

INPUT DATA FOR RADTRAN FOR PA'INA IRRADIATOR

TAB	OPTIONS
Title	Accident Options: Incident Free and Accident
	Output Level: 4
	Health Effects: Rem/person-rem
Package	Long Dimension: 1 meter
	Dose Rate : 13 mrem/hr (equivalent to regulatory limit)
	Gamma Fraction: 1
	Neutron Fraction: 0
Radionuclide	⁶⁰ Co pencils. Each pencil equals [REDACTED] (One package)
Vehicle ¹	Number of Shipments: 6
	Vehicle Size: 53 ft (Common length most tractor trailers)
	*Vehicle Dose: 13 mrem/hr (equivalent to regulatory limit)
	Gamma Fraction: 1
	*Crew Size: 2
	*Crew Shielding Factor: 1 (no shielding)
	Crew View: 1 m
	Exclusive Use: Yes
	Package: Number of Packages: 10
Link	Link Name: Link
	Vehicle: Name from Vehicle TAB
	Length: 1 km
	*Speed: 24 km/hr – speed for trucks on city street
	*Population Density: 3326 persons/km (urban)
	*Vehicle Density: 2800 vehicles/hr (urban)
	*Persons per Vehicle: 2
	Accident Rate: 1
	Fatalities per accident: 0
	Zone: Urban
	Type: Primary Highway
	Farm Fraction: 0
Stops	Options from this TAB were not used to the short distance between airport and facility.
Handling	Options from this TAB were not used to the short distance between airport and facility.
Accident	Probability Fraction: 1 (assumes an accident will occur)
	*Deposition Velocity: 0.1
	Release: 6.5E-05 (Value from SFST security assessments for ⁶⁰ Co)
	Aerosol: 1 (assumes everything released is aerosolized)
	Respirable:1 (assumes everything aerosolized is respirable)
	Isopleth: Used Default Population Densities
	Weather: Used Pasquill Stability Class D fraction =1 (assumes average met data)

* Values used are from RadCat 2.3 User Guide, SAND2006-6315

¹ Since the specifics of shipping the sources to the facility were not known, it was assumed that each truck shipment had 10 packages and that there would be six shipments to the facility for a total of [REDACTED] Ci.