Greenhouse Gases

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Part I: Overview of Workplace

POET Biorefinery has been in business for 32 years producing ethanol as its main product as well as: Dakota Gold distillers grains, Voila corn oil, and JIVE asphalt rejuvenator as by products. The Coon Rapids plant has been growing for 17 years.

Part II: Workplace Focus

As stated in the overview, POET produces many different materials at its plant. During this process they also have other materials that are produced that aren't able to be used by other people. (yet)

Part III: Introduce the Problem

- Do ethanol plants contribute to the greenhouse gases and global warming? Are they a benefit to our society or harmful?
- If so, how can we make them more environmentally friendly?
- How do ethanol plants affect the area around them? (Ground, water, air)

Part IV: Background

Students will need to know about climate change and greenhouse gases. Students will need information on ethanol plants.
Students will need to know the area of the plant, the materials that can affect the area around the plant.

Part V: Workplace Solution: Multiple answers.

Part VI: Educational Pathways

Plant operator - high school diploma or experience in production environment preferred
Operations manager - high school diploma, BA, 5 or more years experience
Maintenance - high school diploma
Environmental Health & Safety - high school diploma, AA or BA in safety or environmental studies preferred
Quality Manager - BA in Chem, Biochem, Microbiology, Biology or related science, 3 years lab experience
Lab Tech - high school diploma
Lab Tech 2 - BA in Chem, Biochem, Microbiology, Biology or related science
Material Handler - high school diploma, experience with heavy machinery preferred
Commodity Manager - BA in marketing, business, animal science, agriculture or related field or successful commercial work experience