

Types of Pollution

CO₂ (Carbon Dioxide) – Coal and natural gas plants release CO₂ into the air. The CO₂ can contribute to climate change. This may lead to more hurricanes, tornadoes, floods and droughts, and rising sea levels. The change in weather can harm crops, plants and animals.

Nitrogen Oxides – Coal, natural gas and biomass plants release nitrogen oxides into the air. The nitrogen oxides can cause smog and acid rain. The smog can make your eyes, nose, and throat hurt. It can also cause lung problems, especially in young children. The acid rain can turn lakes and rivers acidic. It can also wear out trees, statues and paint on buildings.

Sulfur Dioxide – Coal and biomass plants release sulfur dioxide into the air. The sulfur dioxide can cause breathing problems, especially in people with asthma. Breathing it for long periods of time can lead to lung problems and worsen heart disease. It also causes acid rain. This can turn lakes and rivers acidic. It can also wear out trees, statues and paint on buildings.

Particulates – Traditional coal plants release particulates into the air. Particulates are a mix of very small dust and droplets. They can make the air look hazy. They can pass through your nose and throat. They get deep into your lungs and heart. That can lead to breathing problems and worsen heart or lung disease.

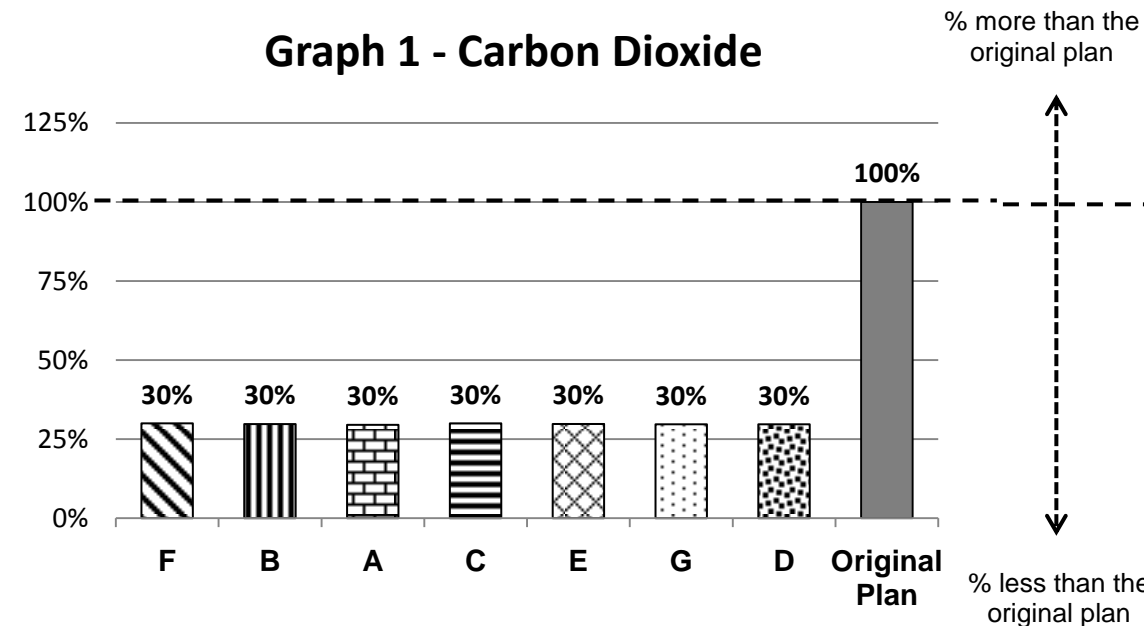
Mercury – Traditional coal plants release mercury into the air. The mercury will settle in water and get inside fish. If people eat too much fish with mercury, it can harm their brain, heart, kidneys, lungs, and immune system. If birds or animals eat fish with mercury, they can die or have reproduction and growth problems.

Pollution Comparison for Combinations

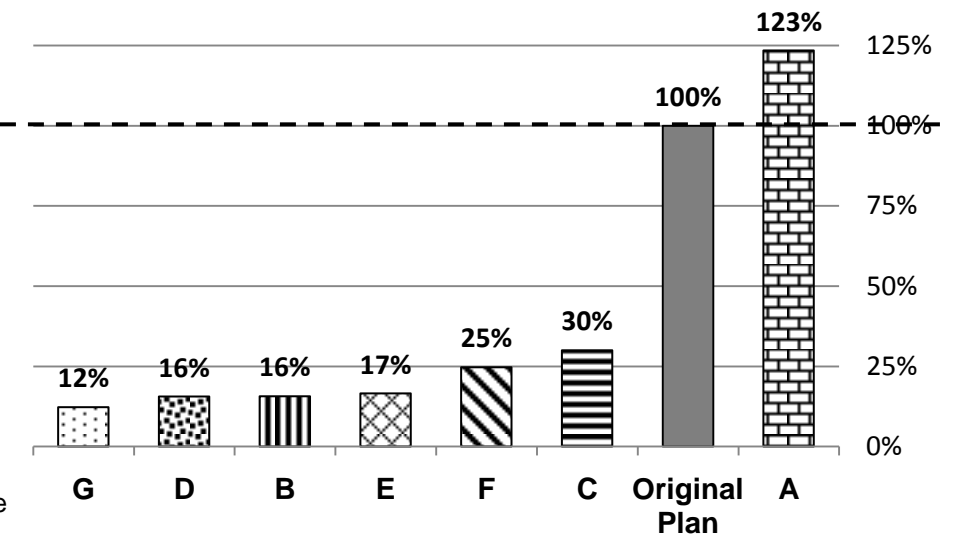
Five types of pollution are shown on this sheet. Each is described in the table to the left. Read the table, “Types of Pollution” to learn more.

The graphs below compare the seven power plant combinations to the “original plan” of building all traditional coal plants. The graphs look at these types of pollution: (1) CO₂ (carbon dioxide), (2) nitrogen oxides, (3) sulfur dioxide, (4) particulates and (5) mercury. The size of each bar shows the percent of pollution put out by that combination relative to the “original plan”. The pollution from the “original plan” is always shown as 100%. If a power plant combination pollutes less the “original plan”, the graph will show a percentage that is less than 100%. If it pollutes more, a percentage greater than 100% is shown. So, the smaller the percentage, the less pollution put out by that combination. A graph shows 0% if a power plant combination puts out (almost) no pollution. Overall, shorter bars on the graph are better than longer ones.

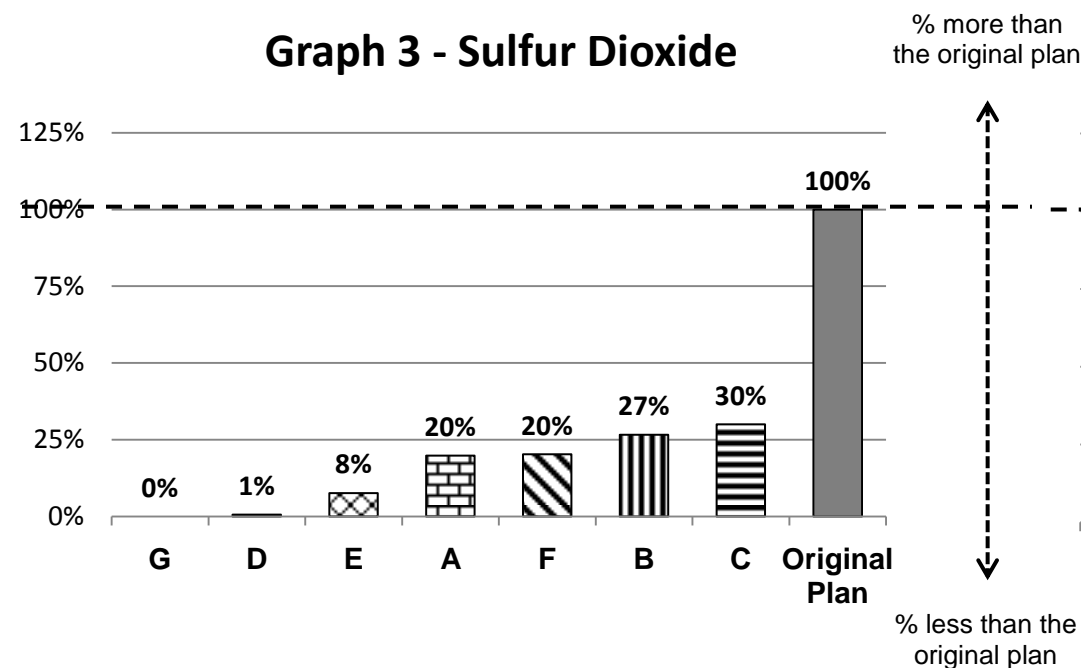
Graph 1 - Carbon Dioxide



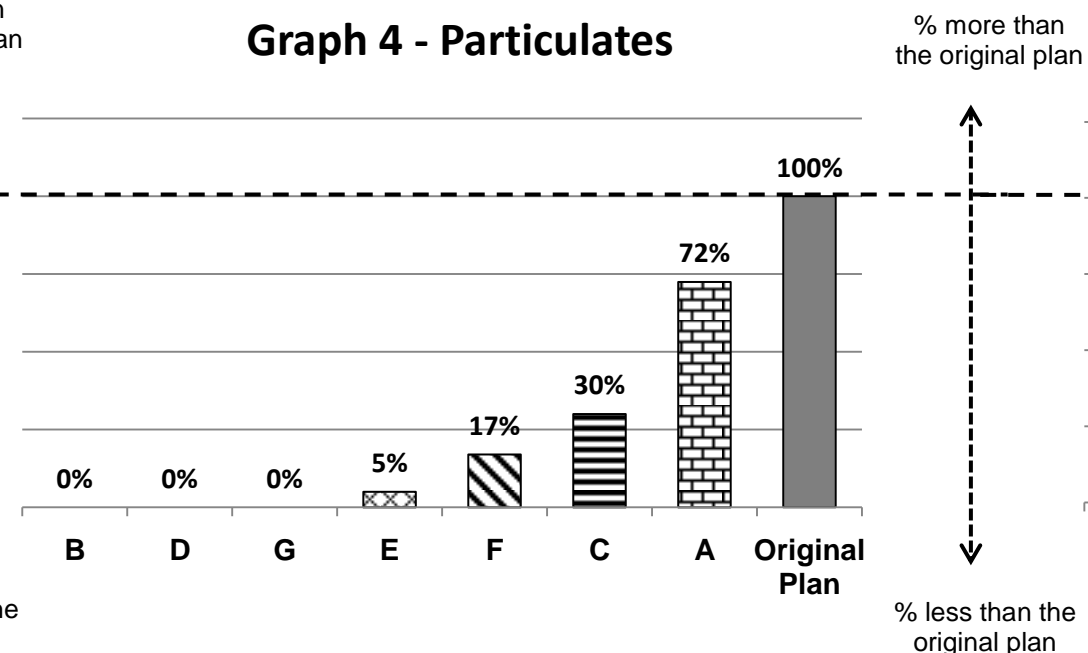
Graph 2 - Nitrogen Oxides



Graph 3 - Sulfur Dioxide



Graph 4 - Particulates



Graph 5 - Mercury

