



GUIDE TO INDUSTRIAL HOUSEKEEPING

Every year countless fires start when waste materials are ignited by smoking materials, hot surfaces, electrical arcs, short circuits, smoking materials and mechanical sparks. Not only is industrial waste the most common material first ignited, but it provides fuel for the fire to spread rapidly. Seldom, if ever, are fire brigades called upon to attend major fires involving premises which have a high standard of housekeeping. Yet the advantages of good housekeeping are too often overlooked.

Why good housekeeping?

A good housekeeping programme will:

- Considerably reduce the possibility of a fire starting
- Prevent rapid spread of a fire and therefore reduce property losses
- Ensure that exits and fire escape routes remain clear and so reduce life losses
- improve accessibility of fire-fighting equipment to facilitate its maintenance and use in an emergency
- bolster productivity through improving staff morale since nobody enjoys working in a dirty or untidy environment

Define responsibilities

Since the importance of housekeeping and effective waste control has been stressed, with whom does the responsibility lie? Clearly - with management.

Managers decide that good housekeeping will form an integral part of working procedures, and the decision must be conveyed to all employees first in writing, then followed up on bulletin boards, in newsletters or during face-to-face meetings. Every employee must feel involved and be committed to the cause.

However, storage and working areas change, staff change and unless the housekeeping programme is constantly monitored, it could soon deteriorate. Key personnel are assigned to be responsible. Delegate these responsibilities in writing – if not written down, they will be easily forgotten.

Whilst fire and safety personnel are intimately involved in the housekeeping programme, supervisors and foremen should be made responsible for the standard of housekeeping in their area of jurisdiction. If necessary, advertise the fact, with signage, using names if necessary, that proclaims responsibility for housekeeping.

Signage designating responsibilities for housekeeping in each area are most effective

Housekeeping guidelines

Three factors can be identified as being paramount if the general standard of housekeeping is to be upgraded and maintained.

1. *Layout of equipment and production flow*

Ensure wherever possible that sufficient work space is provided. Working areas need to be demarcated, preferably with lines painted on the floor to show where goods may or may not be stored. Adequate space should be provided for operators, equipment and work-pieces within these areas.

2. *Handling and storage facilities*

Experience will dictate how much space is required for temporary storage of raw materials and finished goods at each place of work. Always aim to keep these to the absolute minimum, particularly where they are of a combustible nature. This will reduce the fire loading within the manufacturing area where most ignition sources are present.

Strict control of flammable liquids should be exercised and these should be issued to operators only in quantities sufficient for single production runs or shifts and even then safety containers and/or flammable liquid cabinets need to be provided.

It would be most useful to detail an employee to collect finished products for return to the finished goods area and to draw and supply raw materials from the stores as and when required. This leaves the machine operators free to supervise uninterrupted manufacturing runs.

3. *Clean and tidy premises*

Each operator should be made responsible for tidiness in his/her own work place. As they clean up swarf, cuttings, fluff, dust, overspray, shavings, etc it can be placed in non-combustible receptacles for removal by cleaning staff. Always appreciate that loose, thin and finely divided materials ignite readily.

Floor markings demarcate travel and stacking areas and ensure that fire equipment remains accessible.

General Guidelines

The following guidelines should be followed to maintain the efficacy of a formal housekeeping programme.

Cleaning materials

Use only non-flammable cleaning solvents and waxes wherever possible. Stipulate suitable materials and monitor what is used. Frequently, highly flammable materials are found in working areas simply because they are readily available or slightly cheaper. Avoid using sawdust to absorb oils or hydraulic fluids – there are other alternatives.

Dust and fluff

Production processes and product handling frequently generate dusts and fluff which accumulates on machinery, structural elements, pipes and ledges. Regular cleaning is necessary to prevent unsightly and dangerous accumulations which become expensive and difficult to remove.

Sometimes ineffective or leaking extraction systems compound the problem so dust handling equipment needs regular checking. Cleaning should be effected through using industrial vacuum cleaners and not by blowing dust away with compressed air.

Waste disposal

The golden rules for waste disposal are based on common sense. Remember first that waste accumulations are never necessary in manufacturing areas. Get rid of it as soon as possible. Large accumulations must be prevented – irrespective of manpower shortage excuses. Small accumulations should be collected regularly and placed in non-combustible refuse receptacles pending removal.

Second, clean up after every shift. Make this a routine and third, appreciate that waste or dirty flammable liquids are just as hazardous as clean liquids. Liquids/solvents must receive priority attention during removal. If all the liquids are not used up in the process have them returned to the flammable store or pre-designated waste liquid magazine immediately.

Too often excess liquids are used for cleaning machinery and overalls and waste liquids are dumped down drains! Remember too that when flammable liquids and people share the same environment, accidents can happen. Provide suitable absorbent materials on-site for mopping-up spillages.

Smoking

One of the leading causes of fires in South Africa, smoking materials frequently ignite combustibles where housekeeping is poor. It is therefore important to provide safe smoking areas for workers when smoking cannot be permitted at the work place. If this is not possible, provide for smoke breaks, otherwise workers may smoke regardless of the hazard.

Exterior Housekeeping

Many major fires have occurred because fires spread into a building via accumulations of combustibles. Housekeeping should be as good outside buildings as it is indoors. Waste removed from the work place should be dumped in a safe place and not against walls or below windows where smoking materials are often thrown. Pallet storages, raw materials and the like should be kept away from buildings in vegetation free areas.

Conclusion

It is clear that good housekeeping plays an important role in eliminating unwanted fires and reducing losses. Now is the time to establish a formal housekeeping standard. Market the concept amongst all employees as aggressively as products are marketed to the public. Define responsibilities, monitor progress and arrange good housekeeping competitions amongst departments. Make good housekeeping a way of life.

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