



2022 Oral Component Scenario

Waste to Resources

The Scenario:

You live in Smalltown USA, a rural community that enjoys scenic parks, high quality streams, and a cohesive community spirit. Your community landfill, Mt. Trashmore, has submitted an application for an expansion. The surrounding community is concerned about the potential for soil and water contamination from a landfill expansion and from toxic waste and hazardous materials. Outside of the downtown area, all the homes in the community rely on private wells for their drinking water; and the proposed expansion would put the landfill closer to their homes. The Smalltown High School's Environmental Science Class has been studying the causes and impacts of climate change, and the students are expressing concern about an increase in greenhouse gasses from the landfill. Both the proposed expansion and the rising costs of waste disposal have encouraged community efforts to seek alternatives to reduce the volume of material being sent to Mt. Trashmore.

The Presentation:

As an Envirothon team, you are the community Sustainability Coalition that has formed in response to the proposed landfill expansion. Your members include a mix of professionals, community leaders, and students. You are presenting alternatives to the landfill expansion and to address the community's concerns.

The Judges are the county solid waste committee, including elected officials, community planners, residents, and Mt. Trashmore representatives. The committee is open to hearing your proposal for alternatives to landfill expansion.

Develop a 10-minute presentation that addresses the following tasks:

- I. **Landfills:** What are some ways that the landfills can address the soil and water pollution concerns that the community has shared? What steps can be taken to make efficient use of the land already occupied by the landfill?
- II. **Inorganic waste:** Describe your top priority category of recyclable item that you plan to collect (i.e. glass, metal, plastic, or paper). Why is this type of recyclable category most important to you? What are the possible pitfalls in recycling and recovering this item? What finished products can be made?
- III. **Organic waste:** Describe ways that organic waste can be recovered and recycled. How does recovering organic waste help reduce the need for landfill expansion? What finished product would be created? What are some ways that greenhouse gas concerns can be addressed?

- IV. **Toxic/Hazardous waste:** Mt. Trashmore is not a certified facility to accept toxic and hazardous waste. Explain what types of materials qualify as toxic/hazardous and why they are handled in special facilities instead of in a regular landfill. What are ways that Smalltown can reduce its production of toxic/hazardous waste so that less of that material is generated and sent to a special facility?
- V. **Personal action:** How will you get involved in making a change in your own lifestyle to reduce waste entering the landfill? How will you educate other community members on actions they can take? If you can't enact changes at home, what are the barriers to making changes?

References:

Be sure to incorporate/cite at least three (3) spoken, relevant, and reputable references as you present, such as a formal publication or information provided in the 2022 Current Issue Resources.

Examples of references:

1. "According to _____'s publication entitled _____, [fact that supports scenario]."
2. "Research from [organization/agency/etc.] outlined in their article _____, suggests [fact that supports scenario]."
3. "An article entitled _____, on _____'s website, says [fact that supports scenario]."

Final Notes:

While preparing, teams should feel free to include details of your choosing, not specifically referenced in the scenario, to aid your presentation. **The Pennsylvania Envirothon will not answer any questions regarding the scenario - you must interpret and respond as you see fit.**