

1 Section 17 – TRANSPORT

26 May 2006

ORGANISATION AND ARRANGEMENTS FOR THE IMPLEMENTATION OF THE WEST YORKSHIRE FIRE & RESCUE AUTHORITY'S HEALTH AND SAFETY AT WORK POLICY WITHIN THE CENTRAL WORKSHOP AND MOBILE WORKSHOPS AND FIRE STATIONS

Introduction

The purpose of this statement is to provide general guidance for standards and procedures to be adopted in the West Yorkshire Fire and Rescue Authority workshops. To ensure the health and safety of all personnel employed in the workshops all supervisory staff employed in such workshops must familiarise themselves with the information contained in this statement, to be read in conjunction with the Authority's Corporate Health and Safety Policy, and also with all other publications to which they are directed by the statement. Certain regulations mentioned herein apply only to safety matters. **The potential health hazards involved must be assessed and the appropriate precautions taken. Inline with the appropriate risk assessment.**

The term "workshop" is to include all premises (including mobile workshops and Fire Stations) where repair and maintenance is carried out.

Limitations of this statement

Any omissions from this statement as to detailed procedures for operations or the identification of specific hazards in no way absolves employees of their general responsibilities under Sections 7 and 8 of the Health and Safety at Work Act 1974 for the safety and welfare of colleagues, subordinates and lawful visitors to the sites and premises in connection with the maintenance and repair of vehicles, plant and other manufacturing processes.

Distribution of this statement

This statement is to be distributed to all staff in all workshops including: -

Transport & Logistics Manager	Workshop Chargehand
Workshop Manager	Body shop Chargehand
Body shop Manager	Transport Clerks
Fleet Controller	Mobile Chargehand
Mobile Vehicle Technicians	Painter/Body shop Technicians
Transport Assistant	Vehicle & Electrical Technicians

To be displayed on official notice board for inspection by all personnel in the workshops at the following location: -

Fire Service Headquarters - Central Workshop
Halifax Workshop
Central Stores

Responsibility for observance of Health and Safety Policy

The Transport & Logistics Manager is responsible for ensuring that the Authority's and department health and safety policies are implemented within the central workshop organisation.

The Workshop Manager/Bodyshop Manager are responsible for the detailed implementation within the workshop of the health and safety policies of which this statement is part and for ensuring that all supervisory staff carry out their duties and responsibilities on health and safety.

The Workshop Manager/Bodyshop Manager are responsible for organising work within the workshops in accordance with the health and safety policies of which this statement is part and for ensuring that all personnel under their control carry out their duties and responsibilities on health and safety.

The charge-hands will ensure that all personnel under their control observe the health and safety policies of which this statement is part.

All employees must take reasonable care for the health and safety of themselves and of other persons who may be affected by what they do or fail to do at work. (See Authority Corporate Health and Safety Policy) In summary these are as follows: -

The Transport Health and Safety Policy will be reviewed annually by Transport and Logistics Manager, Workshop Manager, Bodyshop Manager, and Health and Safety Department, and Workshops Health and Safety Representatives.

Employers Duties

Section 2 “It shall be the duty of every employer to ensure so far as is reasonably practicable, the health, safety & welfare of all his employees”.

Section 3 “It shall be the duty of every employer to conduct his undertaking in such a way as to ensure, so far as is reasonably practicable, that persons not in his employment, who may be affected, are not exposed to risk to their Health & Safety”.

Employees duties

Section 7 “it shall be the duty of every employee whilst at work: -

- (a) To ensure the Health & Safety of himself and other persons who may be affected by his acts or omissions at work and
- (b) Cooperate with his employer so far as is necessary to enable him to comply with all relevant statutory provisions.

Section 8 “No person shall intentionally or recklessly interfere with or misuse anything provided in the interest of Health & Safety Welfare in pursuance of any of the relevant statutory provisions”.

Protective clothing and safety equipment

Protective clothing and equipment will be provided, as necessary, for all personnel as identified by the appropriate risk assessment.

It is a requirement of Section 7 of the Health and Safety at Work Act 1974 that such clothing and equipment must be worn and used where there is any foreseeable risk of injury.

All personnel will therefore use protective clothing as and when required inline with the risk assessment.

General conduct of personnel

Horseplay of any kind is forbidden throughout the premises and surrounding areas, and running at any time is not allowed.

In workshops there are many areas where there is a high risk of fire. **Smoking must take place in designated areas only (as per the Brigade Smoking Policy).**

The Workshop Manager/Bodyshop Manager will be advised by the by the FP officer with regard to fire fighting equipment within the workshop. **In addition each item of such equipment will be checked monthly by a chargehand and a record of date and findings be kept by the Workshop Managers/Bodyshop Manager**

The Workshop Manager/Bodyshop Manager will ensure that all personnel are aware of the location of equipment, how to use such and the emergency procedure. An up to date roll call will be kept. In the event of the fire alarm actuating all personnel will walk outside to the road at the rear of the offices to the assembly point at the large gates outside MACC. The last person from each area closes the doors. A supervisor will check the nominal roll and report any absentees.

The fire alarm system, or part of it, will be tested weekly and a record kept in Part 6 of the General Register (Form 2057). The Caretaker is responsible for this task.

All spillages of oil, grease, water or any other substances should be treated and/or cleaned up immediately to prevent the risk of slipping.

Oil impregnated rags and sawdust can ignite spontaneously. To prevent this, oily rags must be kept in tightly lidded metal containers and sawdust must not be used for mopping up spilt oil.

Welfare and first aid facilities are provided for the benefit of all personnel and must not be misused or abused.

The standard of housekeeping should be such as to eliminate the risk of trips, slips and falls

The Health & Safety Folder that is kept in the workshop manager's office can be consulted for any Health & Safety Policy information.

General Hazards

The hazards in Workshops, which may give rise to an accident, are associated with:

1. The movement of vehicles and plant
2. Manual Handling Operations

3. The use of jacks
4. Lifting operations
5. Carbon monoxide fumes
6. Vehicle mobile column lifts
7. Welding and Cutting Operations
8. Steam cleaning and pressurised washers
9. Lathes, guillotines, drills, presses
10. Woodworking machinery
11. Abrasive wheels
12. Battery charging
13. Asbestos and fine dust particles from brake and clutch components
14. Paint spraying
15. Pressure greasing equipment
16. Electrical hazards
17. Liquefied petroleum gas and other flammable liquids
18. Inspection pits
19. Compressors and compressed air working
20. Inflation of tyres
21. Ladders
22. Industrial dermatitis
23. Hand tools
24. Work on vehicles with tipping bodies
25. Working platforms and storage areas
26. Noise and Vibration
27. Working at height
28. Use of Forklift
29. Road side repairs
30. Repairs on the fire ground
31. Working Outside
32. Chemicals and other substances
33. Trips, slips and falls

Risk assessments- A risk assessment is an examination of tasks performed in the workplace with potential to cause harm. The aim of the risk assessment is to

- Identify the significant hazards
- Decide who might be harmed and how
- Evaluate the risks and decide whether existing precautions are adequate or more should be done.
- Record the Findings
- Review the assessments and revise if it is deemed necessary.

Risk assessments are located with Workshop/ Bodyshop managers and are accessible for all staff for reference or use.

1. The movement of vehicles and plant

- a. The risk of an accident between vehicles and/or plant or between pedestrians and a vehicle can be reduced by effective control.

- b. On all entrances a large, easily read sign instructing all drivers to conform to a certain speed and where to report to should be exhibited.
- c. When vehicles are reversed within the workshop area assistance must always be given to ensure that collisions do not occur.
- d. All personnel must ensure that the supervisory staff is made aware of any dangerous incident to enable appropriate action to be taken to prevent further similar incidents.

2. Manual Handling Operations

- a. Many injuries are caused by incorrect methods of lifting. **All personnel should be reminded at regular intervals by chargehands.** In addition, illustrations of the correct manner of lifting should be displayed in appropriate places within the workshop. When heavy or awkward objects are to be lifted, mechanical devices should be used wherever appropriate.
- b. All workshop personnel will attend an appropriate Manual Handling course in line with the Manual Handling Operations 1992 as amended

3. The use of jacks

- a. All jacks in use must be marked with the safe working load. Only jacks of adequate lifting capacity appropriate to the item to be lifted should be used.
- b. Jacks will only be used to raise the item to enable adequate axle stands to be fixed under the item. No work will take place under the vehicle until such axle stands are correctly positioned.

4. Lifting operations

- a. All chains, ropes eyehooks must have the SWL (safe working load) plainly marked on it.
- b. No attempt should be made to lift a load with tackle, the SWL of which is less than the load to be lifted. Only competent personnel should operate lifting tackle.
- c. Chains, ropes and lifting gear must be thoroughly examined by a competent person (i.e. Insurance Company Engineer) at least every six months.

5. Carbon monoxide fumes

- a. Accidents due to gassing by carbon monoxide account for many cases of gassing in factory premises. Carbon monoxide is a gas having the same density as air and is present in the exhaust gases of petrol or diesel engines.
- b. Engines should not be run unnecessarily within workshops and adequate ventilation systems should be provided, to ensure that there is no build up of carbon monoxide fumes.
- c. If an engine has to be run in the workshop, the local exhaust ventilation system must be

connected before the engine is started.

- d. The exhaust filter unit must be connected to a vehicle before it is driven into or out of the workshop.

6. Vehicle mobile column lifts

- a. Accidents can occur due to improper operation of vehicle lifts.
- b. The safe working load of all lifts should be clearly indicated on them and all personnel should ensure that they are not overloaded.
- c. Vehicles placed on the lifts should have hand brakes in the off position and left out of gear.
- d. Lifts should be installed with switches that require constant pressure by the operator to raise and lower the hoists and with automatic stops or projecting flanges to prevent trapping of feet under the hoist.
- e. During the raising and lowering operations the operator must ensure that no tools etc are left under the hoists before lowering commences and that all other personnel are kept clear.
- f. Hoists are subject to Provision & Use of Work Equipment Regulations 1992 and LOLER.
- g. Lifts should be inspected before use and thoroughly examined at six monthly intervals and if these inspections or examinations reveal defects the lifts must be taken out of use until the defect is remedied.

7. Welding and Cutting Operations

As a safe working practice an assistant should be enlisted while welding or cutting operations take place, to watch for and make people aware of any hazards, such as fires, which can be caused by any of these operations.

Oxygen-acetylene welding and cutting

- a. Only competent personnel must undertake welding operations.
- b. Gas cylinders must be treated with care and not subjected to shocks, falls or extremes of temperature. In addition the following precautions must be observed:
- c. Cylinders must be secured by chains or bars in an upright position and always moved by means of a suitable trolley, which permits them to be secured.
- d. Oil, grease or other fatty substances should not be allowed to come into contact with gas cylinders. These substances will ignite violently when in contact with oxygen.
- e. Acetylene cylinders must never be stacked horizontally but should always be stored and used upright.

- f. Because oxygen enriches any combustible substance and causes it to burn much more fiercely than normal, it is important that such substances, unless they are required to be enriched, should be kept free from oxygen.
- g. Empty and full cylinders should always be stored separately and oxygen cylinders stored separately to acetylene cylinders. The storage area should always be away from the working area, in a well-ventilated area, and the cylinders protected from extremes of heat and cold. They should not be covered with tarpaulins or such like.
- h. Acetylene can form explosive compounds in contact with copper; silver and certain other metals or alloys. Such contact should be avoided and no metal containing more than 70% copper should be used.
- i. It is good practice to keep the valve key in position when cylinders are in use in order to be able to quickly turn off the supply in an emergency.
- j. Cylinders must always be fitted with appropriate regulators and flashback arrestors designed for the gas being used.
- k. Gas welding and cutting operations emit much heat and light requiring that the following types of protection are essential and must be used:

Protective clothing for the body.

The operator must wear a leather apron to afford body protection, leather spats to prevent hot particles from falling into boots or shoes and special welders' gauntlet gloves when the welding or cutting process warrants it.

Protection for the eyes and head

The operator should wear a cap to protect his head when welding or cutting above head height and gas welders' goggles to BS679 to protect the eyes from heat and light. Generally it is not necessary to wear a helmet as used in electric arc welding but these may be used if required.

TIG and MIG welding

Tig and Mig welding are safe operations when carried out under normal and correct workshop conditions.

The following precautions should be observed:

- a. All cables and connections should be sound.
- b. The earthing arrangements for the welding circuit should be properly made. A proper earthing clamp and bolted terminal should always be used.
- c. Two or more welding machines should not be connected to the same structure or where other portable electric tools are in use unless a competent person has supervised the earthing

arrangements.

- d. The operator should ensure that the working position is dry, secure and free from dangerous obstructions.
- e. The operator must ensure that the welding machine is set up correctly and the correct type of gas and welding wire used.
- f. Protective clothing should always be worn as described below.
- g. All electric welding operations must be carried out behind suitable opaque screens and suitable bold notices (**ELECTRIC WELDING IN PROGRESS**) conspicuously displayed.
- h. The welding arc gives off light and heat of high intensity and could produce toxic fumes, the following types of protection are essential and must be used:
 - i. The local ventilation system in the welding bay must be used.
 - j. The local exhaust ventilation system in the workshop must be used.
- k. Empty and full cylinders should always be stored separately and oxygen cylinders stored separately to acetylene cylinders. The storage area should always be away from the working area, in a well-ventilated area, and the cylinders protected from extremes of heat and cold. They should not be covered with tarpaulins or such like.

Protective clothing for the body

UVA radiation can cause burning to exposed skin. If extended periods of welding are planned, any exposed skin should be covered.

The operator must wear a leather apron to protect the body from the heat of the work and to prevent burns from globules of hot material. Where the nature of the work prevents the use of a leather apron, flameproof overalls should be worn.

In addition leather sleeves and spats may be necessary. A suitable cap is also important. Special welders' gauntlet gloves must always be worn.

Protection for the eyes and head

The operator should always use either a helmet or hand shield to BS679. The hand shield protects the head as well as the face but provides the least protection to the head. The helmet or hand shield must be fitted with the filters appropriate to the work being carried out.

Welding Plastics

- a. Always read carefully and follow the manufacturer instructions.
- b. The most important part in plastic welding is that it is only possible to weld like with like. Hence the need to identify the plastic material and select a matching welding rod.

- c. Don't change tools while hot.
- d. Whenever the hot air tool welder is in use the barrel becomes extremely hot. Do not touch the barrel and always rest the tool on its stand when not in use.
- e. Plastic welding can cause harmful fumes. Always use in a well-ventilated area, or use a local exhaust ventilation system.

Plasma Cutter

This Plasma cutter requires high voltages for arc spark starting. The following safety rules must be observed when using the unit.

- a. Do not touch live parts
- b. Insulate yourselves from pieces to be cut and from earth by wearing insulated gloves and clothing.
- c. Keep your clothing (gloves, shoes, hats, dresses) and body dry. Do not work in humid or wet areas.
- d. Avoid touching or holding by hand the piece to be cut.
- e. Always arrange for proper insulation against electric shock. Should you work close to or in a dangerous area use all possible precautions.
- f. If you feel even the slightest electric shock sensation, stop cutting at once. Do not use the machine until the problem is identified and solved.
- g. Always fit an automatic wall switch with adequate power, if possible close to the machine so as to immediately switch the machine off in an emergency event.
- h. Check often-main cable; torch cable, earth cable and torch.
- i. Never use the unit when one of the above is damaged. Replace immediately.
- j. Disconnect main cable from mains before replacing cables or before removing unit cover.
- k. Always switch the unit off or disconnect it before replacing nozzle, swirl ring, electrodes or nozzle holder.
- l. Do not use the unit with out protecting covers.
- m. Always replace any damaged parts of the unit, torch and cable with original materials.
- n. Never remove torch or unit safety devices.
- o. Make sure that the supply main line is equipped with an efficient earth plug.
- p. Make sure that the earth cable is connected to an efficient earth plug.
- q. Qualified personnel aware of the risks due to dangerous voltages necessary to make the unit work should only carry out any maintenance.
- r. Never screw nozzle holder to torch body without fitting consumables electrode, diffuser and nozzle.
- s. Ultraviolet radiation created by arc may damage your eyes and burn your skin.
- t. Cutting operations give off fumes and harmful metal dust, which may damage health.
- u. Do not work in areas without proper ventilation. Keep your head out of fumes
- v. In closed rooms use suitable exhaust extraction, place under the cutting area if possible.
- w. If ventilation is not enough, use-breathing sets approved for this procedure.
- x. Clean the material to be cut of solvents or halogen degreasers, which could give rise to toxic gases when cutting. Some chlorine solvents may decompose with radiation emitted by the arc and create phosgene gas.

- y. Do not cut plated materials or metals containing lead, graphite, cadmium, zinc, chrome, quicksilver, or beryllium unless you have a proper breathing set.
- z. The electric arc creates ozone. After long exposure to high concentrations of ozone you may have headache, nose, throat and eyes irritation as well as serious congestion and breast pains.

IMPORTANT: DO NOT USE OXYGEN FOR VENTILATION

Always be aware of the risk of **FIRE** due to sparks and hot metal pieces produced while using this equipment.

Protective clothing for the body

The operator must wear a leather apron to protect the body from the heat of the work and to prevent burns from globules of material. Where the nature of the work prevents the use of a leather apron, flameproof overalls should be worn.

In addition leather sleeves and spats may be necessary. A suitable cap is also important. Special welders' gauntlet gloves must always be worn.

Protection for the eyes and head

The operator should always use either a helmet or hand shield to BS679. The hand shield protects the head as well as the face but provides the least protection to the head. The helmet or hand shield must be fitted with the filters appropriate to the work being carried out.

8. Steam cleaning and pressure washers

- a. Problems can occur in these operations due to prolonged exposure of the operator to the sprays and, in the case of high-pressure washers, damage to the bodies of personnel.
- b. When appropriate, operators must wear protective waterproof clothing and, in particular, eye protection such as, goggles or visors. Any detergent used must be non-toxic and not be an eye-irritant substance.
- c. All filters must be regularly cleaned and safety valves checked daily to ensure proper operations.
- d. In the case of high-pressure washers, operators must ensure that no other personnel are in the vicinity of the operation and that the spray lance is fitted with a dead man's handle.

9. Lathes, guillotines, drills and presses

Lathes

Only operators who have been suitably trained can use the lathe.

- a. Every lathe must be provided with an effective guard or guards that must not be removed or adjusted during the operation of the machine. It should be realised that frequently a single guard will not suffice to adequately protect the operator.

- b. Starting and stopping controls must be conveniently placed to enable the operator to control the machine and to stop it readily from every normal working position. The controls should be so placed so that no part of the machine can inadvertently set in motion. The function of each control should be clearly indicated.
- c. There should be arrangements for applying and adjusting the coolant pipe in such a way that the operator is not exposed to the risk of coming into contact with the cutter.
- d. See subsequent sections on use of mineral oil.

Guillotines

- a. Every guillotine must be provided with an effective guard or guards that must not be removed or adjusted during the operation of the machine. It should be realised that front, back and throat guards are normally required.
- b. All flywheels, belts, pulleys, shafts and other parts, which might cause injury, should be completely guarded. Removable covers should be interlocked so that the machine cannot be operated under power if they are removed. Foot operated pedals should be covered to prevent accidental operation.

Drills

Careful supervision should be given to ensure that the necessary precautions are taken.

Drilling machines are the cause of frequent accidents due to:

- a. The seizure of hair by revolving spindles chucks and drills.
- b. Entanglement of gloves, sleeves, bandages and rings at the point of the drill.
- c. Violent spinning of the workpiece in the absence of arrangements for secure clamping.

All these accidents can be prevented by the following precautions to ensure safe operation:

- a. Effective guarding of the revolving parts.
- b. Adequate arrangements for secure clamping of the workpiece.
- c. Education of operators in the risks of entanglement.
- d. All loose items of clothing or anything that could become entangled with moving parts should be secured before proceeding with drilling.
- e. Chuck keys must always be removed from their sockets before setting the machine in motion. Safety chuck keys are available to prevent accidents due to chuck keys being ejected

at high speed.

Presses

Always follow the manufacturers instructions, posted on the equipment.

- a) Be sure that the press is located on firm level ground with adequate space and lighting.
- b) Before applying a load be sure that all press bed support pins are fully engaged and the hydraulic ram is fully located in the ram mount. Ensure also that the hydraulic hoses and couplings are completely sound.
- c) Before use **ALWAYS** ensure the work piece is secure and stable.
- d) Do not exceed the rated capacity.
- e) Only competent people (unless under supervision) are allowed to use this equipment.
- f) Do not allow anyone to work directly in front of the machine when it is in use.
- g) Raise saddle to a convenient height.
- h) Be sure the saddle rests on the pins and not the wires.
- i) Lower ram to job carefully.
- j) Ensure the ram is aligned correctly (square and level).
- k) Operate the pump slowly using a smooth action.
- l) Lubricate all moving parts frequently.

10. Woodworking machines

ONLY TRAINED, NOMINATED AND NAMED PERSONS CAN OPERATE WOODWORKING MACHINERY.

ANY PERSON WITHIN THE BODY SHOP MUST BE WARNED BEFORE ANY WOODWORKING MACHINERY IS TURNED ON AND EAR PROTECTION MUST BE USED BY EVERYONE IN THE BODYSHOP BEFORE OPERATING THE WOODWORK MACHINERY.

Frequent accidents are caused by carelessness, failure to use the guards or to adjust guards correctly. PUWER must be strictly adhered to.

Appropriate PPE must be used when operating the woodworking machinery.

The local extraction system must be used when operating the woodworking machinery.

In order to eliminate accidents with woodworking machines the following points must be observed:

- a. All guards must be in place and correctly adjusted for the piece to be worked.
- b. No machine shall be started unless a guard is in place.
- c. The safe operation of woodworking machines requires constant alertness and close attention to the work in hand by all operators.

- d. All operators must ensure that cutters are resharpened as necessary to ensure they operate efficiently and smoothly.
- e. No guards should be adjusted when the machine is in motion.
- f. Whenever possible appliances such as jigs and holders, push sticks etc should be provided and used so that the operator's hands can be kept as far as possible from the cutting edges.
- g. Whenever possible guards must be rigidly fixed to the machine and be capable of adjustment to suit workpieces of different sizes.
- h. It is preferable that the guards are capable of adjustment by means of wing nuts, hand wheels and handles, which do not require the use of tools.
- i. The machine and work area must be kept clean and tidy and sawdust etc frequently cleared from the machine.
- j. All machines with detachable cutters must be checked to ensure that the securing nuts or set bolts are properly tightened. The machine must be inspected to ensure that threads on nuts and bolts are not distorted and any defect immediately reported and the machine not used, until a competent person remedies the defect.

Circular saws must be safeguarded in three ways:

Circular saws must never be operated with blade diameter less than 6 tenths of the diameter of the largest blade for which the machine is designed. Notices showing the minimum diameter of saw blade to be used must be fixed to every saw bench.

- a. Guards for the part below the bench.
- b. A riving knife at the back of the saw above the bench.
- c. A guard for the crown and the front of the saw must be set as close to the work piece as possible.

11. Abrasive wheels

The following are the main operating precautions, which must be taken:

- a. Accidents with abrasive wheels are usually associated with wheel breakages and personnel coming into contact with running wheels.
- b. PUWER must be adhered to.
- c. Wheels more than 55mm in diameter must be marked with a maximum running speed in revolutions per minute. For variable speed machines minimum and maximum spindle speeds must be displayed.
- d. When wheels 55mm or less in diameter are used, a notice must be displayed specifying the

maker's recommended running speeds in revolutions per minute for each type of wheel.

- e. For mounted wheels and points, maximum overhang must be shown.
- f. Abrasive wheels must only be fitted by a trained operator, appointed in writing, whose appointment is duly recorded in the Workshop register (and kept up to date).
- g. An approved notice must be displayed setting out the precautions to be observed when abrasive wheels are in operation.
- h. A proper guard must be kept in position whenever an abrasive wheel is being used. Where it is necessary to use a wheel with an exposed arc of more than 180E, the wheel should be tapered and fitted with protection flanges.
- i. Only trained operators should use abrasive wheels.
- j. The floors and area surrounding fixed machines should be maintained in a good condition and free from obstruction. Splashguards should be used when appropriate to prevent the floor becoming slippery.
- k. Only competent operators, as defined, and appointed, must mount abrasive wheels.
- l. The maximum operating speed must never be exceeded.
- m. The wheel guard must always be in position and properly adjusted before a wheel is run.
- n. Work rests must be kept adjusted as close as possible to the wheel. Lack of compensation for wheel wear is the chief reason for bad work rest adjustment; all work rests must be inspected and adjusted at frequent intervals.
- o. Grinding on the sides of straight-sided wheels is dangerous, particularly when they are appreciably worn or when sudden pressure is applied.
- p. Wheels used for off-hand grinding should be frequently trued to eliminate out of balance conditions and to enable the work rest to be adjusted close the wheel.
- q. Spindles must not be allowed to become overheated, because of lack of lubrication.

Supervisors must carry out frequent checks to ensure that the foregoing safety precautions are being observed.

12. Battery charging

- a. Accidents during battery charging are usually associated with acid spillage or explosions.
- b. Charging must only take place in well-ventilated areas and kept well away from sources of ignition. Suitable notices must be displayed.
- c. When handling lead acid batteries, suitable personal protective equipment, such as overalls,

gloves and eye protection, must be used if there is a risk of acid coming into contact with bare skin and eyes.

- d. Where possible when charging lead acid batteries, remove from vehicle and place on charging bench and use extractor fan.
- e. A supply of water must be readily available for instant washing off of any splashes.

13. **Asbestos and fine dust particles (as found on brake lining and clutch drive plates)**

- a. Asbestos is a substance, which, if inhaled in sufficient quantity, can cause cancer of varying types.
- b. A type 3 asbestos survey has been carried out in the transport department areas. The result of which is kept at the PMU.
- c. Asbestos was present in brake linings and clutch pads.
- d. When work is being carried out on cleaning brake drums or clutch assemblies requiring the removal of dirt etc, **portable hand extractor units must be used to remove the resultant dust etc**. The material removed by this process must be transferred in a sealed bag and stored awaiting disposal in receptacles outside the normal workshop area.

14. **Paint spraying**

Respirators must be used with weekly checks carried out and logged in the record book.

- a. Accidents during paint spraying operations can be caused due to fire risk. Some paints exert harmful effects, through inhalation, skin absorption and ingestion.
- b. Employees should avoid skin contact with paint and thinners and gloves **MUST** be worn (Nitrile offer best protection).
- c. Paint spraying should only take place in a properly constructed, well-ventilated workshop specially designated as a paint spraying area. It is essential to ensure that the extraction equipment is working properly and defects should be reported immediately to the supervisor/manager. The Local Exhaust Ventilation (LEV) will be visually examined before use and specific testing carried out in accordance with COSHH regulations (every 14 months). The minimum amount of inflammable paint must be stored within the paint spraying area and must be kept in a sealed metal container (not exceeding 50 L of highly flammable liquid in the paint shop store).

Safety Data sheets-Under the COSHH regulations there are a range of substances regarded as hazardous to health. Substances or mixtures of substances classified as dangerous to health under the chemicals (Hazard information and packaging for) supply regulations 2002 (or C H I P). These can be identified by their warning label and suppliers must supply a safety data sheet for them. Safety data sheets are located within the Workshop/ Bodyshop managers office and are accessible for all staff for reference and use.

- d. All personnel during paint spraying operations must wear protective clothing and appropriate air-fed facemasks.

15. Pressure greasing equipment

- a. Accidents can occur due to misuse of the equipment and also slipping in the area of use.
- b. All pressure greasing equipment must be regularly inspected to ensure security of fittings, that hoses are not worn, filters are functioning correctly and safety valves correctly operating.
- c. The correct adapters must always be used for the operation in hand and any spillage's immediately treated or cleaned up.

16. Electrical hazards

- a. Electrical hazards are different from other types found in the workshop because the human senses provide no advance warning. It is extremely important therefore that safety precautions are observed, particularly relating to supply voltages.
- b. The following voltages should be used:

Portable hand held lighting - the voltage should be reduced as low as possible.

Portable electric hand tools - the voltage should be 110 volts or battery powered.

Fixed electrical equipment - the mains supply voltage (240 volts) with Safety RCD sockets.

- c. Portable electric hand tools must be double insulated or must be effectively earthed. **Trailing power and other leads are not desirable.** They should be suspended out of harms way above head height to prevent possible injury to people tripping over them.
- d. Before new electric tools are put into use all personnel who may use the tools must be instructed in its use and capabilities. Only competent personnel should adjust or repair electrical tools.
- e. Electric tools must never be switched on or off under load; they must always be let run freely before applying them to the work and free from the work before switching off. They must not be used where there is a risk of concentration of liquefied petroleum gas or other inflammable gases, which may possibly ignite from a spark.
- f. **All leads plugs and tools must be visually inspected before being used to ensure safety.** Inspection and testing will be carried out on 110v and 240v portable electrical equipment annually.

17. Liquefied petroleum gases and other flammable liquids

Liquefied Petroleum Gas (LPG)

- a. The main risks of accidents with LPG are of fire and explosions.
- b. All LPG cylinders must be stored in the designated storage area and NO SMOKING signs

exhibited and observed. Full containers must always be stored separately from empty containers. The cylinders must always be stored in an upright position and, if being transported should be adequately secured to prevent movement.

- c. Cylinders, valves, connections, piping and hoses should be regularly inspected for leakage. Detection for leakage should be by:
 - I. Sense of smell.
 - II. Sense of touch - a leaking cylinder may be colder than others surrounding it.
 - III. Listening for escaping gas.
 - IV. Looking for localised condensation or frosting.
- d. Leaks should be confirmed by brushing with soapy water over the suspected area. If leakage is discovered on a cylinder and cannot be stopped, the cylinder should be removed as quickly as possible to an open space and management notified immediately.
- e. All cylinders must be handled with care and respect and must not be dropped either full or empty.
- f. Flexible tubing is only recommended for final connection to appliances and should be protected or steel braided wherever they might be subjected to damage by abrasion. They should always be sited so that they are not exposed to excessive heat.

The operator of LPG equipment must:

- a. Check that burners and containers have sufficient ventilation.
- b. See that the burners are protected from draughts, which might extinguish the flame.
- c. Remove all combustible material from within 1 metre of the burner.
- d. Ensure that all equipment is matched and in good condition and that abrasion or heat from the burner cannot damage piping or tubing.
- e. Ensure that the tubing or hose is firmly held in place.
- f. Check that the equipment is clean and that the jets are clear.
- g. Check that the appropriate regulator is in use.
- h. Check that the controls operate easily and that the cylinder is positioned so that, in the case of fire, access to the valve remains clear.
- i. Operate equipment only in accordance with the manufacturers' and the suppliers' instructions.

Flammable Liquids

The main risks are due to fire and explosion.

Petrol, acetone, methylated spirit, some paints and other volatile liquids with flash points below 55EC should be stored within the designated storage area.

Minimum quantities for the work in hand should be always be moved in securely capped cans or steel drums on which the contents are clearly marked and stored in robust metal lockers. Where these liquids are used the lighting should be flameproof. No other materials should be stored with flammable liquids.

In handling, the following precautions must be observed:

- a. Transportation should always be in sealed metal containers, either the original container or specially designated containers, clearly marked with the contents. A sign must be placed on any transportation vehicle to indicate the contents contain flammable liquids.
- b. Transfer operations should be carried out with funnels and there should be no naked flame within 6 metres of the operations.
- c. Screw tops and stoppers should be replaced immediately.
- d. Drums for use must be fitted with taps and provided with drip trays.
- e. Drums not in use must be stored on end.
- f. Empty containers should be returned to the storage area.

18. Inspection pits

- a. Accidents are mainly caused by personnel falling into pits, dangerous fumes within the pits and tools falling on personnel in pits.
- b. All inspection pits must be adequately fenced or covered when not in use. An adequate means of entering or leaving an inspection pit must always be provided and used. If the means of access or egress is a ladder then the ladder must conform to the standards in the following paragraph.
- c. When first entering a pit, care should be taken to ensure that there are no dangerous fumes within the pit and all personnel must enter slowly and with care. In cases of doubt, personnel should consult the supervisor.
- d. Suitable head protection (PPE) should be worn as mentioned by any risk assessments.
- e. Care should be taken with tools to see that they are properly stored when not in use to prevent them falling. All pits must be regularly cleaned out and any spillage's immediately treated or cleaned up.

19. Compressors and compressed air tools

Compressed air is delivered at high pressure and can cause serious injury if jets are allowed to come into contact with the body. Even low pressures 1 to 1.5 bar have been known to cause serious injuries.

Compressors

All air receivers on compressors must have:

- a. The safe working pressure (SWP) plainly marked on it.
- b. A suitable and easily readable pressure gauge.
- c. A suitable safety valve to permit escape of air if the SWP is exceeded.
- d. Under the Pressure Systems and Transportable Gas Containers Regulations 1989 a written scheme of examination will be prepared for each receiver and be examined by a competent person under those regulations.
- e. A thorough examination by an Insurance Company Engineer must be carried out at least once in every 26 months and the report of these inspections must be kept for reference.
- f. No person shall tamper with escape valves or any other part of the compressor. Any defect must be reported immediately to the supervisor. Filters must be cleaned regularly.

Compressed Air Tools

- a. All compressed air hoses must be the right size for the tool in use. The length of hose must be kept as short as possible and it should be kept clear of corrosive materials and protected from passing traffic, both pedestrian and vehicular. All connections must be properly clamped to ensure that loose connections do not occur. Loose connections can cause the hose to whip and result in personal injury. Hoses and connectors should be regularly checked for defects.
- b. Tools require clean air and proper lubrication. Every airline should have an efficient filter and lubricator and these must be regularly checked.
- c. If a fault develops in a tool, the operator must turn off or disconnect the air supply before investigating the fault.
- d. Protective clothing in the form of gloves, aprons etc should be worn as necessary. Suitable eye protection must be worn

20. Inflation of tyres etc

During the re-inflation of tyres, following replacement, accidents can happen with flying rims;

not commonly used now. Safety precaution recommended by the manufacturers (on training courses) must be followed.

21. Ladders

Because ladders are taken for granted they are the cause of many accidents.

Where ladders are used to gain access to platforms, storage areas etc. the following safeguards must be taken:

- a. The ladder must be safe, the rounds should be secure and none missing. The feet should not be split or frayed.
- b. It should be placed at the safest angle, about 70° (one third of the working height).
- c. If used to gain access to a platform it should extend 1 metre above the stepping-off point.
- d. When climbing or descending ladders the safe practice should be to grasp the rounds and not the strings.
- e. Ladders should be visually inspected prior to use
- f. A fully trained competent person should check the ladders annually, any defects noted and if serious, repaired before the ladder is used again.

22. Industrial dermatitis

Industrial dermatitis is one of the principal causes of disablement from industrial disease. The substances, which have been proved to cause dermatitis, and are widely used in workshops, are described below.

Mineral Oil

Any type of mineral oil, including diesel and other fuel oils can give rise to skin irritation and the amount and duration of exposure determines the resultant effect.

Chemicals

Chemicals likely to cause dermatitis include alkalis, synthetic resins, certain rubber accelerators and friction from glass fibre.

Solvents and Degreasers

Thinners, petroleum products and similar solvents and degreasers can produce dermatitis by dissolving the natural grease from the skin. They also render the skin more liable to damage by other substances.

Precautions to avoid Dermatitis

Substances used by Authority personnel are assessed under the COSHH Regulations (2005) and information regarding these substances is available to personnel.

- a. Good housekeeping in the workshop area and cleanliness of workbenches and equipment is an important factor in reducing the hazard. These items must receive attention by all personnel.
- b. All personnel as necessary must use barrier creams, and all contaminated skin should be cleansed with skin cleansers or soap and water. Care must be taken that coarse abrasives are not used which might damage the skin and start dermatitis.
- c. Protective gloves should be worn.
- d. Medical attention should be obtained at the first sign of a skin related problem.

23. Hand Tools

Some tools in the department generate both noise and vibration, which if not effectively managed can lead to adverse health effects.

Hand tools by themselves are incapable of causing accidents. Therefore accidents with them must arise through human failing.

The following rules must apply:

- a. The correct tool must be used for the work in hand.
- b. Tools must be maintained in good condition and stored properly.
- c. Any defective tool must not be used, but replaced.
- d. All tools should be regularly cleaned off and moving and adjustable parts lightly oiled to prevent wear and misalignment.
- e. Cutting edges should be kept sharp and sharpened in a correct manner.
- f. Tools should be stored at all times in a correct manner to avoid danger of damage and also danger of tripping by other personnel.
- g. Metal tools conduct electricity. Where work is taking place on or near electrical apparatus insulated tools must be used.
- h. Care must be taken near combustible or flammable liquids; sparks from tools can cause fire or explosion.

24. Work on vehicles with tipping bodies

Accidents have occurred due to personnel being trapped between the chassis and the tipping

body. No work under raised vehicle bodies shall take place until the body is propped by means of the purpose made prop. The purpose made prop must be placed in a suitable position to prevent accidental displacement and the weight of the body taken firmly on the prop before work under the body commences.

25. Working platforms and storage areas

- a. Accidents can occur due to falls of personnel or materials and tools from working platforms.
- b. Every working platform or storage area from which a person could fall will be provided with rigid guardrails, to a height of 0.94 to 1.143m (3'0" to 3'9") high and toe boards or barriers at least 0.152m (6") high. The space between the top of the toe board and the guardrail, must not be more than 0.76m (2'6"), otherwise an intermediate guardrail will be necessary.

26. Noise and Vibration

- a. Workshops practice is to monitor, with the assistance of Occupational Health & Safety department, the levels of noise and vibration within the Workshop/Body-shop areas, with the intention to keep exposure to such hazards to a safe limit.
- b. Ear protectors must be worn in the body shop when any of the woodworking machinery is in use.

27. Working at Height

Accidents can occur when working from any height. Care should be taken to use suitable safe means of accessing heights and where the risk assessment dictates, a safety harness should be used and anchored to a safe load bearing fixed point. For minor repairs ladders and stepladders can be used to access work at height but a working access platform should be used for repairs of a more major nature.

28. Use Of Fork Lift Truck

- a. The forklift truck can only be driven or operated by some who is trained and has passed a suitable test.
- b. A list of certified drivers/operators is kept in the workshop office.
- c. Drivers/operators must attend and pass a refresher-training course at the prescribed intervals.
- d. The fork truck in conjunction with the dedicated access platform to safely carry out repairs at height. When using this method to work at height, the area below the access platform should be cordoned off (hazardous area below platform as tools or equipment could be dropped)
- e. When using the fork truck access platform if the work involves reaching outside the platform area, a safety harness must be used and anchored to one of the dedicated point inside the access platform.

29. Roadside Repairs

It is the intention to have all vehicles which have broken down at the side of the road recovered to workshops, by outside contractors, were it is less hazardous to carry out repairs. In the event that a repair has to be carried out at the side of the road, the following precautions must be taken.

- a. Always wear reflective clothing that has been provided.
- b. If possible use warning signs light or cones, as appropriate, (from appliances) to warn oncoming traffic.
- c. Try to work on the side of the vehicle that is furthest away from oncoming traffic.
- d. Arrange to have an appliance parked in a way that it will provide protection from oncoming traffic (fend-off) on busy roads or traffic lanes (especially Motorways).
- e. Keep work to a minimum, just enough to make the vehicle mobile, to enable it to be moved to a safer location.

30. Repairs on the Fire Ground.

It is the intention to have all vehicles which have broken down at the fire ground, recovered to workshops, by outside contractors, were it is less hazardous to carry out repairs. In the event that a repair has to be carried out at the fire ground, the following precautions must be taken.

- a. Report to the officer in charge of the incident.
- b. Always wear any PPE supplied or what the OIC supplies.
- c. If the defective vehicle is in close proximity to the incident, ask the OIC if a Risk Assessment has been carried out to determine if it is safe to work on the vehicle at this time.
- d. If in doubt consult with the OIC
- e. If you are still concerned about the hazards involved, contact either the Workshop manager or the Body-shop manager or a suitable workshop/body-shop supervisor.

31. Working Outside

Repairs to vehicles that are parked outside should be avoided if prevailing weather conditions make the task hazardous. Care should be taken when working in extremes of weather conditions such as cold, wet or freezing. Appropriate PPE to suit the weather conditions must be used. If necessary take regular breaks in cold weather to enable you to go inside and get warm. In hot sunny weather take breaks to re-hydrate yourself with water from the dispensers. If necessary wait for the weather to improve or until there is room undercover to carry out the repairs.

32. Chemicals and Other Substances.

Chemicals come in a vast arrange of products and containers. Always check the manufacturers instructions on the label before use. If in doubt check the safe systems of work that are kept in a filling cabinet outside the workshops office door or consult the COSHH records, which are kept in the workshops office.

33 Slips Trips and Falls.

The working environment in the workshops (body-shop) is classed as hazardous, due to the nature of the work carried out, there tends to be equipment, tools and parts of vehicles left on the workshops floor (trip hazard), access panels bonnet and grills open at head height and raised

vehicles (bump and impact), water, oil and grease can be spilt onto the floor (slips), although it is normal practice to clean such spillages straight away. There are also hazards caused by power cables and hoses stretched across the working area.

Reporting Accidents, Near Misses and Dangerous Occurrences.

All accidents should be reported immediately to the workshop or body shop manager (or chargehands if the managers are not available). Near misses and dangerous occurrences should also be reported; this will prompt an investigation into the occurrence that will enable us to take steps to reduce the risk of a reoccurrence.

PPE Personnel Protective Equipment.

- a. All staff has a duty to report any defective PPE.
- b. All staff must make available any PPE when requested for inspection and every 6 months for the health and safety checks.
- c. All staff must use their PPE when conditions require it.

First Aid Policy

First Aid notices are posted around the workshops.

A copy of the brigade First Aid policy is kept in the filing cabinet outside the workshops office door, with the risk assessments and safe systems of work, and in the workshops Health & Safety Folder that is kept in the workshop manager's office.

There should always be someone available to administer first aid within the workshop area, if not

Phone 4004 and give the nature and location of the emergency.

Emergency Evacuation Procedure

Emergency Evacuation Procedure notices are posted around the workshops.

- a. On discovering a fire.
 - I. Raise the alarm
 - II. Ring the Mobilising centre on 4004 and inform them of the fire.
 - III. Do not attack the fire unless your escape route is safe.
 - IV. Leave the building and assemble at the large gate to control car park.
 - V. Wait for the responding fire crew to arrive.
 - VI. On arrival inform the fire crew of the location of the fire and whether all persons are accounted for.
- b. On hearing the fire alarm (ringing bell and flashing red lights).
 - I. Leave the building and assemble at the large gate to control car park.
 - II. Wait to be accounted for.

YOUNG PERSONS (AGED UNDER 18)

It is a department policy that operators of the following items of equipment must be over 18 years of age:

Cranes and other lifting appliances.
Winches
Woodworking Equipment
Large Goods Vehicles

Young persons under 18 years of age must not operate the above equipment unless they are under a course of training and under the direct supervision of a person to operate the particular item.

As required by the Management of Health and Safety at Work Regulations 1999 and The Health & Safety (Young Persons) Regulations 1997, risk assessment of activities to be undertaken by 'young persons' will be carried out, prior to their employment.

EMERGENCY PROCEDURES

It is not possible to make a definitive list of emergencies which are likely to arise in a workshop, however it is possible to identify probable occurrences of which emergencies are likely to arise. These may be listed as:

- a. Fire and explosions
- b. Bomb warnings

The Transport and Logistics Manager shall ensure that the managers prepare written emergency procedures for the workshop in line with Management of Health and Safety at Work Regulations 1992 Regulation 7. The procedures must include instructions on the actions to be taken by personnel in the event of any emergency and shall incorporate:

The telephone number of the emergency services: 4004 or 999

The name and telephone number of the TLM who shall be immediately notified (Mr P Coughlan ext 5714)

The measures to be taken by personnel to ensure their safety and that of there Colleagues.

The assembly stations (At the large gate to Control car park) in any evacuation procedures.

Fire and Explosives

An annual workshops premises Fire Safety Risk Assessment will be carried out by the Workshop/ Bodyshop manager. The purpose of this assessment is to determine the risk from fire

to persons in the Workshops premises and to identify the General Fire Precautions necessary to comply with the Regulatory Reform Order (Fire Safety) 2005.

Bi Annually a Fire Safety Officer will be requested to perform a Fire Safety Risk assessment and report on the findings and confirm that the Fire Safety Procedures and fire fighting equipment are suitable and sufficient for the Department.

First Aid.

There is an official Brigade First Aid Policy, a copy of which can be found in the workshops office or the health and safety filing cabinet in the main workshops.

Technical Services is classes as a high to medium risk area. High risk for workshops from the engineering tasks and medium risk for other areas.

PROTECTION OF VISITORS TO WORKSHOPS

All visitors must sign the Workshops Contractors health and safety record book (form 856) before entering the workshops, unless a suitably competent person is escorting them.

Notices will be exhibited at the entrances to the workshop instructing drivers and other visitors where to report upon their arrival.

Supervisors will ensure no unauthorised visitors are on the workshop floor unless accompanied by the Technical Services Manager or Workshop Managers.

Brigade personnel must report to the workshop office, on arrival. They are not permitted to enter the workshops without prior approval and must conform to all warning notices and signs. Protective clothing and equipment will be worn as necessary.

Only authorised visitors will be permitted to enter workshops.

The hazards of the workshops must be identified to all visitors and the visitors shall be provided with protective clothing, safety equipment and the appropriate information instruction training and supervision as necessary.

Any person who claims to be an Inspector shall be required to produce proof of identity before being admitted to any premises.

SAFETY TRAINING

The Transport and Logistics Manager, with the assistance of managers and chargehands, will be responsible for the identification of training needs. The requirements will be notified to the TLM who will arrange for appropriate training, either in-house or external courses as necessary.

All transport personnel must familiarise themselves with the whole of the Safety Policy document.

SUMMARY

The successful implementation of this policy requires the total commitment of management and employees at all levels. Full details of the organisation and arrangements for health and safety are set out in separate sections of the Transport Health and Safety policy document. This policy will be regularly monitored and revised when required to ensure that the objectives are achieved. It will be reviewed annually and updated in the light of legislative or organisational changes.

SIGNED ...P. Coughlan.....

PositionTLM

DATE20/03/07.....