user shall ensure that every lifting machine is operated by an operator specifically trained for a particular type of lifting machine: Provided that in the case of lift trucks with a lifting capacity of 150 kg or more and jib-cranes with a lifting capacity of 5 000 kg or more at minimum jib-radius, the user shall not require or permit any person to operate such a lifting machine unless the operator is in possession of a certificate of training, issued by a person or organisation approved for this purpose by the Chief Inspector.

### Notes

1. Under Section 8 of the Occupational Health and safety Act, the employer must ensure a safe working place where the risks are known and “eliminated”. Part of the duty of the employer is to inform and train the employee and give that employee rules and regulations to follow and be conversant with it (section 13).
2. The employee must obey such rules and regulations (section 14).
3. In the definitions of DMR 18(11) an operator must be trained on a lifting machine. But a lifting machine is a crane or a lift truck. A refuse removal truck, earth moving machine or a tow truck is not a lift truck and hence not a lifting machine. Thus the employer has to train under section 8 of the Occupational Health and Safety Act except for crane/lift trucks operators for which training should be provided under the DMR Regulations using an accredited organization.

### RECOMMENDATIONS

1. **Train the workers once** against a proper and accepted standard (training material) using a reputable provider with experienced instructors.
2. **Assess the worker at regular intervals** (normally 24 months) to ensure their competency using proper practical and theoretical assessment tools.
3. **Have regular information sessions** (this can take place when assessments are done) for the workers about safety in their workplace.
4. **Keep proper record** of the training and information/assessments in case it is required in an inquiry (by the Department of Labour) or a disciplinary session:
- 5: **Implement a training strategy** in order to ensure that points 1 to 4 as above are implemented as soon as possible.



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# **TRAINING STRATEGY FOR SOLID WASTE DIVISION**

## **PURPOSE OF THE STRATEGY**

In terms of the relevant Health and Safety Legislation it is paramount to realise that the Solid Waste Management Division (Employer) needs to ensure that all workers are trained and in certain cases certified in all aspects regarding Health and Safety awareness in the working environment.

In order to be in compliance with the relevant legislation and to minimize risk of possible injury or loss of life due to health and safety factors in the working environment, a strategy have to be finalized to ensure that training can commence as soon as possible.

## **REQUIRED STANDARDS FOR TRAINING**

In terms of the legislation the majority of employees involved in solid waste operations can be trained in-house, meaning that by law it is not required to have an accredited organization to train and certify staff.

In view of the above it is recommended that all staff except staff which operates lift or crane trucks or similar equipment, be trained in-house, the last mentioned operators need to be trained by an approved organization. (Approved means “approved by the Chief Inspector of the Department of Labour”)

## **IN-HOUSE TRAINING**

In-house training is a cost effective method but only if the trainers are adequately trained and equipped with the necessary knowledge, training material and information.

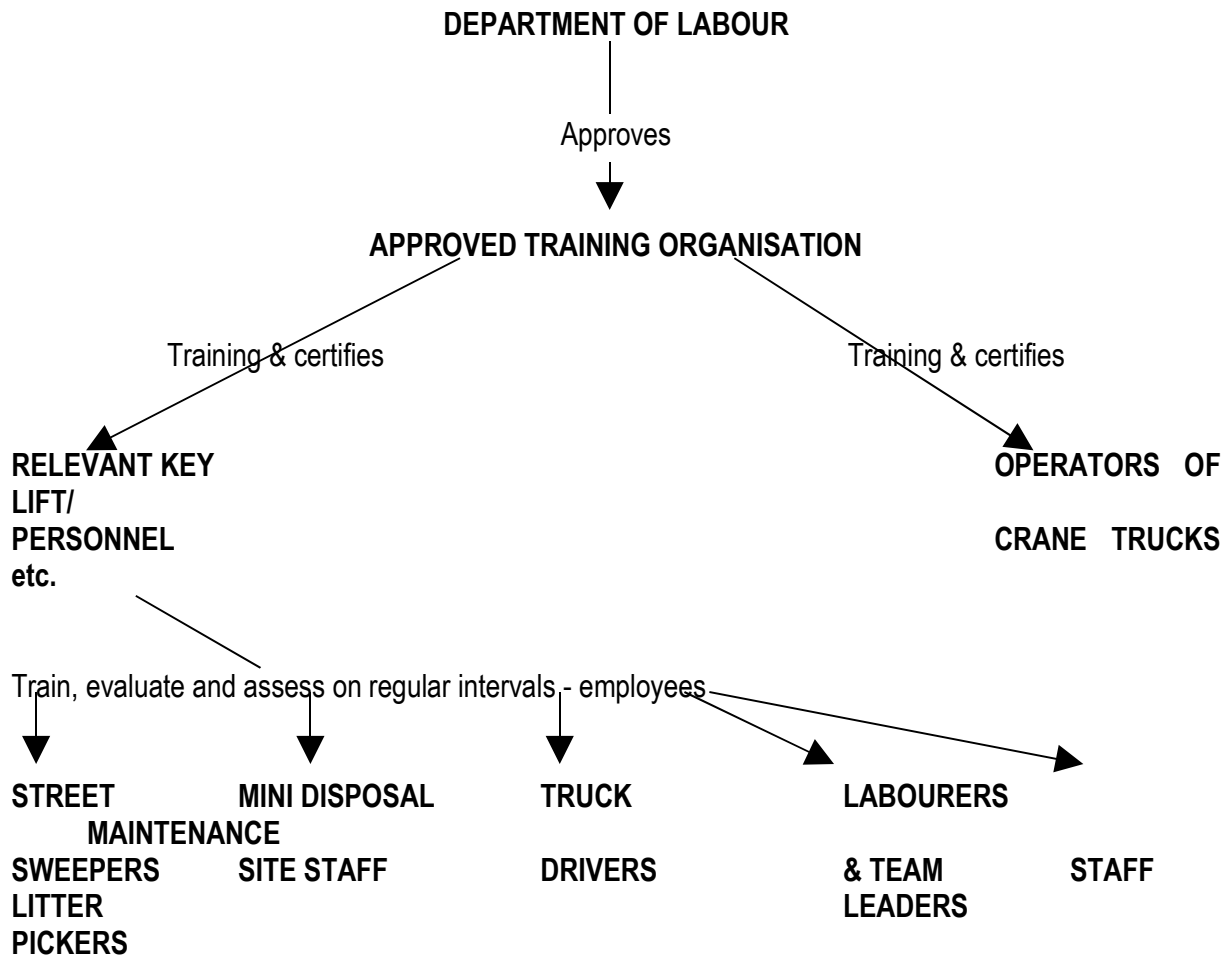
In order to develop such trainers it is recommended that all key personnel involved in training be trained by an approved organization. That key personnel who has been subjected to training use the exact training material and knowledge to train other employees in-house.

By following the abovementioned method of training, management will ensure that cost effective training which complies with all relevant legislation is offered and maintained.

## **TRAINING OF LIFT/CRANE TRUCK AND SIMILAR VEHICLE OPERATORS**

in terms of the Driven Machinery Regulations (Regulation 18 of 1985) all operators in the abovementioned category should be trained and certified by an approved training organization and therefore must be sent for such training and reassessments at regular intervals, e.g. every 12-24 months.

The following is a flow chart illustrating the recommended procedures for training of staff



## CONCLUSION

The Solid Waste Management Division needs to act responsible and swiftly to be in compliance with all relevant legislation and to ensure as far as reasonably practicable that the health and safety of all workers are protected.

## RECOMMENDATIONS

1. That all key personnel (Operations Officers) be subjected to training and certification by an approved organization.
2. That all lift/crane truck operators undergo training and certification by an approved organization.
3. That key personnel be used to train other employees against the exact same standards that they themselves have been trained to.
4. That all workers be reassessed at regular intervals.
5. That regular information sessions be held about the health and safety of employees.
6. That proper record be kept of all training and information assessments in case it is required in an enquiry by the Department of Labour or any other party concerned.

7. That all contractual staff, not in permanent service of the Council's Solid Waste Division be deployed only if sufficient proof of health and safety training with specific reference to the nature of the operations of the Solid Waste Division has been obtained from the employee, or any party concerned.
8. That the Solid Waste Division be authorised to create a vote number for health and safety training and that in terms of this strategy provision be made on the budget for purposes of such training as part of an ongoing concern.