ELEMENT ENGINEERING LABORATORY

QUALITY, HEALTH, SAFETY, AND ENVIRONMENT SYSTEM

HOUSEKEEPING & SANITATION PROCEDURE

	Name	Signature
PREPARED BY	M. Rameez	
APPROVED BY	Salma Sohail	

1. REVISION AND APPROVAL

Rev.	Date	Nature of Changes	Approved By
00	05 Aug 2025	Original issue.	AUTHORIZED OFFICER

2. PURPOSE

The purpose of this procedure is to establish and maintain a clean, orderly, safe and hygienic working environment in the soil and concrete testing laboratory, so that test results are not affected by contamination, equipment is kept in good working condition, and the health and safety of personnel and visitors are protected.

3. SCOPE

This procedure applies to all areas and activities of the laboratory, including:

- Soil testing area (sample preparation, sieve analysis, Atterberg limits, Proctor compaction, CBR, moisture content and specific gravity tests).
- Concrete testing area (cube casting, curing tank, slump and fresh concrete tests, compression testing machine).
- Sample receiving, storage and retention areas.
- Cement, aggregate and chemical storage areas.
- Wash area, sedimentation/slurry trap, waste yard and outdoor yard.
- Offices, corridors, toilets, pantry and drinking water facilities.

4. RESPONSIBILITIES

Laboratory Manager / Management Representative

- Provide the resources, cleaning materials, PPE and waste containers needed to implement this procedure.
- Review housekeeping inspection reports and ensure corrective actions are closed.

HSE Officer / Quality Officer

- Conduct and record periodic housekeeping and sanitation inspections.
- Raise Non-Conformance or Corrective / Preventive Action Requests for repeated failures.
- Verify waste segregation and disposal records.

Laboratory Supervisor

- Allocate housekeeping duties and monitor that daily, weekly and monthly tasks are carried out.
- Ensure test areas are cleaned between tests and before and after calibration or verification work.

Laboratory Technicians / Testing Staff

- Clean their work area, tools and equipment immediately after each test.
- Segregate waste correctly and report spills, leaks, damage and unsafe conditions.
- Wear the required PPE and follow personal hygiene rules.

Housekeeping / Cleaning Staff

- Carry out routine cleaning of floors, offices, corridors, toilets and pantry as per the cleaning schedule.
- Use only approved cleaning agents and record completed tasks on the checklist.

5. PROCEDURE

5.1 General Housekeeping Rules

5.1.1 All work areas, walkways, emergency exits, fire extinguishers and electrical panels shall be kept clear and unobstructed at all times.

5.1.2 Tools, moulds, sieves, trays and equipment shall be returned to their designated storage locations after use. A place for everything and everything in its place.

5.1.3 Floors shall be kept free from dust, soil, cement slurry, water and oil to prevent slips, trips and falls. Wet floor signs shall be placed where required.

5.1.4 Eating, drinking and smoking are prohibited in the testing areas. Food and drink shall be consumed only in the designated pantry/rest area.

5.1.5 Materials shall not be stored on the floor against walls or equipment. Racks, pallets and shelves shall be used and loads shall be stacked safely.

5.1.6 Lighting, ventilation and dust extraction (where provided) shall be kept functional. Defects shall be reported to the Supervisor immediately.

5.2 Soil Testing Area

5.2.1 Soil samples shall be prepared (drying, crushing, sieving, quartering) only in the designated sample preparation area to prevent dust spreading to other areas.

5.2.2 Spilled soil and dust shall be removed immediately by sweeping with damp methods or vacuum. Dry sweeping that raises dust shall be avoided.

5.2.3 Sieves, pans, lids and brushes shall be cleaned after each test using soft brushes only. Sieves shall not be washed with abrasive tools or struck against hard surfaces, to avoid damage to the mesh.

5.2.4 Atterberg limit apparatus (Casagrande cup, grooving tool), proctor moulds, rammers, CBR moulds and density equipment shall be cleaned, dried and lightly oiled (where applicable) after use to prevent rust and soil build-up.

5.2.5 Ovens shall be wiped clean on the outside and the interior kept free of soil residue. Containers shall be cleaned and dried before reuse for moisture content determination.

5.2.6 Balances shall be kept clean and free of dust, and pans shall be brushed after each use. Liquid and soil shall not be placed directly on the balance pan.

5.2.7 Soil samples that are retained shall be sealed, labelled and stored on shelves. Samples beyond the retention period shall be disposed of as per Section 5.6.

5.3 Concrete Testing Area

5.3.1 Cube moulds shall be cleaned of hardened concrete, inspected for damage and lightly coated with mould release oil before each casting. Excess oil shall be wiped off.

5.3.2 Concrete mixing and casting shall be done only in the designated area. Spilled concrete, cement and aggregate shall be cleaned up before it hardens.

5.3.3 Slump cones, base plates, tamping rods, scoops and trowels shall be washed immediately after use, and hardened concrete shall not be allowed to build up on them.

5.3.4 The curing tank shall be kept clean and the water free of oil, algae and debris. Water shall be changed at a defined frequency (at least monthly or when visibly dirty), and the temperature hall be maintained and monitored as required by the test standard. Cubes shall be identified and arranged so that they can be retrieved easily.

5.3.5 The compression testing machine (CTM) platens and surrounding area shall be cleaned of concrete fragments and dust before and after each test. Fragments from crushed cubes shall be removed using a brush and scoop, and the protective shield or cage shall be kept in place during testing. Platens shall not be cleaned while the machine is running.

5.3.6 Compression machine hydraulic oil levels and leakage shall be checked weekly. Oil leakage shall be cleaned immediately using absorbent material, and the used material shall be disposed of as hazardous waste.

5.3.7 Crushed cubes shall be collected in a designated bin or yard and shall not be left on the floor or in walkways.

5.4 Storage of Materials and Samples

5.4.1 Cement shall be stored on pallets away from walls and moisture, covered and stacked in a way that allows first in, first out use. Damaged or hardened bags shall be segregated and disposed off.

5.4.2 Aggregates and sand shall be stored in separate bays or bins to prevent mixing and contamination, and shall be kept covered where required.

5.4.3 Chemicals, admixtures, oils and cleaning agents shall be stored in labelled containers in a designated, ventilated area. Safety Data Sheets (SDS) shall be available. Incompatible chemicals shall be stored separately.

5.4.4 Samples received from customers shall be identified and stored separately in accordance with the Storage & Handling Procedure (IMS-SH-P15).

5.5 Sanitation and Personal Hygiene

5.5.1 Toilets, washbasins and the pantry shall be cleaned and disinfected at least daily, and soap, tissue and clean water shall be available at all times.

5.5.2 Drinking water dispensers and coolers shall be cleaned and sanitised at least monthly, and filters shall be replaced as per the manufacturer's recommendation.

5.5.3 Personnel shall wash their hands with soap and water after handling cement, soil, oil or chemicals, after using the toilet, and before eating or drinking.

5.5.4 Personnel shall wear the following PPE as applicable: safety shoes, coveralls or lab coats, gloves (cement is caustic and can cause skin burns), safety glasses, dust masks or respirators during dry sample preparation, and ear protection near noisy equipment. Contaminated PPE shall be cleaned or replaced promptly, and PPE shall not be worn in the pantry or rest areas.

5.5.5 First aid boxes shall be available, checked monthly and replenished. Eye wash facilities shall be available near chemicals and the concrete area.

5.5.6 Pest control shall be carried out by an approved contractor at a defined frequency (at least quarterly). Records of treatment shall be retained.

5.5.7 Waste bins in offices and toilets shall be emptied daily, and bins shall be cleaned regularly.

6. RECORDS

Record	Form No.
Housekeeping Inspection Checklist	IMS-HS-F01

ELEMENT ENGINEERING LABORATORY

House Keeping Schedule

Month: September 2026

Serial No	Area/ Equipment	Date																										Checked By
		1	2	3	4	5	7	8	9	10	11	12	14	15	16	17	18	19	21	22	23	24	25	26	28	29	30	
1	Floor	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
2	Doors	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
3	Side & Middle Tables	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
4	Fume Hood & Wash Basins Area	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
5	Equipment	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
6	Reagents and Chemical Shelves	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
7	Restrooms & Pantry	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

Verified By: _____

CONTROLLED