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| HAZARDOUS SUBSTANCES CONTROL SYSTEM - CONTAINMENT | | | |
| This is the minimum level of control needed where a hazardous substance assessment has identified as requiring Containment.  Substances will usually have a Workplace Exposure Limit; health surveillance and workplace monitoring for airborne contaminants will be required to demonstrate that the system is effective. | | In a contained system the hazardous substance or preparation is kept within a closed system at all times. It is used for substance that are particularly hazardous or where large amounts are likely to become airborne.  There is potential for the substance to escape during sampling and maintenance activities. These tasks need to be carefully managed and controlled. | |
| This sheet provides good practice advice on **Containment.** It can be applied to a range of tasks involving small, medium or large scale use of solids and liquids. It describes the key points that you need to take to reduce exposure to a safe level. Remember that where flammable or corrosive substances are used control measures must also take account of those risks. The SDS will give more information. LEV is likely to form part of any closed system to capture harmful dust or vapour. Air cleaning equipment such as scrubbers and filters may have to be included in the system to comply with emission limits imposed by environmental legislation. Any residues or emissions must discharge to a safe place away from doors, windows and air inlets. | | | |
| Design and Equipment   1. Closed systems should be designed for the particular substance and built to industry standards. They can take a number of forms e.g. enclosures, pipelines, closed conveyors, laboratory fume cupboards, glove boxes, automatic spray booths etc. 2. The system should be designed for easy maintenance and engineered so that potential leaks are prevented. 3. Air extracted from the process should be controlled to meet environmental standards and discharge away from doors windows and air inlets. 4. Restrict access to the working area to authorised persons only and provide suitable information and instructional signs. | | | |
| Maintenance, Examination and Testing   1. Ensure that any control equipment used is maintained in good order and in good repair; where appropriate provide suitable equipment to detect any leakage. 2. Give careful consideration to maintenance work; a Permit to Work system may be required. 3. Follow any special procedures that are needed before the system is opened or entered, e.g. purging and washing. 4. Ensure that all equipment is tested and examined according to regulatory requirements. 5. Keep these reports and maintenance records for at least 5 years. | | | |
| Personal Protective Equipment (PPE)  Most substances can irritate or penetrate the skin. In addition to the appropriate engineering controls the PPE specified in the Safety Data Sheet(s) should be provided and used.   1. After checking the SDS to ascertain what personal protective equipment is needed ask your safety equipment supplier to help you select suitable protective equipment. 2. Provide arrangements for keeping PPE clean and replace at recommended intervals. 3. Consider respiratory protective equipment (RPE) for cleaning and maintenance activities. 4. Train workers to use PPE e.g. face fit testing for RPE, and to report faults. | Training and Supervision   1. Provide supervisors and workers with information on the harmful nature of the substance. 2. Provide supervisors and workers with training on handling and using the substance safely and checking controls are working. 3. Provide supervisors and workers with instruction and training on what to do if something goes wrong. 4. Managers and supervisors must ensure control measures are used. 5. Make workers aware of any applicable health surveillance arrangements. | | Cleaning and Housekeeping   1. Clean work equipment and the work area to prevent contamination build up. 2. Clean other equipment and the workroom regularly. 3. Deal with spills immediately using the relevant emergency procedures. 4. Clean using appropriate methods so that contamination is not spread. 5. Store containers in a safe place and dispose of empty containers safely. 6. Put lids on or seal containers immediately after use. |

| Control Measure |  | Further Control Measures and Additional Actions Required |
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| Design and Equipment |  |  |
| Are closed systems designed and built to industry standards? | **Yes - No** |  |
| Is the system designed for easy maintenance and engineered so that potential leaks are prevented? | **Yes - No** |  |
| Do you obtain information from the substance supplier on all parameters needed for a safe system of work? | **Yes - No** |  |
| Is air extracted from the process discharged to a safe place away from doors, windows and air inlets? | **Yes - No** |  |
| Do you restrict access to the working area to authorised personnel only? | **Yes - No** |  |
| Do you provide suitable signage? | **Yes - No** |  |
| Where necessary, do you provide suitable equipment to detect any leakage? | **Yes - No** |  |
| Maintenance, Examination and Testing |  |  |
| Do you ensure that all equipment used in the process is maintained in good order and in good repair? | **Yes - No** |  |
| Is a Permit to Work System used for maintenance work? | **Yes - No** |  |
| Are special procedures that are needed followed before the system is opened or entered, e.g. purging and washing? | **Yes - No** |  |
| Do you ensure that all equipment is tested and examined according to regulatory requirements? | **Yes - No** |  |
| Do you keep all records of maintenance for at least 5 years? | **Yes - No** |  |
| Personal Protective Equipment |  |  |
| Do you check the material safety data sheet to check what personal protective equipment (PPE) is needed? | **Yes - No** |  |
| Do you ask your safety equipment supplier to help you select suitable protective equipment? | **Yes - No** |  |
| Are there arrangements in place for keeping PPE clean? | **Yes - No** |  |
| Is PPE replaced at recommended intervals? | **Yes - No** |  |
| Is respiratory protective equipment provided for cleaning and maintenance activities (where required)? | **Yes - No** |  |
| Do you ensure employees are instructed to report faults with PPE? | **Yes - No** |  |
| Is suitable PPE training given? | **Yes - No** |  |
| Training and Supervision |  |  |
| Do you provide workers with information on the harmful nature of the substance? | **Yes** **- No** |  |
| Are employees trained in all relevant process operations? | **Yes - No** |  |
| Are employees trained in following maintenance procedures? | **Yes - No** |  |
| Are employees trained on when and how to use PPE? | **Yes - No** |  |
| Are employees trained in how to detect and deal with leaks? | **Yes - No** |  |
| Do you provide employees with instruction and training in the safe use of the chemical? | **Yes - No** |  |
| Do employees know what to do if something goes wrong? | **Yes - No** |  |
| Have a system available for checking that control measures are in place and are being followed. | **Yes - No** |  |
| Do you ensure that your employees are aware of any health surveillance arrangements (if applicable)? | **Yes - No** |  |
| Cleaning and Housekeeping |  |  |
| Are items of work equipment and the work area cleaned regularly to prevent contamination build up? | **Yes - No** |  |
| Are the workroom and other equipment cleaned regularly? | **Yes - No** |  |
| Are spills dealt with immediately using the relevant emergency procedures? | **Yes - No** |  |
| Are appropriate cleaning methods used so that contamination is not spread? | **Yes - No** |  |
| Are containers stored in a safe place? | **Yes - No** |  |
| Are empty containers disposed of safely? | **Yes - No** |  |
| Are lids put on or containers sealed immediately after use? | **Yes - No** |  |

Checklist completed and additional actions allocated by ….. on date …