

Reading Guide

CEEG 340–Introduction to Environmental Engineering

Instructor: Deborah Sills

Reading assigned for Friday 8/30: Textbook, pp.40–52

After completing the reading, you should be able to:

1. Define ppm_v and differentiate between ppm_m and ppm_v .
2. Use the ideal gas law to convert from units mole fraction to units of partial pressure (ex. 2.4).
3. Use the ideal gas law to convert from units of ppm_v or ppb_v to mass per volume.
4. Convert from units of concentrations of mg/L NH_3 , mg/L NH_4^+ , and mg/L NO_3^- to units of mg/L “as N” (see example 2.13 on p.51).
5. List the three major greenhouse gases, and describe qualitatively changes in their concentrations since preindustrial times (you don’t need to memorize any numbers).