Likelihood of Release (LR)

Observed Release
or
Potential to Release
- Containment
- Net Precipitation
- Depth to Aquifer
- Travel Time

X

Drinking Water

Waste Characteristics (WC)

Toxicity/Mobility/Persistence
- Toxicity
  - Chronic
  - Carcinogenic
  - Acute
- Mobility
  - Water Solubility
  - Distribution Coefficient (K_d)
- Persistence
  - Half-life
  - K_{ow}

Hazardous Waste Quantity
- Hazardous Constituent Quantity
- Hazardous Wastestream Quantity
- Volume
- Area

X

Target (T)

Nearest Intake
Population
- Level I Concentrations
- Level II Concentrations
- Potential Contamination

Resources

+

Human Food Chain

Waste Characteristics (WC)

Toxicity/Mobility/Persistence/
Bioaccumulation
- Toxicity
  - Chronic
  - Carcinogenic
  - Acute
- Mobility
  - Water Solubility
  - Distribution Coefficient (K_d)
- Persistence
  - Half-life
  - K_{ow}
- Bioaccumulation Potential

Hazardous Waste Quantity
- Hazardous Constituent Quantity
- Hazardous Wastestream Quantity
- Volume
- Area

X

Targets (T)

Food Chain Individual
Population
- Level I Concentrations
  - Human Food Chain Production
- Level II Concentrations
  - Human Food Chain Production
- Potential Human Food Chain Contamination
  - Human Food Chain Production

+

Environmental

Waste Characteristics (WC)

Ecosystem Toxicity/Mobility/
Persistence/Bioaccumulation
- Ecosystem Toxicity
  - Ambient Water Quality Criteria
  - Ambient Aquatic Life Advisory Concentrations
- Mobility
  - Water Solubility
  - Distribution Coefficient (K_d)
- Persistence
  - Half-life
  - K_{ow}
- Ecosystem Bioaccumulation Potential

Hazardous Waste Quantity
- Hazardous Wastestream Quantity
- Hazardous Constitutent Quantity
- Volume
- Area

X

Targets (T)

Sensitive Environments
- Level I Concentrations
- Level II Concentrations
- Potential Contamination

Figure 4-2
OVERVIEW OF GROUND WATER TO SURFACE WATER MIGRATION COMPONENT