Ozone Depletion Study Guide EVPP 111 Lecture - Spring 2004 Dr. Largen

Ozone Depletion

- In what part of the atmosphere is the protective layer of ozone located?
- About what percentage of the sun's harmful UV radiation is kept from reaching the earth's surface by the stratospheric ozone layer?
- What is the "ozone hole" and when and where does it occur?
- What are the possible consequences of the depletion of stratospheric ozone?
- What are chlorofluorocarbons (CFCs)?
- Why were the CFCs originally called "dream chemicals"?
- What are some of the uses of CFCs?
- Why don't CFCs "rain" out of the troposphere?
- How long does it take CFCs in the troposphere to rise into the stratosphere?
- How do CFCs in the stratosphere contribute to ozone depletion?
- How long can a CFC last in the stratosphere?
- What are ozone depleting compounds?
- What are some ozone depleting compounds other than CFCs?
- What are some natural sources of ozone depleting compounds?
- Of the observed ozone loss in the stratosphere since the late 1970s, what percentage of that loss has been attributed to compounds released into the atmosphere by human activities?
- What is meant by seasonal thinning of the ozone layer over Antarctica?
- Approximately what percentage of the ozone over Antarctica is destroyed each Antarctic spring and summer?
- Why is the loss of ozone over Antarctica seasonal?
- What are the possible effects of increased UV reaching the earth;s surface?
- What have been some of the efforts to reduce ozone depletion?
- Why does the World Meteorological Organization say that even if we stopped all ozone-depleting compound emissions immediately the depletion of the ozone layer would continue for several decades?