Food and Agriculture Organization of the United Nations

Global Soil Laboratory Network (GLOSOLAN) aims to harmonize soil analysis methods so that soil data is comparable and interpretable across soil laboratories in a country, between countries and regions, and globally.

LABORATORY SAFETY GUIDELINES

WHAT is this for?

- SAFETY IN THE LABS
- UNDERSTAND THE DIFFERENCE BETWEEN HAZARDS AND RISKS
  - HAZARD = ANY SOURCE OF POTENTIAL DAMAGE OR HARM
  - RISKS = A CHANCE OR PROBABILITY OF A PERSON BEING HARMED

  IT IS POSSIBLE TO REDUCE RISK IF YOU CONTROL OR MINIMISE THE HAZARD
- KNOW YOUR LABORATORY HAZARDS
- RECOGNIZE THE SIGNS AND LABELS

WHEN is this for?

- ALWAYS
- BE AWARE AT ALL TIMES: BEFORE, DURING AND AFTER

WHO is this for?

- SAFETY IS A RESPONSIBILITY THAT LIES ON EVERYONE
- MAKE SURE THAT EVERYONE AROUND YOU, INCLUDING YOURSELF, CAN ASSESS THE HAZARDS

WHY do I need to know this?

- FOR YOURSELF AND EVERYONE AROUND YOU
- YOUR CARELESSNESS WILL HURT OTHERS
- SAFETY COMES FIRST!

HOW can I prepare my surroundings and myself?

1. Recognize the risks and the hazards

2. Assess them

- WHAT ARE THE HAZARDS?
- WHO MIGHT BE HARMED AND HOW
- WHAT ARE YOU ALREADY DOING TO CONTROL THE RISKS?
- WHAT FURTHER ACTION DO YOU NEED TO TAKE TO CONTROL THE RISKS?
- WHO NEEDS TO CARRY OUT THE ACTION?
- WHEN IS THE ACTION NEEDED BY?

3. Minimize or control the risk

A. **WHAT YOU SHOULD KNOW:**

- KNOW THE LOCATION
- KNOW THE HAZARDOUS AGENTS AND MATERIALS THAT YOU ARE DEALING WITH
- KNOW WHEN AND HOW TO USE SAFETY EQUIPMENT

B. **WHAT YOU SHOULD DO:**

- MAKE SURE THE LAB IS UP TO DATE WITH SAFETY REGULATIONS
- LABEL EQUIPMENT, MATERIALS, TOOLS AND AREAS
- PUT WARNING SIGNS (INSERT PICTURES/LABELS)
- MAKE SURE LABORATORY IS EQUIPPED WITH MATERIAL SAFETY DATA SHEETS FOR SAFETY INFORMATION ON CHEMICALS AND MATERIALS
- USE SAFER SOLUTIONS
- ALWAYS USE AND WEAR THE RIGHT EQUIPMENT
- SHOW FIGURE EXAMPLE WEARING THE WRONG AND THEN THE RIGHT TYPE OF CLOTHING (PPE – PERSONAL PROTECTIVE EQUIPMENT)
- KEEP CHEMICALS STORED ACCORDINGLY TO ITS REQUIRED STORAGE DETAIL
- STORE WATER REACTIVE MATERIAL SEPARATELY
- KEEP THE WORKPLACE CLEAN, BEFORE, DURING AND AFTER
- PROPERLY DISPOSE OF WASTE MATERIAL AS INDICATED

C. **WHAT SHOULDN'T YOU DO?**

- NEVER EAT, DRINK OR SMOKE IN THE LAB
- NEVER APPLY COSMETICS
- DO NOT TOUCH YOUR FACE, MOUTH OR EYES
- DO NOT PUT ANY TOOLS INCLUDING PENS OR PENCILS IN YOUR MOUTH
- DO NOT ENGAGE IN PRACTICAL JOKES WITHIN THE LAB

4. Prepare yourself for any potential emergency

- ALWAYS TRY TO PREVENT
- RECOMMEND SAFETY EQUIPMENT
- ENSURE KNOWLEDGE OF EXITS
- HAVE EMERGENCY DRILLS
- KNOW WHERE EMERGENCY PREVENTION TOOLS ARE (FIRE EXTINGUISHER,
- BE PREPARED FOR SITUATIONS THAT YOU MAY NOT CONTROL
- HAVE AN EMERGENCY RESPONSE READY

GLOBAL SOIL PARTNERSHIP