ILO TOOLKIT CONTROL SHEET 206

CONTROL APPROACH 2
ENGINEERING CONTROL

SACK EMPTYING

SCOPE

This control sheet is part of the ILO Chemical Control Toolkit. It should be used when the toolkit identifies that your chemical(s) and task(s) incorporate sack or bag emptying and control approach 2 is called for. The sheet gives good practice advice on emptying sacks and bags. It can be applied to tasks involving medium quantities or solids. The key points you need to follow to help reduce exposure to an adequate level are described. It is important that all the points are followed. Some chemicals are flammable or corrosive and your controls must be suitable for those hazards too. Look at the safety data sheet for more information. Air cleaning equipment may before discharging exhaust air to the atmosphere. This sheet identifies the minimum standards you need to apply to protect your health. It should not be used to justify a lower standard of control than that which may be required for process control or control of other risks.

ACCESS

• Keep unnecessary people away from the work area. Ensure that no one is working close by downwind.

DESIGN AND EQUIPMENT

 Ensure that the equipment for emptying sacks or bags is designed and installed to recognised standards. The roise levels from the equipment should also be disclosed.

Exhaust

1.0 m/s

minimum
airflow

Open grill work shelf

The designer/supplier/installer should provide proof that the equipment meets the required specifications and standards.

- Ensure the equipment is compatible with the bags and sacks handled.
- Enclose the bench and bag/sack disposer as much as possible – see diagram.
- Where possible, site the working area away from doors, windows and

walkways to stop draughts interfering with the ventilation and spreading dust.

- Airflow into the enclosure should be at least 1 metre per second.
- Ensure that air extracted from the workroom can readily be replenished.
- Provide an easy way of checking that the exhaust ventilation is working, e.g. a manometer, pressure gauge or ribbon strips.

- Discharge extracted air to a safe place away from doors, windows and air inlets. Be careful that extracted air does not affect neighbours.
- Make sure the bag disposal point can be reached easily without the operator placing their head within the enclosed area.
- Provide good lighting. It should be suitable for the chemical(s) and task(s) e.g. dust tight or flameproof.
- Avoid manual handling. Provide mechanical/pneumatic assistance to lift full bags or sacks to the work shelf.

EXAMINATION, TESTING AND MAINTENANCE

- Get information on the design performance of the equipment and extraction system from the supplier. Keep this information to compare with future test results.
- Once every day, check that the extraction system is working. Check for dust emission during sack/bag emptying. Do not use the equipment unless the extraction system is working properly.
- Ensure the waste bag collector doesn't discharge dust when it is removed. Consider additional ventilation at the disposal point.
- Visually check the equipment and extraction system once a week for signs of damage, and ensure necessary repairs are carried out immediately.
- Have the equipment and extraction system thoroughly examined and tested against its performance specifications and standards at least once a year.
- Maintain the equipment as advised by the supplier/installer, in effective and efficient working order.

CLEANING AND HOUSEKEEPING

- Clean the equipment and surrounding area daily.
- Deal with all spills immediately.
- Store bags or sacks in a safe place and dispose of empty bags/sacks safely.
- Don't clean up dusts with a brush or compressed air. Use a damp cloth or vacuum.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

- Chemicals in hazard group S can damage the skin or eyes, or enter the body through the skin and harm you. Sheets Sk100 and Sk101 give good advice on how to keep the materials off your skin.
- Check the material safety data sheet for the hazards associated with the materials handled or ask the supplier of the material what personal protective equipment is needed.
- Ask your safety equipment supplier to help you select suitable protective apparatus.
- Look after your protective equipment. When not in use, store in a clean, safe place.
- Keep your protective equipment clean and change it at recommended intervals or when it is damaged.

• Respiratory protective equipment should not be necessary for routine operations. It may be required for some cleaning and maintenance activities e.g. cleaning up spills.

TRAINING AND SUPERVISION

- Tell your workers about any harmful properties of the substances that they are dealing with and why they must use the controls and PPE provided.
- Teach them to handle the materials and any resulting dust safely and how and when to wear any PPE supplied.
- Check controls are working and ensure that they know what to do if something goes wrong.
- Have a system to check that the precautions you have put in place are being followed.