

- > Outline the M&C Safety (ES&H) program
- > Describe the core functions of Integrated Safety Management (ISM)
- > Tell you what is expected of you relative to ES&H
- > Give you a list of contacts that can help you with ES&H related concerns

- > Stop work and contact your Group Leader or an ES&H Group member, if you perceive a dangerous situation exists.
- You should respect the environment and conserve resources.
- Your work must meet the quality requirements of the task you are assigned.
- You must know and follow the environmental, safety, and health rules for your work.
- You are expected to incorporate ISM core functions into your work.

## GET TO KNOW THE ENVIRONMENTAL, SAFETY, HEALTH, AND QUALITY GROUP



- There are too many ESH&Q rules for one person to keep up with.
- It is the responsibility of the ESH&Q Group to:
  - > provide ESH&Q guidance;
  - > assist in review of your work;
  - > provide control recommendations; and
  - > to assist you with your concerns.



## ENVIRONMENTAL, SAFETY, HEALTH, AND QUALITY GROUP

**Environmental Protection Officer (EPO) is Kennie Edwards (576- 8568).**  
**Safety Officer (DSO) is Jamie Bain (576- 8665).**  
**Radiation Control Officer (RCO) is Steve Hamley (241- 0446).**  
**Chemical Hygiene Officer is Randy Ogle (574- 5744).**  
**Quality Assurance Specialist is Mark Vance (574- 6545).**  
**ESH Group Leader is Randy Ogle (574- 5744).**  
**Facility Manager is Ron Baldwin (574- 8603).**  
**Pollution Prevention Representative is Kennie Edwards (576- 8568).**  
**ORNL's Office of Safety and Health Protection Representative is Susan Lewis (576- 5373).**  
 (A complete list of M&C Support Services is included in your handouts)

## Integrated Safety Management (ISM) Working Safely Together



## DEFINE SCOPE OF WORK ANALYZE HAZARDS



- Plan every job together
  - > Involve all levels of workers; set expectations
  - > ESH professionals
  - > Group Leaders/Managers
    - WE ARE ALL PART OF THE SAFETY TEAM!
- Take time to identify all potential hazards

used.

- Follow procedures.
  - > Don't take shortcuts.
  - > Don't become complacent.
- Work safely and watch out for each other.
  - > Each of us are responsible for our own safety and for the safety of those around us.
- If you don't feel safe - STOP WORK.
  - > Understand the risks associated with your work and take personal responsibility to protect yourself.

- Report safety concerns or near-misses immediately to your Group Leader or Division Safety Officer.
- Feedback (lessons learned) provide opportunities for improvement.

### **Integrated Safety Management (ISM) Working Safely Together**

- These five functions are not independent. Rather, they are linked and interdependent such that outcomes during the accomplishment of one may affect the others.



### **NEW WORK REVIEW**



- We encourage you to have your new work reviewed by the ES&H Group prior to start up.
  - You are expected to participate in the processes used to plan your work and help identify associated hazards.
- Requires completion of a "Proposed New Work ESH&Q Review" (Example included in your handouts)
  - > Follows ISM core functions
    - Defines Work
    - Analyzes Hazards
    - Develops Controls
  - > Helps ensure all safety and environmental rules will be satisfied.

### **ACCESS TO M&C LABORATORIES**



- Although most labs are not locked, access is restricted due to the hazards and/or proprietary information in the area.
  - > Do not enter a lab unless you are escorted or have permission from the Group Leader and are aware of the hazards and controls for the area.
- The entrance to each laboratory is labeled with a note card

### **LABORATORY SAFETY SUMMARY**



- Applicable issues of safety, health and environmental concerns are summarized in the Laboratory Safety Summary for each lab. (An example is included in your handouts)
- The Lab Safety Summary is posted at or near the entrance to each lab.
- This document communicates the "safety envelop" for the area and lists recognized hazards and controls.
  - > Work which is recognized to be outside the approved safety

types of PPE are required for working in the area.

- It is your responsibility (and required by OSHA regulations) to use the safety equipment provided to you. (You will be scheduled for PPE training in the near future).
- Contact your group leader or Jamie Bain, Division Safety Officer, at 576-8665 if you need safety equipment and it is not readily available.



WEAR YOUR  
PERSONAL  
PROTECTIVE  
EQUIPMENT

Hazards Training; know the hazards, know how to protect yourself, know emergency actions. (You will be scheduled for this training in the near future).

- Material Safety Data Sheets, The OSHA Rules, and The M&C Chemical Hygiene Plan are available for your review on request from your Group Leader or from Randy Ogle, the Division's Chemical Hygiene Officer.
- Observe labels cautionary information, preserve existing labels and label secondary containers.
- DON'T FORGET..... RANDY OGLE AND KENNIE EDWARDS ARE "YOUR" CHEMICAL HYGIENE OFFICERS!

## BE PREPARED IN THE EVENT OF AN EMERGENCY

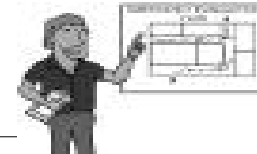
- Familiarize yourself with your work area.
- Know the location of the:
  - > telephone; safety shower; eye wash station
  - > fire extinguisher; and nearest exit.
- Depending on the nature of the emergency:
  - > You may need to evacuate the area immediately;
  - > Call 911 or the shift supervisor at 574-6606;
  - > Pull a fire alarm box; or
  - > Contact your group leader or others in the area for help.



## DURING A BUILDING EVACUATION, EXIT THE BUILDING IN A SAFE DIRECT ROUTE

- Follow all instructions given over the public address system or by emergency personnel.
- Learn your evacuation route before you need it.
  - > Routes are posted in main hallways.
- Evacuate to area assembly point.
- To hear a sample of the different alarms dial 574-4462.

THINK  
SAFETY



## Fire Extinguisher Usage

- Fire extinguishers are provided in your work area.
- The type of extinguisher is based on the anticipated fire hazard in the immediate area.
- Fire extinguisher usage by non-emergency employees is voluntary and allowed only if you are trained in the use of an extinguisher.



## THE DIVISION IS COMMITTED TO PROTECTING YOUR HEALTH

- Some of the IH programs include:
  - > Noise Monitoring
  - > Indoor Air Quality
  - > Ergonomics
  - > Bloodborne Pathogens (Included in your handouts, please read Module 90404 - M&C Bloodborne Pathogen Control Awareness)
  - > Reproductive Health Protection & Prenatal Exposure

preventing cumulative trauma disorders.

- Jobs that require repeated movements should be evaluated.
- For an ergonomic assessment of your work area, contact one of the following:
  - > Randy Ogle (574-5744)
  - > Susan Lewis (576-5373)
  - > Kennie Edwards (576-8568)

noted as containing radiation hazards without receiving approval and instructions from the person responsible for the area.

- If allowed into a radiation area, please follow all "entry" and "exit" requirements.
- If questions or concerns regarding radiation areas, contact Steve Hamley, Division Radiation Control Officer at 241-0446. (If you do not have a dosimeter contact your secretary. She can provide the documentation needed in order for you to obtain a dosimeter.)

#### **POLLUTION PREVENTION IS IMPORTANT TO THE ENVIRONMENT AND M&C DIVISION**

- The Division has programs in place to reduce our hazardous waste streams.
- Pursue methods that minimize project waste.
  - > Plan for waste reduction/disposal when project is in conceptual stage.
- Choose the safest material for your needs and purchase only the amount needed.
- Take advantage of the "Between Use Storage" (BUS) Area where unused chemicals can be obtained or transferred free of charge.
  - > Contact Kennie Edwards (576-8568) for BUS info.

#### **THE DIVISION IS DEDICATED TO PROTECTING OUR ENVIRONMENT**

- We are required to comply with "all" federal, state, and local environmental protection laws.
- Special rules exist for the use of drains, storage/disposal of hazardous materials, and recycling of certain materials.
- We have programs in place for the proper disposal of hazardous wastes.
  - > **Do not pour waste chemicals into any drain without prior approval from the EPO or your Group Leader.**
  - > **Do not dispose of hazardous materials in the regular trash cans or dumpsters.**
- Contact Kennie Edwards (576-8568) for assistance with hazardous waste disposal and if unsure of requirements for non-hazardous waste items.

#### **IF YOU HAVE ITEMS (OTHER THAN HAZARDOUS WASTE) TO DISPOSE OF, CONTACT YOUR EPO or FACILITY MANAGER**

- Prior to disposal of equipment or scrap metal
  - > Items must be free of oil, capacitors, transformers, mercury, light bulbs, refrigerant, etc.
- Special dumpsters are available for scrap metal.
- Special dumpsters are available for glass.
- For assistance in disposal of these items contact your facility manager or the Division EPO.

#### **QUALITY ASSURANCE IS CUSTOMER ORIENTED**

- Requirements are based on common sense and the needs of our primary customer - DOE.
- A record of research and development activities should be maintained by the researcher.
- Use of procedures and repeatable methods result in positive research processes and reliable results.

problems in Bldgs. 4500S, 4508, 4515, & west end of 5500.

- Contact Charlie DeVore (576-7713) concerning any problems in Bldg. 3525.
- Contact Lloyd Turner (574-5461) concerning any



- > Carpenters
- > Electricians
- > Millwrights
- > Painters
- > Pipefitters
- > Sheetmetal workers

- We ask that you do not perform craft (union) work unless it is incidental to research. (If unsure, ask your group leader or contact Ron Baldwin at 574-8603).
- Ron Baldwin can also help you schedule P&E craftsmen.

**ADMINISTRATIVE AND ENGINEERING SERVICES  
(A&ES) GROUP SATISFIES SELECTED R&D SUPPORT  
SERVICES FOR THE DIVISION**

- Equipment and materials purchases
- Removal of government property
- Shipment of government material and/or information
- Vehicles
- Miscellaneous services
- Their responsibility is to ensure services are satisfied
  - > In accordance with applicable regulations, and
  - > Serve to minimize your involvement in non-research efforts.

**ALL PURCHASE REQUESTS SHOULD BE HANDLED  
BY YOUR GROUP SECRETARY OR THE A&ES  
GROUP**

- Group leader or program manager will provide the charge number
- All purchases must be for official company business
- Certain procurements require special handling
  - > Capital equipment
  - > Hazardous materials
  - > Precious metals
  - > Special fabrication
  - > On-site service calls by subcontractors, etc.
- ESH&Q regulations must be addressed prior to procurement

**ALL EQUIPMENT AND MATERIAL AT ORNL IS  
CONSIDERED TO BE GOVERNMENT PROPERTY**

- Equipment and/or material can be removed from ORNL only for official company business
- See your secretary or A&ES Group for a Property Removal Pass

**THERE ARE VERY STRINGENT PROCEDURES WHICH  
MUST BE FOLLOWED PRIOR TO SHIPPING ANY  
EQUIPMENT OR OTHER MATERIALS FROM ORNL.**

- All shipments, with the exception of printed matter, must be routed through the Division's A&ES Group.
- This ensures certain issues are satisfied:
  - > Proprietary concerns
  - > DOT regulations
  - > Property accountability
  - > Export licensing, etc.
- You may ship printed matter through the ORNL Mail

or guest should be advised to:

- > Route the shipment through the A&ES Group where assistance with the applicable regulations will be provided.
- If they choose to assume responsibility for regulatory compliance and ship the material themselves, they must exclude any reference to the Division, ORNL, or LMER on the documentation they initiate with the commercial carrier (including return address, etc.).

■ Vehicles are assigned throughout the Division.

- General use vehicles are maintained and available by contacting the A&ES Group.

### CONTACT THE AE&S GROUP FOR OTHER SERVICES

- Company clothing/safety shoes
- Conference room scheduling
- Prescription safety glasses
- Property accountability/excessing
- Security keys/locks
- Special fabrication of metals, ceramics, etc.

### Computer Security

- Computing resources at ORNL and M&C Division are to be used only for “official business” in support of assigned duties.
- They are not to be used in a manner that would constitute waste or fraud.
  - > For example playing games, conducting personal business, viewing sexually explicit materials, etc.

### Computer Security (cont'd.)

- There is no expectation of privacy of activities while using ORNL computers and networks.
  - > ORNL retains the right to monitor all activities on these systems without prior notice or consent.
  - > Anyone using these systems must acknowledge their consent to, and understanding of, ORNL Computer Security Program's terms and conditions.
- All computer users should immediately report potential,