

## APPENDIX N

### EXAMPLE CALCULATION FOR FULL-PERIOD, CONTINUOUS SINGLE SAMPLE

A single glass-fiber filter and personal sampling pump were used to sample for carbaryl for an 8-hour period. The SLTC reported  $6.07 \text{ mg/m}^3$ . The SAE for this method is 0.23. The PEL is  $5.0 \text{ mg/m}^3$ .

Step 1. Calculate the exposure severity (using [Equation 9](#) from Section III.K.2):

$$Y = \frac{6.07}{5.0} = 1.21$$

Step 2. Calculate confidence limits

Calculate the  $LCL_{95\%}$  (using [Equation 10](#) from Section III.K.2):

$$LCL_{95\%} = 1.21 - 0.23 = 0.98$$

Because the  $LCL_{95\%}$  does not exceed 1.0, noncompliance is not established.

Calculate the  $UCL_{95\%}$  (using [Equation 11](#) from Section III.K.2):

$$UCL_{95\%} = 1.21 + 0.23 = 1.44$$

Step 3. Classify the exposure.

Because the  $LCL_{95\%} < 1.0$  and the  $UCL_{95\%} > 1.0$ , classify as possible overexposure.