



Dose Compliance Concentration (DCC) Calculator



Stuart Walker – walker.stuart@epa.gov, (703) 603-8748

DCC: <http://epa-dccs.ornl.gov/>

Office of Superfund Remediation and Technology Innovation, US Environmental Protection Agency

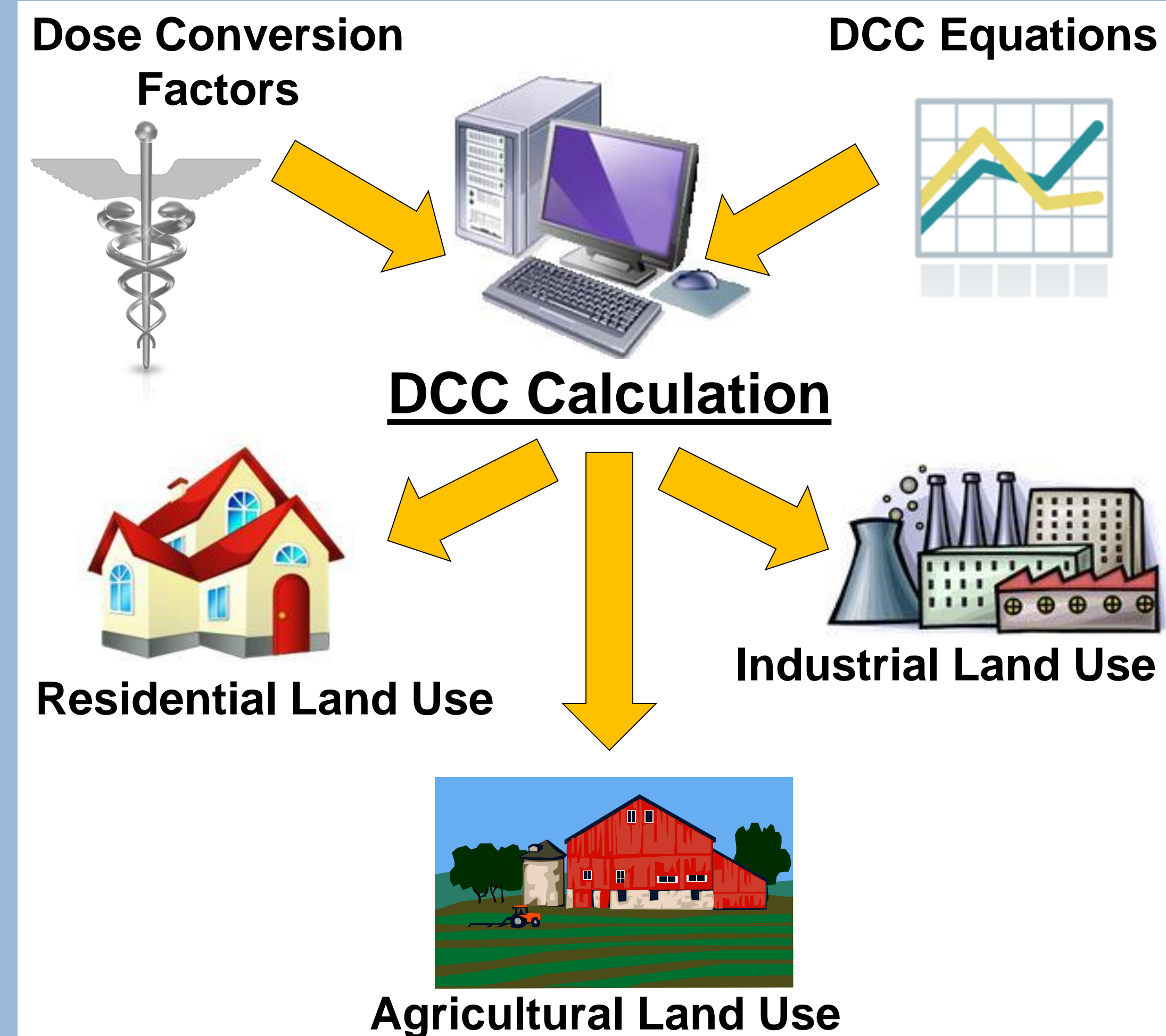
What is DCC?

- DCC stands for **dose compliance concentrations**.
- DCCs are cleanup levels that correspond to a specific dose of radiation.
- Superfund is **NOT** a dose-based program.

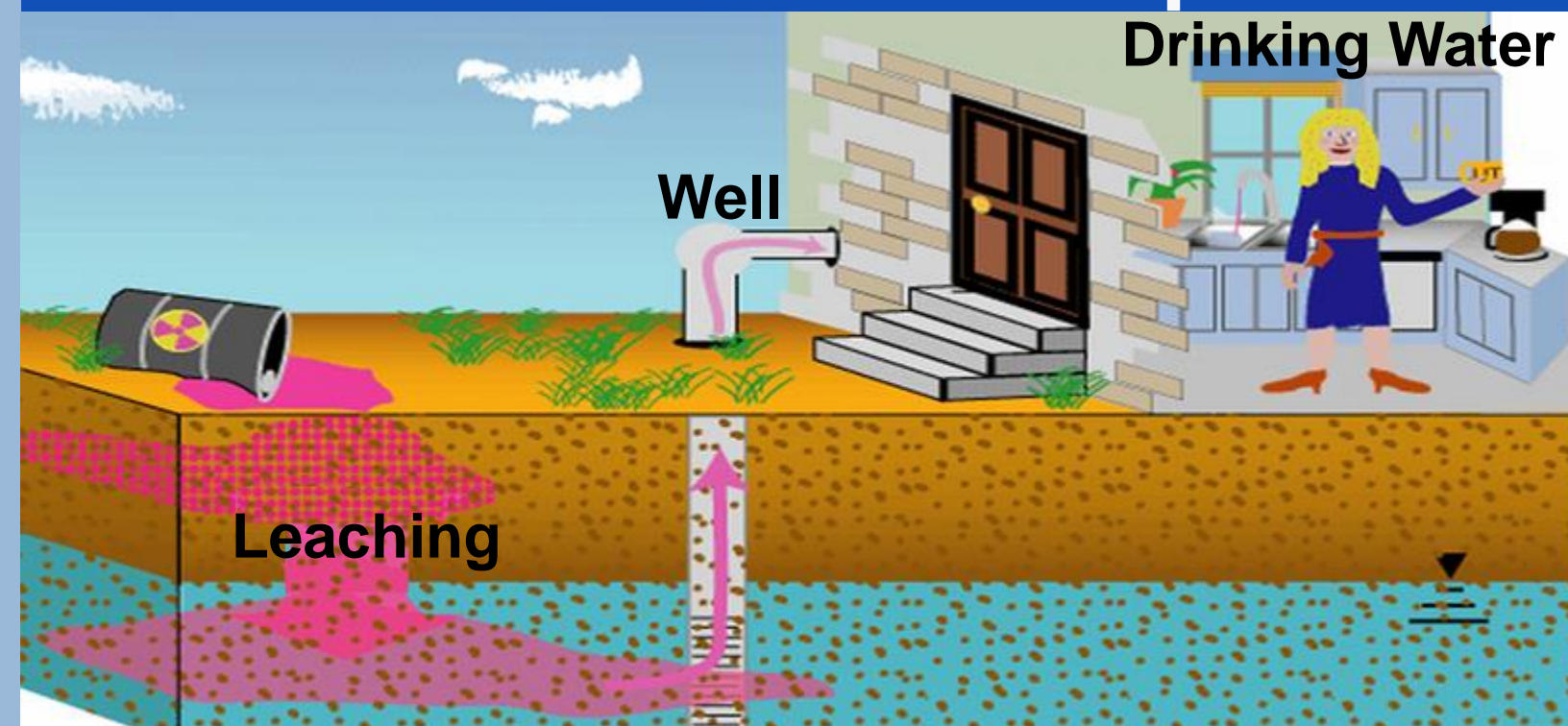
DCC Calculator

- The **DCC Calculator** is a tool that allows EPA to calculate cleanup levels in soil, water, and air that correspond to a specific dose of radiation at a Superfund site. The calculator uses **dose conversion factors (DCF)** in calculating radiation dose.
 - **Dose** is the amount of radiation absorbed by a person's body.
 - **DCFs** use concentration of a radionuclide in soil, air, water, and food to determine the dose of radiation a person at a contaminated site is exposed to. DCFs also take into account the type of exposure (inhalation, ingestion, or external) in determining dose.
- Superfund takes into account cancer risk, not radiation dose, in deciding cleanup levels. The DCC calculator is useful to show compliance with existing regulation of cleanup levels that may be in place.

How does the DCC Calculator Work?



Soil to Groundwater Exposure



Outdoor (or Composite) Worker: Soil Exposure



Resident: Soil Exposure



Tapwater Ingestion Exposure



Indoor Worker: Soil Exposure



Agricultural: Soil Exposure



Fish Ingestion Exposure

