



2022 Connecticut Envirothon Oral Scenario

The North American Envirothon Current Issue topic is *Waste to Resources*. This topic includes everything from collecting bottles and cans for recycling, composting food scraps to managing hard-to-manage or hazardous materials. One hard-to-manage material currently facing Connecticut is one-pound gas cylinders, especially the kind used for camping stoves.

The issue:

How best to manage one-pound gas cylinders to ensure human safety, environmental protection and resource conservation?

Scenario:

Connecticut waste-to-energy facilities that burn trash and materials recovery facilities that process recyclables experience explosions an average of once per month. The explosions are caused by gas cylinders hidden amongst household trash or household recycling that has been delivered to the facility. Explosions cause harm to employees, damage to facilities which result in delays and repair costs. The most problematic gas cylinders are the one-pound propane cylinders used for camp stoves. However, few people are aware of the safety and environmental hazards that are posed by these tanks that appear empty or the costs that taxpayers pay for their disposal.

Employees of materials management facilities, town recycling or department of public works and concerned citizens have decided that the time has come to address the challenges of how to best manage the disposal of gas cylinders.

Task:

Your team will explore possible solutions and address state legislators with a proposal to enact legislation to establish a standard procedure that addresses safety for employees, protects the environment and is cost effective for municipalities.

Your legislators may not all be up to date on CT's waste and recycling basics, so your presentation will inform the legislators of the following:

- The concept of Sustainable Materials Management;
- Where CT's trash and recycling end up;
- What programs CT has for reducing and diverting waste;
- How Systems Thinking applies to sustainable materials management;
- How Environmental Justice relates to waste and recycling;
- What gas cylinders are, what they are made of and what they are used for;
- The current method of how one-pound gas cylinders are disposed/where they end up;
- The hazards of throwing gas cylinders in the trash or recycling bins;



- How one-pound gas cylinder waste can be reduced;
- Share if there are alternatives to the single-use one-pound gas cylinders;
- How are national or state parks managing one-pound gas cylinders left behind by campers; and
- What is EPR (Extended Producer Responsibility) and examples of current CT EPR programs; and
- How/if EPR is a good approach for solving the one-pound gas cylinder problem in Connecticut.

Background:

Post 7: Gas Cylinders [Post-7-Gas-Cylinders-FINAL-2.14.22.pdf \(ctenvirothon.org\)](https://ctenvirothon.org/post-7-gas-cylinders-final-2.14.22.pdf)

Post 4: Recycling and Waste Diversion [Post-4-Recycling-and-Waste-Diversion.pdf \(ctenvirothon.org\)](https://ctenvirothon.org/post-4-recycling-and-waste-diversion.pdf)

Post 6: Systems Thinking: Environmental Justice, Zero Waste, Pay-As-You-Throw and Product Stewardship [Post-6-Systems-Thinking.pdf \(ctenvirothon.org\)](https://ctenvirothon.org/post-6-systems-thinking.pdf)

Post 1: Sustainable Materials Management [Post-1-October-2021-Intro-to-SMM-1.pdf \(ctenvirothon.org\)](https://ctenvirothon.org/post-1-october-2021-intro-to-smm-1.pdf)

Post 3: Waste Prevention and Reuse [Post-3-Current-Topic-Waste-Reduction-and-Reuse-1.pdf \(ctenvirothon.org\)](https://ctenvirothon.org/post-3-current-topic-waste-reduction-and-reuse-1.pdf)

CT Envirothon Scenario: Gas Cylinders, Webinar recording:
<https://www.youtube.com/channel/UCiJB5g6YGbmKe7c8WKdqUdg/videos>

Pdf of the presented PowerPoint: <http://ctenvirothon.org/wp-content/uploads/2022/03/2022-CT-Envirothon-Scenario-Gas-Cylinders.pdf>