



Surface Preliminary Remediation Goals (SPRG) and Surface Dose Compliance Concentrations (SDCC) Calculators



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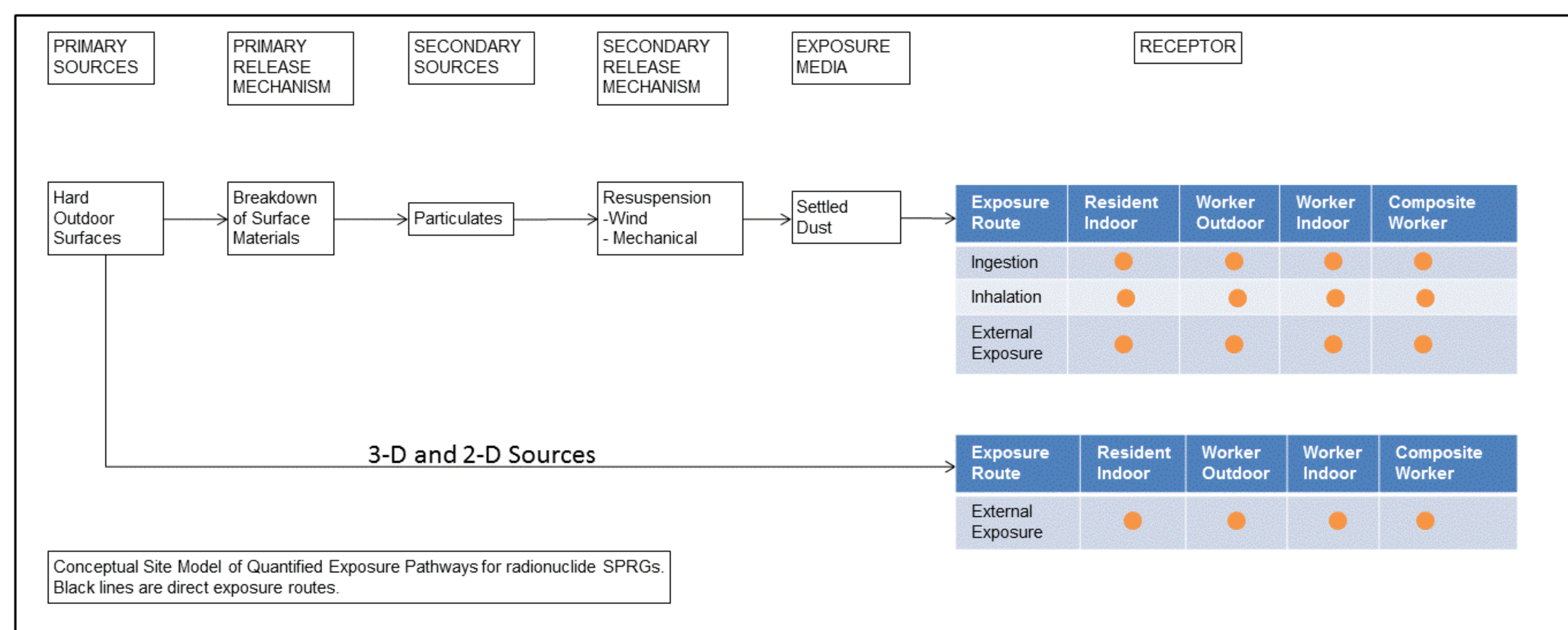
SPRG: <http://epa-sprg.onrl.gov>

SDCC: <http://epa-sdcc.onrl.gov>

BPRG Calculator

- Calculates risk-based **surface preliminary remediation goals (SPRGs)** for use in **radiation risk assessments** on contaminated outside hard surfaces (streets, pavement, sides of buildings). Useful when ARARs (Applicable or Relevant and Appropriate Requirements – regulations set by governments) are not available.
- Calculates cleanup concentrations based on a target cancer risk of 1×10^{-6} .
- Not cleanup standards – used for site screening and initial cleanup goals.
- Applicable for residential, indoor and outdoor worker exposure scenarios.

Conceptual Site Model



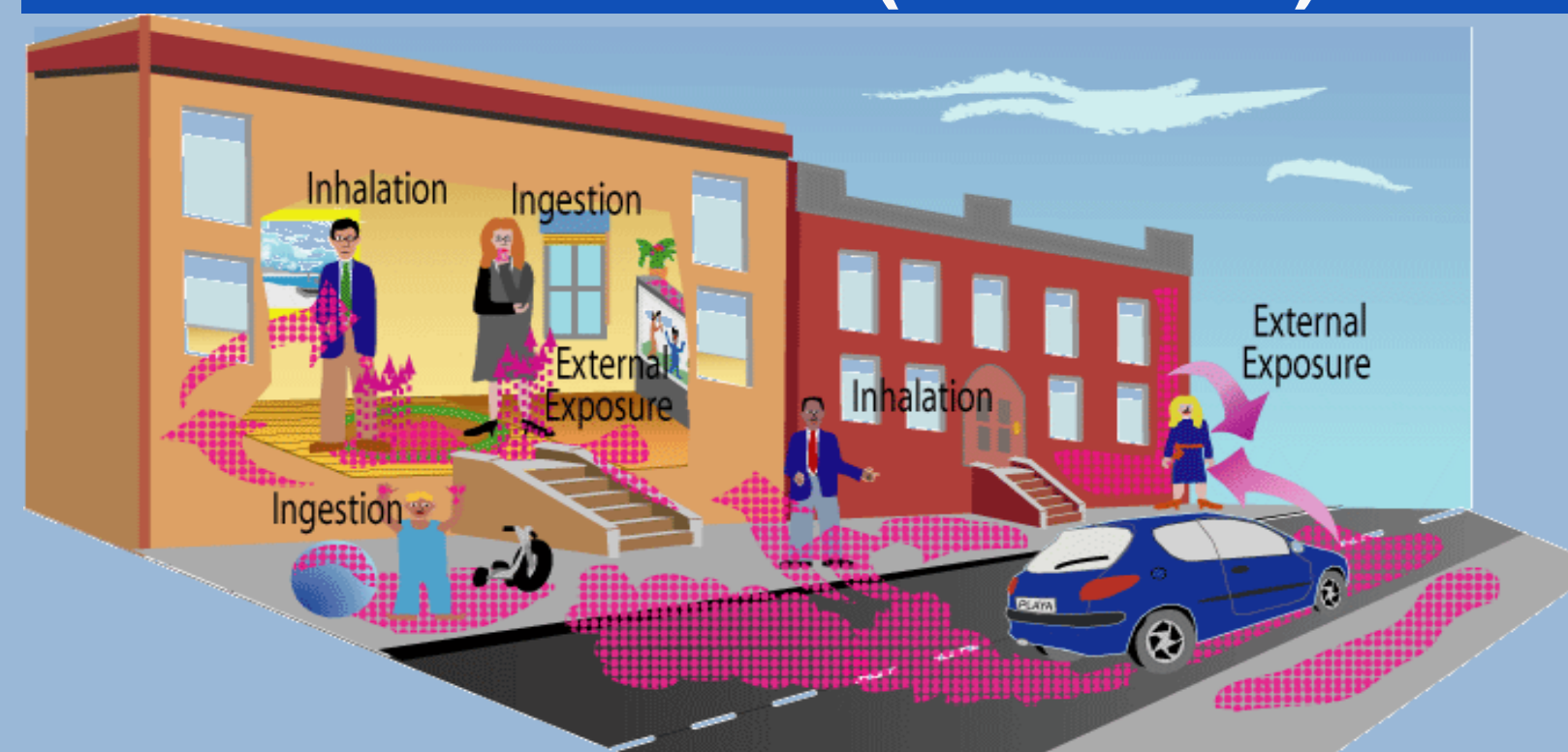
Using the Calculators

- Select scenario:** 3 exposure scenarios (resident, indoor worker, outdoor worker) and 5 exposure pathways. All exposure pathways demonstrated below with a sample exposure scenario.
- Select PRG/DCC type:** use default parameters or site-specific. Defaults useful for initial site assessments. If data is collected, may use site-specific data to set more accurate cleanup goals.
- Select units:** units of activity in pCi or Bq.
- Select isotopes of interest:** Select the radionuclides and/or radionuclide decay chains present at site.
 - +D includes activity of daughter nuclides (100 yr).
 - +E includes activity of daughter nuclides (1000 yr).

BDCC Calculator

- Calculates **surface dose compliance concentrations (SDCCs)** for use on contaminated outdoor hard surfaces.
- Superfund is **NOT** a dose-based program.
- DCCs are useful for demonstrating compliance to ARARs.

Settled Dust (Resident)



2D Exposure to Fixed Contaminated Finite Slabs (Resident)



2D Exposure to Fixed Settled Dust on Finite Slabs (Outdoor Worker)



3D Exposure to Fixed Contaminated Building Materials (Outdoor Worker)



3D Exposure to Fixed Settled Dust on Outdoor Surfaces (Indoor Worker)

