TOPIC 7.6
Reduction of Air Pollutants

Required Course Content

ENDURING UNDERSTANDING

STB-2

Human activities have physical, chemical, and biological consequences for the atmosphere.

LEARNING OBJECTIVE

STB-2.G

Explain how air pollutants can be reduced at the source.

ESSENTIAL KNOWLEDGE

STB-2.G.1

Methods to reduce air pollutants include regulatory practices, conservation practices, and alternative fuels.

STB-2.G.2

A vapor recovery nozzle is an air pollution control device on a gasoline pump that prevents fumes from escaping into the atmosphere when fueling a motor vehicle.

STB-2.G.3

A catalytic converter is an air pollution control device for internal combustion engines that converts pollutants (CO, NO*x*, and hydrocarbons) in exhaust into less harmful molecules (CO_2, N_2, O_2, and H_2O).

STB-2.G.4

Wet and dry scrubbers are air pollution control devices that remove particulates and/or gases from industrial exhaust streams.

STB-2.G.5

Methods to reduce air pollution from coal-burning power plants include scrubbers and electrostatic precipitators.

SUGGESTED SKILL

Environmental Solutions

7.D

Use data and evidence to support a potential solution.

AVAILABLE RESOURCES

- Classroom Resource > **AP Environmental Science Teacher's Guide**
- The Exam > **Chief Reader Report 2018, Q1**
- The Exam > **Student Performance Q&A 2016, Q3**
- The Exam > Samples and Commentary (**2018, Q1**, **2016, Q3**)