base font is Times New Roman, 11 pt; line spacing = 1.1
margins: top, left, and right = 1"; bottom = 1.4; header = 0.5; footer = 1"

2.0 Relative Hazard Calculation

#1 heading: 16 pt Bold, Times New Roman. centered

The methodology consists of 1) using site-specific information (e.g., information from site disposition maps, site-specific Project Baseline Summaries (PBSs), and other site documents that address elements of the overall risk story for a site) and 2) applying factors from applicable site-specific risk assessment results or look-up tables to generate relative hazard (RH) ratio values by waste type.

Relative hazards calculations are made using the following relationship of key risk-related parameters that can be extracted from the information provided for the risk profiles:

2.1 Quantity (Q) Data

#2 heading: 14 pt Bold, Times New Roman

The best available site-specific quantity data should be used when calculating the RH ratios. In order for the RH ratios to be comparable across the different waste types, the quantity data should be specific to each controlling constituent and should be provided in units of curies for radionuclides or grams for hazardous chemicals.

2.1.1 Radionuclides

#3 heading: 12 pt Bold, Times New Roman

The HM for radionuclides are similar to an exposure pathway-specific dose factor although the modeling is not detailed enough to provide an absolute dose estimate. Like the MHRS and HRS, radionuclides are evaluated under five potential exposure pathways: air, surface water, groundwater, fire/explosion, and direct contact.[(a)]

- The dose calculation methodology was updated to ICRP Publication 30 (ICRP 1979), using the GENII computer codes (Napier et al. 1988a; 1988b; 1988c) to perform updated calculations for the five exposure pathways. Radionuclide HMs are now based upon effective dose equivalent (EDE) rather than critical organ dose.

- The methodology used to produce the RH-based HM values utilized default inputs of the GENII code, and, for the groundwater exposure pathway, used groundwater transfer partition coefficients (K_d) from Serne and Wood (1990).

$$k = k_0 10^{\eta \cdot pH} e^{\frac{-E_a}{RT}\left(1 - \frac{Q}{K}\right)} \tag{2.1}$$

center equations

equation captions are flush right

(a) This differs from a far-field scenario, defined as determining impacts of a particular release of radioactive or hazardous material into a wide environment, such as the dose from releases from a stack to individuals or populations downwind.

2.1.1.1 Air Exposure Pathway

#4 heading: 11 pt Bold, Times New Roman

Assumptions are that the exposed individual lives continuously in contaminated air (chronic inhalation) and is continuously exposed to external radiation from radionuclides deposited on the ground surface (Table 2.1).

center captions above tables; initial caps, no period at end

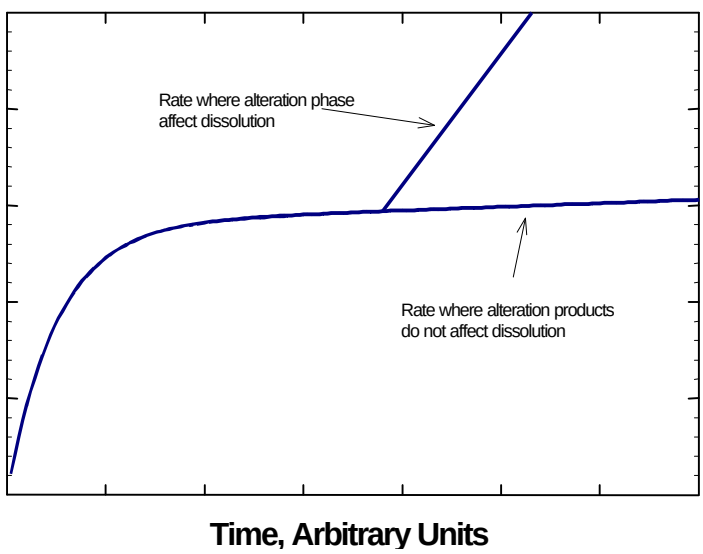
Table 2.1. Hazard Measures for Chemicals Based on Reportable Quantity

bold column headings

Category	RQ	HM
A	1.32	1000
B	10.4	100
E	5000.588	0.5

2.2 Hazard Control Factors

If the risks are compared for a contaminant or waste in differing physical conditions or locations but having the same probability of release or exposure, the relative hazards are related in the same proportion as the relative risks (Figure 2.1).



center figures, tables, and their captions

center captions below figures; initial caps, no period at end

Figure 2.1. Generic Glass Dissolution Showing How Alteration