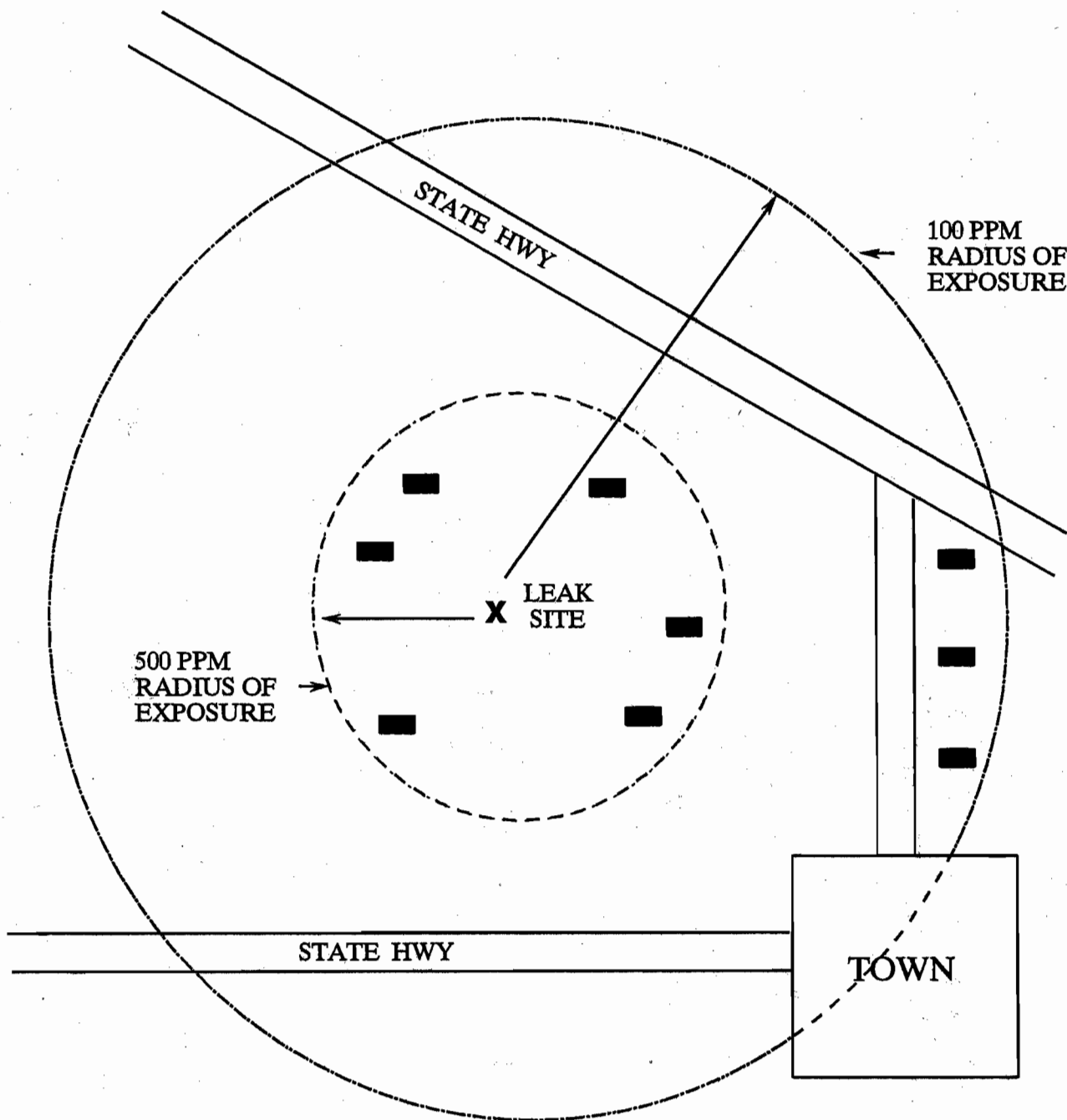
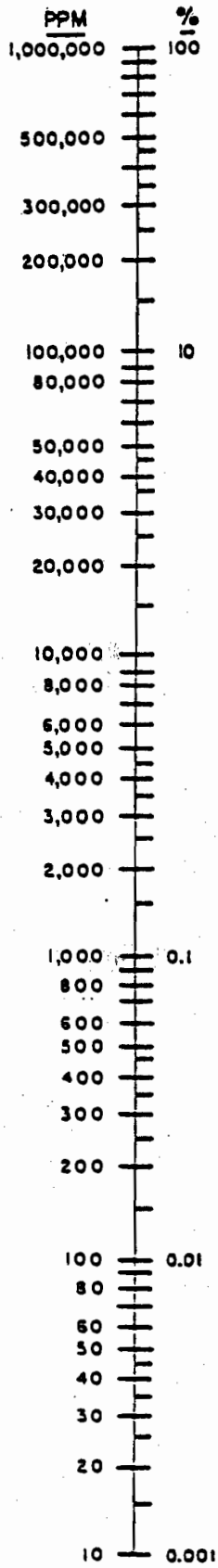


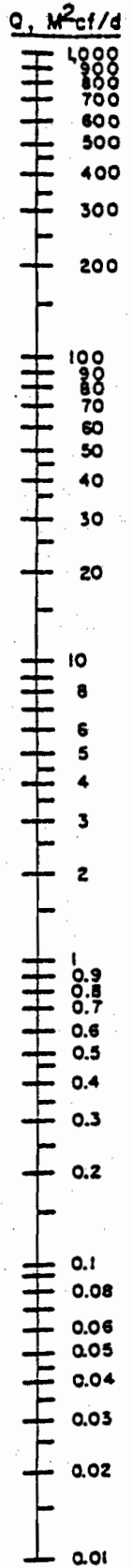
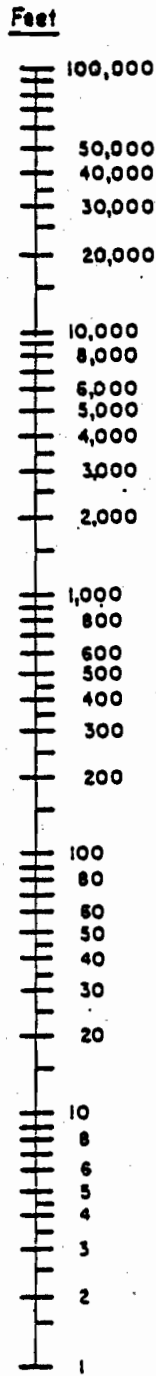
APPENDIX

EXAMPLES OF DISPERSION PROBLEMS





HYDROGEN SULFIDE 100 PPM EXPOSURE RADIUS



At X = 3000 Ft.
Q = 226,547 PPM

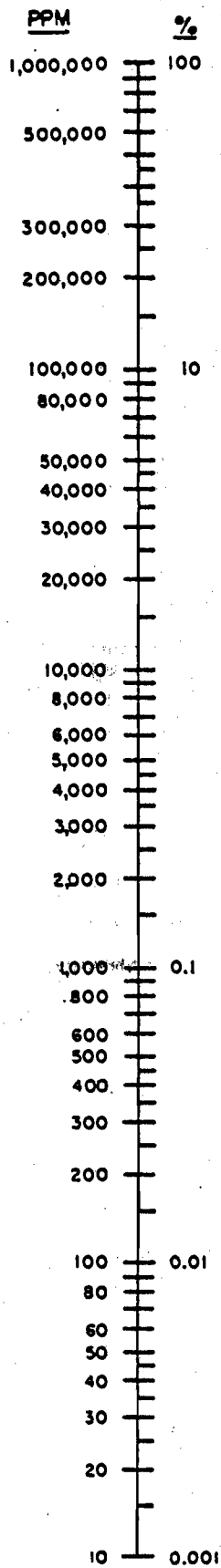
At X = 50 Ft.
Q = 326.4 PPM

Below 100 PPM
Rule 36 N.A.

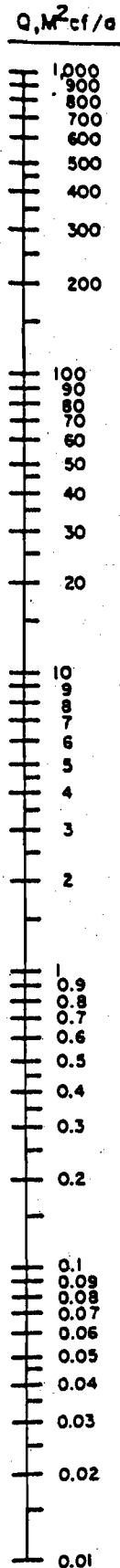
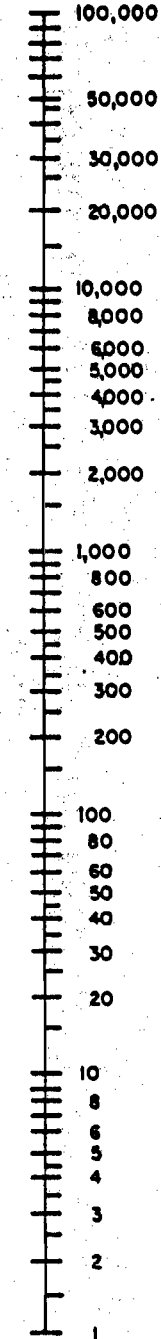
100 PPM Radius of Exposure in Feet = X

$$X = [(1.589)(\text{Mole Fraction})(\text{Escape Rate})]^{0.6258}$$

$$= [(1.589)(\text{PPM})(Q \text{ in } M^2\text{cf/d})]^{0.6258}$$



HYDROGEN SULFIDE
 500 PPM EXPOSURE RADIUS
 FEET



At X = 50 Ft.
 Q = 1140.9
 PPM

500 PPM Radius of Exposure in Feet = X
 $X = [(0.4546)(\text{Mole Fraction})(\text{Escape Rate})]^{0.6258}$

$X = [(0.4546)(\text{PPM} \div 10^6)(Q \times 10^6 \text{ cu. ft.})]^{0.6258}$

Wind velocity = 1 mph; Plume is shape of H₂S dispersion.

Pressure base 14.65 psia, T_b = 60°F