Handout 3.1 Types of Information Collected and Considered When Performing the Risk Assessment

A. Hazard Identification
- Collection of Data
  - a. Name of Substance
  - b. Physical/Chemical Properties
  - c. Source of Information
  - d. Exposure to Toxic Substances
    - Route of exposure
    - Duration of exposure
    - Frequency of exposure
    - Exposure to other toxic substances
  - e. Information on Other Factors

B. Hazard Evaluation or Dose-Response Assessment
1. Calculate Dose-effect
2. Incorporate Safety Factor
3. Determine Dose-response Relationship

C. Exposure Assessment
1. General Information for Each Chemical
   - a. Molecular Formula and Structure
   - b. Physical and Chemical Properties
2. Sources
   - a. Characterization of Production and Distribution
   - b. Uses
   - c. Disposal
   - d. Summary of Environmental Releases
3. Exposure Pathways and Environmental Fate
   - a. Transport and Transformation
   - b. Identification of Principal Pathways of Exposure
   - c. Prediction of Environmental Distribution
4. Measured or Estimated Concentrations
   - Estimation of Environmental Concentration
5. Exposed Human Populations
   - a. Effects from exposure to simple and complex mixtures
   - b. Geographic area
   - c. Health Impact on Susceptible Population
   - d. Population habits
6. Integrated Exposure Analysis (Measurement of Exposure)
   - Calculation of Exposure
     - a. Identification of the exposed population
     - b. Identification of pathways of exposure

D. Risk Characterization