Errata Sheet – January 30, 2006

Guidelines for Chemical Process Quantitative Risk Analysis

Chapter 2: Consequence Analysis

American Institute of Chemical Engineers; New York, NY 2000

Page

D 60	
Page 68	Table 2.4. Several table entries are incorrect.
	For 180° Standard threaded elbow, $K_{\infty} = 0.60$ instead of 0.70
	For Tees, Run-through, threaded, $K_{\infty} = 0.10$ instead of 1.10
	For Tees, Flanged/welded, $K_1 = 150$ instead of 250; $K_{\infty} = 0.50$ instead of 0.05
	For Check valves, Swing, $K_{\infty} = 1.50$ instead of 0.0
	For check valves, Tilting disk, $K_{\infty} = 0.50$ instead of 1.50
	Bottom number of 0.50 in column under K_{∞} should be deleted.
Page 75	Figure 2.4. Upper and lower k values are reversed, i.e. the lower curve should be
	K = 1.2 and the upper curve $k = 1.67$.
Page 99	Middle of page. The italicized word <i>Evaporation</i> should be bold
	Evaporation to be consistent with other headings.
Page 100	Below Equation (2.1.39)
	Heat flux should have units of (energy/area-time) instead of (energy/area)
	Thermal conductivity should have units of (energy/length-time-deg)
	instead of (energy/length-deg)
Page 114	Table 2.8. "E: Slightly" should be "E: Slightly"
Page 121	Figure 2.28. Scales on y-axis on bottom two figures are off by an order of
	magnitude. In both, scale goes from 10^1 to 10^4 .
Page 122	Table 2.12.
	Under urban conditions, for A-B stability class, equation should
	be $\sigma_z = 0.24x(1+0.001x)^{+1/2}$
	Under urban conditions, for D stability, equation should
	be $\sigma_z = 0.14x(1+0.0003x)^{-1/2}$
Page 144	Near middle of page. "demensional" should be "dimensional"
Page 147	Table 2.16. Heading in first column should be "Concentration Ratio" not
<u> </u>	"Concentration ration".
Page 148	Table 2.16. Heading in first column should be "Concentration Ratio" not
_	"Concentration ration".
Page 161	Figure 3.3. The arrival time, impulse and duration should all have units
	that are divided by (kg TNT) ^{1/3} .
Page 170	Table 2.20. First column. The words "Planar" and "Line" should be
	switched.
Page 253	Table 2.29. "n-butyl acrytate" should be "n-butyl acrylate."

Spreadsheets

- Example 20: The impulse, duration and arrival time should be multiplied by (TNT mass)^{1/3}.
- Example 21b: Flame speed at top of spreadsheet has units of Mach no instead of m/s Excel version: interpolation for scaled overpressure and scaled impulse is missing.