**Risk Assessment Document for HVAC Maintenance**

**Project:** HVAC Maintenance – Fan Coil Units, Valves, VAVs, Transfer Air Fans, Air Devices  
**Location:** Dolmen Mall Clifton Karachi

**1. Overview of Work Activities**

* **Purpose:** Regular maintenance of HVAC components, including inspection, cleaning, and minor repairs.
* **Duration:** Quarterly Basis (against 02 Years of contract)
* **Personnel Involved:** HVAC Technicians, Maintenance Supervisor
* **Equipment Required:** PPE (gloves, safety goggles, ear protection), tools (multimeter, manometer, etc.)

**2. Risk Assessment Table**

| **Activity** | **Hazard** | **Potential Risk** | **Risk Level** | **Control Measures** | **Residual Risk** |
| --- | --- | --- | --- | --- | --- |
| **Preparation and Site Setup** | Tripping hazards, improper PPE usage | Falls, minor injuries, PPE-related injuries | Medium | - Clear the work area of clutter  - Ensure PPE is worn and fits correctly | Low |
| **Fan Coil Unit Inspection** | Electrical hazards, sharp edges | Electric shock, cuts | High | - Follow LOTO (Lockout-Tagout) procedure  - Wear cut-resistant gloves | Medium |
| **Cleaning evaporator and Filters** | Exposure to dust, allergens | Respiratory issues, eye irritation | Medium | - Use dust mask and safety goggles  - Clean slowly to minimize dust | Low |
| **Valve / strainer Maintenance** | Manual handling, pinch points | Muscle strain, pinch injuries | Medium | - Use proper lifting techniques  - Check for pinch hazards | Low |
| **VAV System Testing** | Incorrect calibration, noise | System malfunctions, hearing damage | Medium | - Calibrate according to specifications  - Wear ear protection if required | Low |
| **Transfer Air Fan Inspection** | Fan blade motion, noise | Finger injuries, hearing damage | High | - Isolate fan power  - Use lockout procedure before work | Low |
| **Air Devices Maintenance** | Dust, poorly secured grilles | Respiratory issues, impact injuries | Medium | - Wear a mask  - Secure all grilles firmly after cleaning | Low |

**3. General Control Measures**

* **Training:** All personnel must be trained in safe HVAC maintenance procedures and understand emergency protocols.
* **Emergency Procedures:** Emergency shutoff locations and first-aid kits should be identified and accessible.
* **Environment Controls:** Ensure proper ventilation during maintenance to reduce exposure to airborne dust and chemicals.

**4. Review and Sign-Off**

* **Review Date:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* **Witnessed Signature:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* **Supervisor Approval:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_