Risk Assessment is the process of ***determining,*** *either quantitatively or qualitatively, the* ***probability*** *and* ***magnitude*** *of an undesired event and* ***estimating the cost*** *to human society or the environment in terms of morbidity, mortality or economic impact*

— INSTITUTE OF ENVIRONMENTAL MANAGEMENT AND ASSESSMENT (IEMA)

The ILO estimates that nearly ***440,000 people*** *throughout the world* ***died*** *as a result of* ***occupational exposure*** *to hazardous substances in 2005.*

— INTERNATIONAL LABOUR ORGANISATION

On-site sampling for chemical identification in Jamaica (2005). Photo credit: Elva E. Clarke

876.977.1834 (phone)
876.977.1835 (fax)
oesh@uwimona.edu.jm
www.mona.uwi.edu/oesh

UWI OESH PROFESSIONAL DEVELOPMENT COURSES

Environmental and Occupational Risk Assessment

Eco-toxicology, Occupational Risk Analysis

Date: ***November 10, 2009 (5:00 p.m. – 8:00 p.m.)***
November 12 – 16, 2009 (8:30 a.m. – 4:30 p.m.)

Venue: ***Room C6, Chemistry Dept. UWI Mona Campus***

Cost: ***JMD 60,000.00***

Learning Outcomes

- identify, evaluate and communicate potential hazards and associated risks in the environment to the public, media and policy and decisions makers
- source and interpret local, regional and international standards pertaining to risk
- perform basic risk assessments
- make recommendation for prevention and control of risks in occupational and environmental settings

Containers awaiting chemical identification in Jamaica (2007). Photo credit: Elva E. Clarke

Target Audience

Environmental and Safety Managers, Environmental and Safety Officers, Industrial Hygienists or anyone with direct responsibility for environmental and occupational health.

Pre-requisites

Tertiary level education in occupational safety and health, environment, science, engineering, health or related fields.

Topics Covered

- Overview of environmental hazards —chemical, biological, physical
- The concept of risk in relation environmental hazards; quantitative methods of risk assessment
- Environmental hazards in air (indoor and outdoor), water and soils
- Air, water and soil quality — chemical and biological content with respect to environmental hazards and exposure risks
- Ecotoxicological and genotoxicological methods of assessing environmental hazards and risk; their limitations and effectiveness
- Bioavailability and mobility of hazardous materials; biomarkers
- Environmental hazards and exposure risks in sectors such as agricultural, tourism and financial services
- Abatement methods and technologies- asbestos, lead, heavy metals, pesticides, POPs, ozone depleting substances, etc.
- Waste handling and disposal
- Risk communication
- Preparation of environmental impact assessments

Objectives

- discuss the differences between hazard and risk in air, water and soils in environmental and occupational settings
- discuss the differences between hazard and risk in air, water and soils in environmental and occupational settings
- evaluate quantitative methods of risk assessment
- discuss, evaluate and appreciate the effectiveness of different methods of hazard control and management
- discuss and evaluate different methods and technologies of handling and disposal of hazardous materials and waste
- explore environmental impact assessments and risk communication strategies

Lecturers

Prof. Hans deKruijf *is a part-time senior advisor to UNITAR (UN Institute for Training and Research) Chemicals and Waste department. He has co-developed guidance documents on risk management, chemicals management, action plan development, relevant workshop programs to include the recent SAICM, Strategic Approach to Integrated Chemicals management. He is professor of Ecotoxicology and his passion for the environment has occasioned his travel to many countries around the world including but not limited to Jamaica, Surinam, Netherlands Antilles, India, Nicaragua, Thailand, Cyprus, Canada, Indonesia, Benin and Costa Rica. Professor Kruijf is joined by* ***Dr. Irina Zastenskaysa,*** *the deputy director of Republican Scientific-Practical Centre of Hygiene in Belarus. Dr. Zastenskaya posits a practical approach to occupational and environmental risk assessment informed by her years of experience in the field and her in-depth knowledge of chemical management and toxicology.*