

Today's Air Breakpoints Update FACT sheet

Update 05/12/2016

- Currently in Today's Air, the short term breakpoints (one hour and eight hour) are estimated using Screening guidance from EPA. The SCREEN model guidance contains multiplying factors to estimate longer term average concentrations from hourly concentrations ([EPA-454/R-92-019](#), page 4-16):

$$(24\text{-hour concentration}) = (1\text{-hour concentration}) \times 0.4$$

$$(8\text{-hour concentration}) = (1\text{-hour concentration}) \times 0.7$$

- To estimate the shorter term concentrations, we start with the Washington Air Quality Advisory 24-hour breakpoints and back calculate with the multiplying factors to obtain the one and eight hour breakpoints. Previously, there was an error in the calculation:

$$(1\text{-hour concentration}) = (24\text{-hour concentration}) / 0.4 \text{ (correct)}$$

$$(8\text{-hour concentration}) = (24\text{-hour concentration}) / 0.7 \text{ (incorrect)}$$

- We have corrected the calculation and the associated 8-hour breakpoints to be consistent with the Screening Procedures:

$$(8\text{-hour concentration}) = (1\text{-hour concentration}) \times 0.7$$

| Category | 8-hour Average Breakpoints ($\mu\text{g}/\text{m}^3$) | |
|--------------------------------|---|------------------------|
| | Previous Application | Corrected Calculations |
| Good | 0 – 19.1 | 0 – 23.5 |
| Moderate | 19.2 – 29.1 | 23.6 – 35.7 |
| Unhealthy for Sensitive Groups | 29.2 – 50.6 | 35.8 – 62.0 |
| Unhealthy | 50.7 – 114.9 | 62.1 – 140.7 |
| Very Unhealthy | 115.0 – 193.4 | 140.8 – 237.0 |
| Hazardous | >193.4 | >237.0 |