NYC 9/11 Public Portal Document

DUST EXPOSURE CALCULATION WORKSHEET

Name of Site:
JATC Riker's Island

Safety factor for this site = 6

Chemical	*Exposure Limit (mg/m3)*	*Maximum Soil Concentration (mg/kg)*	*Exposure Limit Based on Single Compound (mg/m3)*	*Dust Quotient for Each Compound (level/limit)*
Mercury	0.05	0.9	9259.2593	18.00
			SUM=	18.00
	Dust Exposure Level at PEL for Mixture (mg/m3) =			9259.2593
	Action Level (respirable fraction in mg/m3)=			4629.6296

EQUATIONS USED IN THIS CALCULATION

Dust exposure level = (For one dust)

$$\frac{(1E+6)(\text{Exposure Limit mg/m3})}{(\text{Concentration mg/kg})(\text{Safety Factor})}$$

Dust exposure level = (For mixed dusts)

$$\frac{(1E+6) / (\text{Safety Factor})}{\text{Sum of } [(\text{Concentration mg/kg}) / (\text{Exposure Limit})]}$$

The total dust action level for PPE upgrades is the dust exposure level calculated by the spreadsheet. The respirable fraction action level is 1/2 of the total dust action level.

CITY_21MC100_006246029

NYC-WTC_000266641