

## Introduction

During this presentation we will focus on air quality. The air we breath, ambient air, has never been pure. There have always been natural and manmade sources of air pollution. Let's look at the evolution of air quality management in the United States.

Show slides of dirty air - Washington, New York, LA only about 40 - 50 years ago.

History of air pollution - show Search for Clean Air (stop at Mount Mitchell tower.)  
At: [http://films.com/id/7773/The\\_Search\\_for\\_Clean\\_Air.htm](http://films.com/id/7773/The_Search_for_Clean_Air.htm),  
select "preview clip"

### Evidence of Air Pollution's Harmful Effects (the free preview is all you need)

Notes:

1306 Queen Eleanor - Edward the 1st's wife complained of bronchitis from air  
1930 60 die in Belgium  
1948 20 die in Donora, PA  
1952 4,000 die in London  
(Temperature inversions and SO<sub>2</sub>)

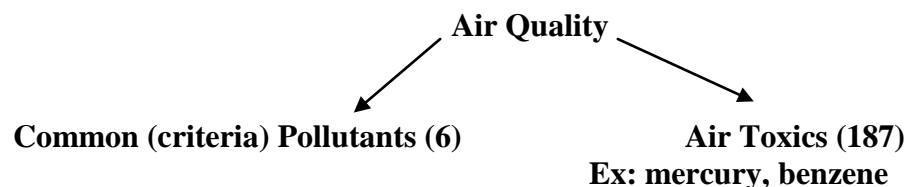
Bring in the Message during the video – or also show pictures in presentation.

This message is dated July 9, 1970. \_\_\_\_\_ it's for you from President Nixon. You have been appointed as the first Administrator of the U.S. Environmental Protection Agency.

People are dying. What are you going to do?

Guide them to:

- 1. ID staff** - get the "administrator" to "appoint" other lecture participants to lead the tasks that follow.
- 2. ID pollutants - two paths for control**

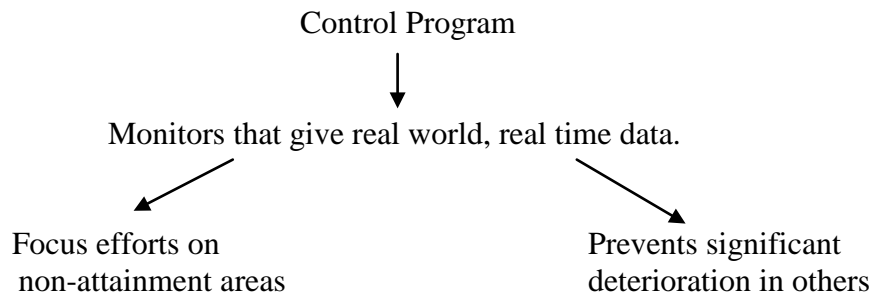


- NAAQS - air quality management process (work through this with the group)
  - Toxics - 187 – used to be 189 – de-listed caprolactam, MEK and EGBE(part of glycol ethers). Air toxics are controlled at source using control technologies demonstrated by the best performing facilities.
- 3. NAAQS - Set allowable limits based on health**  
- don't set standards based on nuisance (odor & visibility)

- National standards - states must comply

#### 4. Control Program

Guide them to say that in order to be sure the allowable limits are met there must be a control program. Use monitoring, emissions and modeling data to understand current conditions and develop a control strategy that fits the needs of individual areas.



States implement this program through operating permits for industrial facilities. Vehicle emission controls, etc. The state implementation plan (SIP) describes all enforceable efforts in place to reduce air emissions. EPA must approve each SIP.

On-going monitoring and a strong enforcement program ensure that the control program is effective.

You've done a great job - you and your staff have set standards and instituted an excellent control program.

\_\_\_\_\_ comes to you and says that a significant percentage of air pollution results from personal actions. Now what are you going to do?

Wave air brochures and newspaper to get them to come up with educating the public.

#### 5. To reflect advances in science, standards are to be reviewed every 5 yr.

What are the results of your work

Show final overhead - Emissions vs other factors GDP etc.