JOINT HEALTH & SAFETY COMMITTEE

WHAT DOES A JOINT HEALTH AND SAFETY COMMITTEE DO?

- RECOGNIZE WORKPLACE HAZARDS.
- EVALUATE THE HAZARDS AND RISKS THAT MAY CAUSE INCIDENTS, INJURIES AND ILLNESS.
- PARTICIPATE IN DEVELOPMENT AND IMPLEMENTATION OF PROGRAMS TO PROTECT THE EMPLOYEES' SAFETY AND HEALTH.

JOINT HEALTH & SAFETY COMMITTEE

A SAFETY COMMITTEE SERVES A VARIETY OF FUNCTIONS, INCLUDING:

- DEVELOPING WRITTEN SAFETY PROGRAMS.
- PROMOTING SAFE WORK PRACTICES.
- FACILITATING SAFETY TRAINING.
- PERFORMING WORKPLACE INSPECTIONS.
- CARRYING OUT ACCIDENT INVESTIGATIONS.
- ACTING AS A POINT OF CONTACT BETWEEN EMPLOYEES AND MANAGEMENT.

JOINT HEALTH & SAFETY COMMITTEE

BELOW ARE 5 KEY SAFETY COMMITTEE MEETING TOPICS EVERY BUSINESS SHOULD WORK INTO THEIR SCHEDULE:

- OHSA COMPLIANCE. OHSA STANDARDS PLAY A CRUCIAL ROLE IN WORKFORCE MANAGEMENT, SAFETY PROGRAM DEVELOPMENT AND ACCIDENT PREVENTION.
- HAZARD ASSESSMENT.
- SAFETY TRAINING.
- RETURN-TO-WORK POLICIES.
- SAFETY PROGRAM IMPROVEMENT.

SAFETY

OPERATOR NEED-TO-KNOW REMINDERS

INTRODUCTION

WATER/WASTEWATER TREATMENT, WATER DISTRIBUTION SYSTEMS, AND WASTEWATER COLLECTION SYSTEMS HAVE MANY HAZARDS THAT CAN POSE A RISK TO OPERATORS, INCLUDING:

- ELECTRICAL CIRCUITS/EQUIPMENT
- ROTATING PARTS
- HAZARDOUS CHEMICALS/SUBSTANCES
- CONFINED SPACES
- EXCAVATIONS
- FIRES
- PHYSICAL INJURIES (SLIPS, FALLS, CUTS, ETC…)

SAFETY - GENERAL

- ALTHOUGH EVERYONE IS RESPONSIBLE FOR ENSURING A SAFE WORK ENVIRONMENT, THE PERSON WHO IS MOST RESPONSIBLE FOR YOUR SAFETY IS YOURSELF
- SAFETY IN THE WORKPLACE IS REGULATED BY THE OCCUPATIONAL HEALTH AND SAFETY ACT
- UNDER THIS REGULATION, A WORKER HAS THE RIGHT TO REFUSE TO PERFORM ANY WORK THAT HE/SHE FEELS IS UNSAFE

ELECTRICAL SAFETY

- WHENEVER IT IS NECESSARY TO WORK ON ELECTRICAL SYSTEMS THE CONTROL DEVICES MUST BE LOCKED OUT (OPENED) AND TAGGED
- THE ONLY PERSON WHO CAN REMOVE THE LOCK AND TAG IS THE PERSON WHOSE NAME APPEARS ON IT
- IT IS IMPORTANT TO REMEMBER THAT EQUIPMENT MAY HAVE MORE THAN ONE SOURCE OF POWER. ALL POSSIBLE SOURCES MUST BE LOCKED OUT AND TAGGED.
- IF YOU ARE NOT QUALIFIED TO WORK ON ELECTRICAL EQUIPMENT, CALL AN ELECTRICIAN OR SOMEONE WHO IS

ROTATING PARTS

- ROTATING PART POSE A RISK OF PHYSICAL INJURY. IT IS IMPORTANT TO AVOID LOOSE CLOTHING, LONG HAIR (UNTIED) AND JEWELRY WHICH MAY BECOME ENTANGLED IN ROTATING EQUIPMENT
- ROTATING PARTS ALSO HAVE THE POTENTIAL OF CREATING PROJECTILES WHICH CAN CAUSE PHYSICAL INJURIES (EYES, CUTS)
- BECAUSE OF THE SAFETY HAZARDS POSED BY ROTATING PARTS, IT IS IMPORTANT THAT EQUIPMENT IS ALWAYS OPERATED WITH GUARDS IN PLACE
- ANYTIME THE POTENTIAL EXISTS FOR FLYING DEBRIS, OPERATORS MUST HAVE THE REQUIRED PERSONAL PROTECTIVE EQUIPMENT (PPE)

FIRES

- FIRES ARE CLASSIFIED AS FOLLOWS:
  - CLASS A: COMBUSTIBLES (WOOD, PAPER, ETC..)
  - CLASS B: FUELS (OIL, GREASE, DIESEL, ETC…)
  - CLASS C: ELECTRICAL
  - CLASS D: METALS (IUM'S)
- FIRE EXTINGUISHERS ARE RATED AS TO THE CLASS OF FIRE FOR WHICH THEY MAY BE USED
- ANYTIME THERE IS A FIRE, THE FIRST QUESTION AN OPERATOR SHOULD ASK HIM/HERSELF IS WHETHER OR NOT HE OR SHE IS CAN SAFELY EXTINGUISH THE FIRE
- IF NOT, THE OPERATOR SHOULD EXIT THE BUILDING AND WAIT FOR THE FIRE DEPARTMENT TO ARRIVE

EXCAVATIONS

- ANY EXCAVATION DEEPER THAN 1.2 M (4 FT) MUST HAVE PROTECTION TO PREVENT CAVE IN
- CAVE IN PROTECTION MAY INCLUDE SHORING OR SLOPING (ANGLE OF REPOSE)
- EXITS (SUCH AS LADDERS) MUST BE PROVIDED AT INTERVALS NOT EXCEEDING 7.6 M (25 FT)
- LADDERS MUST EXTEND 1 M (3 FT) ABOVE THE TOP OF THE TRENCH
- SPOIL AND TOOLS MUST BE KEPT AT LEAST 0.6 M (2 FT) FROM THE TRENCH OPENING

HAZARDOUS CHEMICALS/SUBSTANCES

- MANY HAZARDOUS CHEMICALS/SUBSTANCES CAN BE FOUND IN AND AROUND WATER/WASTEWATER TREATMENT AND DISTRIBUTION/COLLECTION SYSTEMS
- A SAFETY DATA SHEET (SDS) SHOULD BE AVAILABLE FOR ALL OF THESE HAZARDOUS SUBSTANCES
- SAFETY DATA SHEETS PROVIDE A PROFILE OF THE HAZARDOUS SUBSTANCE (PROPERTIES), SAFETY AND STORAGE PROCEDURES, CONTACT INFORMATION, AND FIRST AID PROCEDURES TO FOLLOW IN CASE OF EXPOSURE

HAZARDOUS CHEMICALS SAFETY

- **ALWAYS CARRY CHEMICALS IN APPROVED CONTAINERS**. ALWAYS WASH YOUR HANDS AFTER USING ANY UNSAFE MATERIAL. STORE MATERIALS PROPERLY, AS DIRECTED ON THEIR LABELS. FLAMMABLE CHEMICALS SHOULD BE STORED IN A COOL, DRY PLACE AWAY FROM HEAT AND SUNLIGHT. SOME CHEMICALS LIKE ACIDS MUST BE STORED SEPARATELY FROM EACH OTHER.

STORING HAZARDOUS CHEMICALS

- IF HAZARDOUS CHEMICALS ARE NOT STORED CORRECTLY, THEY CAN LEAD TO CONTAMINATION, FIRES, SPILLS, GAS RELEASES, AND TOXIC EXPOSURES. INFORMATION FOR STORING ANY HAZARDOUS MATERIAL CAN BE FOUND ON ITS SAFETY DATA SHEET (SDS). YOU MUST STORE THE PRODUCTS IN A LOCATION THAT INCORPORATES THE APPROPRIATE RISK CONTROL MEASURES.

STORING HAZARDOUS CHEMICALS SAFELY

A NUMBER OF GENERAL PRINCIPLES FOR THE SAFE STORAGE OF HAZARDOUS CHEMICALS INCLUDE (BUT ARE NOT LIMITED TO):

- ENSURING SAFE DESIGN, LOCATION AND INSTALLATION OF STORAGE AND HANDLING SYSTEMS (E.G. RACKING SYSTEMS, TANKS)
- SEPARATE INCOMPATIBLE SUBSTANCES TO PREVENT REACTIVE CHEMICALS INTERACTING
- CONTROL POTENTIAL IGNITION SOURCES AROUND FLAMMABLE SUBSTANCES

STORING HAZARDOUS CHEMICALS SAFELY (CONT.)

- HAVE APPROPRIATE SAFETY SIGNAGE AND PLACARDS
- BE PREPARED FOR SPILL CONTAINMENT AND HAVE CLEAN UP SYSTEMS
- HAVE EMERGENCY PLANS IN PLACE TO DEAL WITH AN INCIDENT INVOLVING THE HAZARDOUS CHEMICALS
- HAVE THE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE) AND STORE IT CORRECTLY (EG. RESPIRATORS SEALED)
- HAVE FIRE-FIGHTING EQUIPMENT THAT IS EASILY ACCESSIBLE
- SECURE CHEMICALS FROM UNAUTHORIZED ACCESS.

CONFINED SPACES

- CONFINED SPACE PROVISIONS HAVE BEEN AMENDED TO ENSURE THAT WORKERS ENTERING, WORKING IN, OR WORKING NEAR CONFINED SPACES ARE PROTECTED.

CONFINED SPACES

- A CONFINED SPACE MAY BE DEFINED AS ANY SPACE IN WHICH BECAUSE OF ITS CONSTRUCTION, LOCATION OR CONTENTS, HAZARDOUS GASES MAY ACCUMULATE, OR AN OXYGEN DEFICIENCY MAY OCCUR
- HAZARDOUS GASES FOUND IN CONFINED SPACES COMMONLY INCLUDE CARBON MONOXIDE, HYDROGEN SULPHIDE, AND METHANE
- AN ATMOSPHERE IS OXYGEN DEFICIENT IF IT CONTAINS LESS THAN 19.5% OXYGEN BY VOLUME, AND IS OXYGEN ENRICHED IF IT CONTAINS MORE THAN 21.5% OXYGEN BE VOLUME

CONFINED SPACES (CONT'D)

- CARBON MONOXIDE AND HYDROGEN SULPHIDE ARE TOXIC
- METHANE AND HYDROGEN SULPHIDE ARE EXPLOSIVE
- WITH A SOURCE OF IGNITION, AN EXPLOSION CAN OCCUR WHENEVER THE CONCENTRATION OF EXPLOSIVE GAS FALLS WITHIN THE LOWER EXPLOSIVE LIMIT (LEL) AND UPPER EXPLOSIVE LIMIT (UEL)
- IT IS IMPORTANT TO TEST FOR EXPLOSIVE GASES BEFORE REMOVING MANHOLE COVERS, BECAUSE METHANE IS LIGHTER THAN AIR AND WILL ACCUMULATE UNDERNEATH THE MANHOLE COVER
- HYDROGEN SULPHIDE HAS A STRONG ROTTEN EGG ODOUR, BUT AT HIGH CONCENTRATIONS IT WILL KILL YOUR SENSE OF SMELL, THEN YOU

CONFINED SPACE ENTRY

- TO AVOID ACCIDENTS, CONFINED SPACE ENTRY PROCEDURES MUST BE STRICTLY FOLLOWED
- ANY CONFINED SPACE ENTRY REQUIRES A MINIMUM OF TWO WORKERS (ONE ENTERING AND THE OTHER OBSERVING), BOTH OF WHOM HAVE RECEIVED CONFINED SPACE TRAINING (COMPETENT)
- NO ONE SHOULD ENTER INTO A CONFINED SPACE WITHOUT FIRST TESTING THE ATMOSPHERE TO DETERMINE THAT IT IS SAFE TO DO SO
- IF THE ATMOSPHERE IS NOT SAFE, WORKERS SHOULD NOT ENTER INTO A CONFINED SPACE UNTIL IT IS SAFE TO DO SO

CONFINED SPACE ENTRY

- WHILE WORKING IN A CONFINED SPACE, A GAS DETECTOR MUST BE USED TO CONTINUOUSLY MONITOR THE ATMOSPHERE FOR HAZARDOUS GASES/OXYGEN DEFICIENCIES
- THE WORKER MUST WEAR A FULL BODY HARNESS AND BE ATTACHED TO A RETRIEVAL MECHANISM
- ANYTIME THE POSSIBILITY OF A FALL EXISTS, THE LIFELINE SHOULD ALSO BE EQUIPPED WITH A FALL ARRESTER
- ALL EQUIPMENT USED IN A CONFINED SPACE ENTRY MUST BE INSPECTED FOR SERVICEABILITY PRIOR TO USE

CONFINED SPACE PROGRAM

- A CONFINED SPACE PROGRAM IS A WRITTEN DOCUMENT THAT INCLUDES: A METHOD FOR RECOGNIZING EACH CONFINED SPACE TO WHICH THE PROGRAM APPLIES; A METHOD FOR ASSESSING THE HAZARDS TO WHICH WORKERS MAY BE EXPOSED; A METHOD FOR THE DEVELOPMENT OF CONFINED SPACE ENTRY PLANS (WHICH INCLUDE ON-SITE RESCUE PROCEDURES); A METHOD FOR TRAINING WORKERS; AND, AN ENTRY PERMIT SYSTEM.

CONFINED SPACE PROGRAM

- ALL EMPLOYERS WHO HAVE A CONFINED SPACE INTO WHICH WORKERS MAY ENTER TO PERFORM WORK ARE REQUIRED TO DEVELOP AND MAINTAIN A CONFINED SPACE PROGRAM.

CONFINED SPACE PLAN

WHAT IS THE DIFFERENCE BETWEEN A PROGRAM AND A PLAN?

CONFINED SPACE PLAN

- A **PROGRAM** SETS OUT THE METHODS BY WHICH AN EMPLOYER INTENDS TO COMPLY WITH THE REGULATION, SUCH AS HOW TO RECOGNIZE CONFINED SPACES, HOW ASSESSMENTS WILL BE CARRIED OUT, HOW PLANS WILL BE DEVELOPED, HOW TRAINING WILL BE DELIVERED AND WHAT THE ENTRY PERMIT SYSTEM WILL BE.

CONFINED SPACE PLAN

- A **PLAN** IS A SPECIFIC SET OF MEASURES AND PROCEDURES TO CONTROL HAZARDS IDENTIFIED BY THE ASSESSMENT FOR THAT CONFINED SPACE TO ALLOW WORKERS TO ENTER AND WORK IN A SPECIFIC CONFINED SPACE SAFELY. THE PLAN MUST INCLUDE PROVISIONS FOR ON-SITE RESCUE PROCEDURES, RESCUE EQUIPMENT AND METHODS OF COMMUNICATION, IN ADDITION TO THE OTHER PROVISIONS.

UNAUTHORIZED ENTRY

- ONLY AUTHORIZED PERSONNEL ARE ALLOWED ENTRY TO THE CONFINED SPACE, IN ACCORDANCE WITH THE PROCEDURES IDENTIFIED IN THE PLAN.
- ENSURE THAT MEASURES AND PROCEDURES ARE PUT IN PLACE TO ADEQUATELY SECURE EACH ENTRANCE TO THE CONFINED SPACE AGAINST UNAUTHORIZED OR ACCIDENTAL ENTRY. THESE MEASURES AND PROCEDURES MAY INCLUDE, BUT ARE NOT LIMITED TO, ADEQUATE BARRICADES, ADEQUATE WARNING SIGNS, OR ANY COMBINATION THEREOF.

CONFINED SPACE RESCUE

- ENSURE THAT NO WORKER ENTERS OR REMAINS IN A CONFINED SPACE UNLESS, IN ACCORDANCE WITH THE RELEVANT PLAN, ADEQUATE WRITTEN ON-SITE RESCUE PROCEDURES THAT APPLY TO THE CONFINED SPACE HAVE BEEN DEVELOPED AND ARE READY FOR IMMEDIATE IMPLEMENTATION.
- BEFORE A WORKER ENTERS A CONFINED SPACE, ENSURE THAT AN ADEQUATE NUMBER OF PERSONS TRAINED ARE AVAILABLE FOR IMMEDIATE IMPLEMENTATION OF THE ON-SITE RESCUE PROCEDURES

CONFINED SPACE RESCUE

THE PERSONS SHALL BE TRAINED IN:

- ON-SITE RESCUE PROCEDURES
- FIRST AID AND CARDIO-PULMONARY RESUSCITATION
- THE USE OF THE RESCUE EQUIPMENT REQUIRED IN ACCORDANCE WITH THE RELEVANT PLAN.

CONFINED SPACE RESCUE

COMMON QUESTIONS

MAY WE CONTRACT OUT RESCUE SERVICES?

- YES. HOWEVER, DEPENDING UPON THE HAZARD ASSESSMENT AND RISKS INVOLVED, THIS MIGHT NOT BE AN ADEQUATE RESCUE PLAN. THE HAZARDS MUST BE ASSESSED, AND AN ADEQUATE TIMELY RESPONSE MUST BE ENSURED BASED ON THE POTENTIAL HAZARD FACING A WORKER. RESCUE PERSONNEL MUST BE AVAILABLE FOR IMMEDIATE IMPLEMENTATION OF THE ON-SITE RESCUE PROCEDURES.

WHAT RESCUE EQUIPMENT CAN WE USE?

- THE EQUIPMENT TO USE WILL BE DEPENDENT UPON THE HAZARDS IN THE CONFINED SPACE, AND THE RELEVANT PLAN.
- IT IS OF PARAMOUNT IMPORTANCE WHEN CHOOSING THE EQUIPMENT TO BE USED IN A RESCUE SITUATION, TO TAKE INTO ACCOUNT THE DIMENSIONS OF THE ENTRY/EXIT OR ACCESS/EGRESS POINTS TO THE CONFINED SPACE, THAT THEY SHOULD BE COMPATIBLE WITH THE DIMENSIONS OF THE RESCUE EQUIPMENT AND RESCUE PROCEDURES.

WHERE DO RESCUE PERSONNEL HAVE TO BE LOCATED?

- RESCUE PERSONNEL MUST BE AVAILABLE AND READY TO IMMEDIATELY IMPLEMENT THE WRITTEN ON-SITE RESCUE PROCEDURES SHOULD A RESCUE BE REQUIRED AS PER THE PLAN.

MAY WE USE 911 EMERGENCY SERVICES AS OUR "ON-SITE RESCUE"?

- NO, CALLING 911 AS YOUR RESCUE PLAN IS NOT CONSIDERED TO BE AN "ON-SITE RESCUE PROCEDURE" WHICH CAN BE "READY FOR IMMEDIATE IMPLEMENTATION" FOR THE PURPOSE OF RESCUING A WORKER FROM A CONFINED SPACE. EMERGENCY SERVICES DO NOT REPLACE THE REQUIREMENT FOR ON-SITE RESCUE PROCEDURES.

MAY THE ATTENDANT BECOME PART OF THE RESCUE TEAM ONCE A RESCUE HAS BEEN ACTIVATED?

- NO, NOT UNLESS THE ATTENDANT HAS BEEN REPLACED BY ANOTHER PERSON KNOWLEDGEABLE IN ATTENDANT DUTIES. DURING A RESCUE, AN ATTENDANT MUST REMAIN IN PLACE STATIONED OUTSIDE AND NEAR THE ENTRANCE TO THE CONFINED SPACE. THE ATTENDANT MAY ASSIST THE RESCUE AS LONG AS THE WORK DOES NOT IMPEDE THE ATTENDANT'S DUTIES.

WHAT TRAINING DO ON-SITE RESCUE WORKERS REQUIRE?

IN ADDITION TO GENERAL CONFINED SPACE TRAINING, THE EMPLOYER MUST ENSURE THAT AN ADEQUATE NUMBER OF ON-SITE RESCUE WORKERS HAVE THE FOLLOWING TRAINING:

- FIRST AID AND CARDIOPULMONARY RESUSCITATION;
- ON-SITE RESCUE PROCEDURES IN ACCORDANCE WITH THE RELEVANT PLAN; AND
- USE OF THE RESCUE EQUIPMENT REQUIRED BY THE RELEVANT PLAN.