

- No employee working in the maintenance hangar should be exposed to noise level greater than 85 db (A) for a duration of more than eight hours per day without hearing protection. In addition no unprotected ear should be exposed to peak sound pressure level (instantaneous) of more than 140 db(C)
- The use of hearing protection should be enforced actively when the equivalent sound level over eight hours reaches 85 db(A), the peak sound level reach 140 db(C), or the average maximum sound level reaches 110 db(C). Hearing protective devices should be capable of reducing sound levels at the ear to at least 85 db (A). Prior to issuance of hearing protective devices as the final control mechanism, use of acoustic insulation materials, isolation of the noise source, and other engineering controls should be investigated and implemented, where feasible.(Environmental, Health and Safety (EHS) Guidelines, World Bank Group)

### Vibrations

Exposure to hand to hand-arm vibration or whole body vibration from surfaces on which the worker stands or sits, should be controlled through choice of equipment, installation of vibration damping pads or devices and limiting the duration of exposure. Limits for vibration and action values, (i.e. the level of exposure at which remediation should be initiated) are provided by the ACGIH-42. Exposure level should be checked on the bases of daily exposure time and data.

## 2.3 HAZARDOUS MATERIAL MANAGEMENT

Maintenance, repair and overhauling operations of hangars may include the storage of oils and fuels e.g. jet fuel, diesel and gasoline. These fuels may release during transfer or leaks due to tank and piping containment failure (e.g. corrosion of steel component or faulty construction and installation). The use of liquid combustible materials and fire suppression foams and powders in fire fighting drills may result in releases to soil and water resources. Hazardous materials should be managed to prevent the accidental release, fire or explosions as described in General Environment, Health and Safety Guidelines. Hangar operators should develop spill preventions and control plans and emergency preparedness and response plans. Fire fighting foam and powder or other environmentally hazardous fire extinguisher agents or polluted fire water from entering the storm water system. Water containing fire extinguisher agents and non combusted flammable materials should be treated prior to discharge to surface water. Hazardous waste storage should be specially be managed through specially trained employees who has received special training in handling and storage of hazardous waste;

- Labeling of each container for its contents.
- Limiting access to hazardous waste storage areas to employees who have received proper training.
- Conducting the periodic inspection of waste storage areas.
- Avoiding underground storage tanks and underground piping of hazardous waste.

## 2.4 SOLID WASTE

The quantities and characteristics of the solid waste materials highly depend on the nature of the individual activity from where they are generated.

Solid waste generated from maintenance and repair operations may include Municipal Solid Waste (MSW) typically generated at residential and commercial areas and may also include, to some extent, special waste that requires special handling procedures. The latter can be hazardous solid waste material in the form of used oils and other chemical containers, consumable waste from tires, batteries, filters, etc.

Solid Waste Management (SWM) practices should attain the following basic principles:

- Establishing the SWM practices based on acceptable norms to minimize potential Environmental, Health and Safety (EHS) impacts
- Adopting practical operational measures to minimize the generation of MSW and hazardous waste components
- Applying applicable guidelines for storage, transport, and disposal of the waste

The following Regulations and Technical Guidelines should be considered as part of the overall operations. Where applicable, these include enforcements and guidance related to waste inventories, minimization, storage, collection, and transport.

- Technical Guideline No. 2: 'Guidelines for Waste Audit Reports' - April 2003
- Technical Guideline No. 26: 'Requirements and Procedures for the Disposal of Hazardous Waste' - January, 2000
- Technical Guideline No. 28: 'Waste Minimization' - October 2000
- Technical Guideline No. 50: 'Requirements for the Transport of Hazardous Wastes' - April 2003