

RISK ASSESSMENT – Each identified hazard is assigned a Risk Assessment Score (RAS). This RAS represents the degree of safety/health risk associated with the identified hazard.

A **RAS** is established by multiplying two factors associated with an identified hazard:

- the severity of the hazard (represented by a hazard severity score)
- the probability that exposure to the hazard will result in a mishap (represented by a mishap probability score)

RISK ASSESSMENT SCORE (RAS)				
	MISHAP PROBABILITY			
HAZARD SEVERITY	MP1 = 4	MP2 = 3	MP3 = 2	MP4 = 1
HS1 = 4	16 ¹	12 ¹	8 ²	4 ⁴
HS2 = 3	12 ¹	9 ²	6 ³	3 ⁴
HS3 = 2	8 ²	6 ³	4 ⁴	2 ⁵
HS4 = 1	4 ⁴	3 ⁴	2 ⁵	1 ⁵

¹ Equivalent to Risk Assessment Code (RAC) 1, Critical
² Equivalent to RAC 2, Serious
³ Equivalent to RAC 3, Moderate
⁴ Equivalent to RAC 4, Minor
⁵ Equivalent to RAC 5, Negligible

HAZARD SEVERITY – An evaluation of the worst possible consequence(s) that could result from exposure to the identified hazard, defined by the degree of injury, occupational illness or property damage.

Category HS1 (HS Score = 4): Death, permanent total disability, loss of facility or major asset(s)

Category HS2 (HS Score = 3): Severe injury/illness, permanent partial disability, temporary total disability (>3 months), major property damage

Category HS3 (HS Score = 2): OSHA-recordable injury/illness, compensable injury/illness, minor property damage

Category HS4 (HS Score = 1): Minimal threat to personnel or property, non-recordable injury/illness, but still a violation of a standard

MISHAP PROBABILITY – The probability that a hazard will result in a mishap, based on an evaluation of such factors as location, exposure in terms of cycles of hours of operation, and affected population.

Category MP1 (MP Score = 4): Likely to occur immediately or within a short time period

Category MP2 (MP Score = 3): Probably will occur in time

Category MP3 (MP Score = 2): Possibly will occur in time

Category MP4 (MP Score = 1): Unlikely to occur