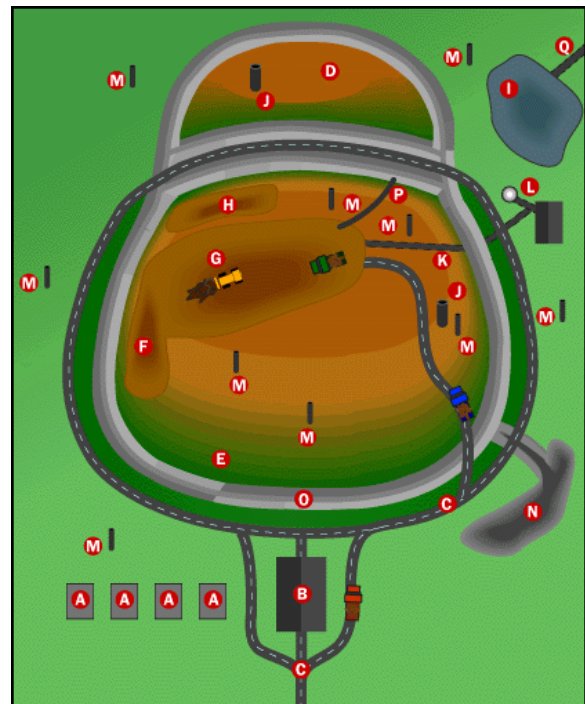


Sunshine Canyon Landfill: Field Trip Study Guide

Pre-Trip Tasks:

- Using the diagram and legend below as a guide, do research to find the role and function of each of the labeled parts of the diagram. If you are unclear on the difference between those two terms, check [this link](#) for help.

- | | |
|--|-----------------------------------|
| A Recycling Centers | I Leachate Collection Pond |
| B Scale House | J Methane Vent |
| C Access Road | K Methane Piper |
| D Sanitary Landfill-Closed
(No Liner-Clay-bottom) | L Methane Station |
| E MSW Landfill
(Liner present) | M Monitoring Pipe |
| F New Cell
Prep Area | N Run-off Collection Basin |
| G Cell Being Filled | O Storm Drainage Basin |
| H Storm Drainage
Collection | P Storm Water Pipe |
| | Q To City Water Treatment |



- a.
- b.
- c.
- d.
- e.
- f.
- g.
- h.
- i.
- j.
- k.
- l.
- m.
- n.
- o.
- p.
- q.

2. Like many landfills, Sunshine Canyon isn't without controversy from the public over potential hazards to local residents. Read these two news stories ([here](#) and [here](#)) as a start for some research. What are the points of view on each side of this controversy? What evidence can you find that supports either side of this controversy? Insert links to any relevant research.
3. One common concern for every landfill is how toxins could potentially escape into the local groundwater system. Research the hydrology of the San Fernando and Santa Clarita valleys to determine some potential catchments where leachate from the landfill could collect. Be sure to include links to your hydrology research and make sure you defend your claim based on reasoning from your evidence.
4. Determine a question you could ask the tour guide *that you can't find the answer to online*. Make sure you submit your questions on the [Sunshine Canyon Field Trip Questions & Quickwrite](#) before the trip and make sure you don't duplicate questions with anybody else in class. If you do any brainstorming with other students, make sure that you still come up with at least one question per student.

Tasks:

- 1) Get a sound or video recording of yourself asking your pre-written question to the tour guide, as well as the guide's response. Transcribe the interaction below. Make sure to include any follow-up questions asked by yourself or anyone else in the group. Upload the sound/video file to Google Drive and submit the link to the [Sunshine Canyon Field Trip Questions & Quickwrite](#).

Tour guide interaction transcript:

- 2) Based on your prior research, what is the significance of the tour guide's answer to your question?
- 3) What common design features of modern landfills were you able to observe? Insert pictures of at least ten of these different features that you took while on the trip.
- 4) Based on the map of the site and the research you've previously done, what possible design changes could you propose to improve this facility?