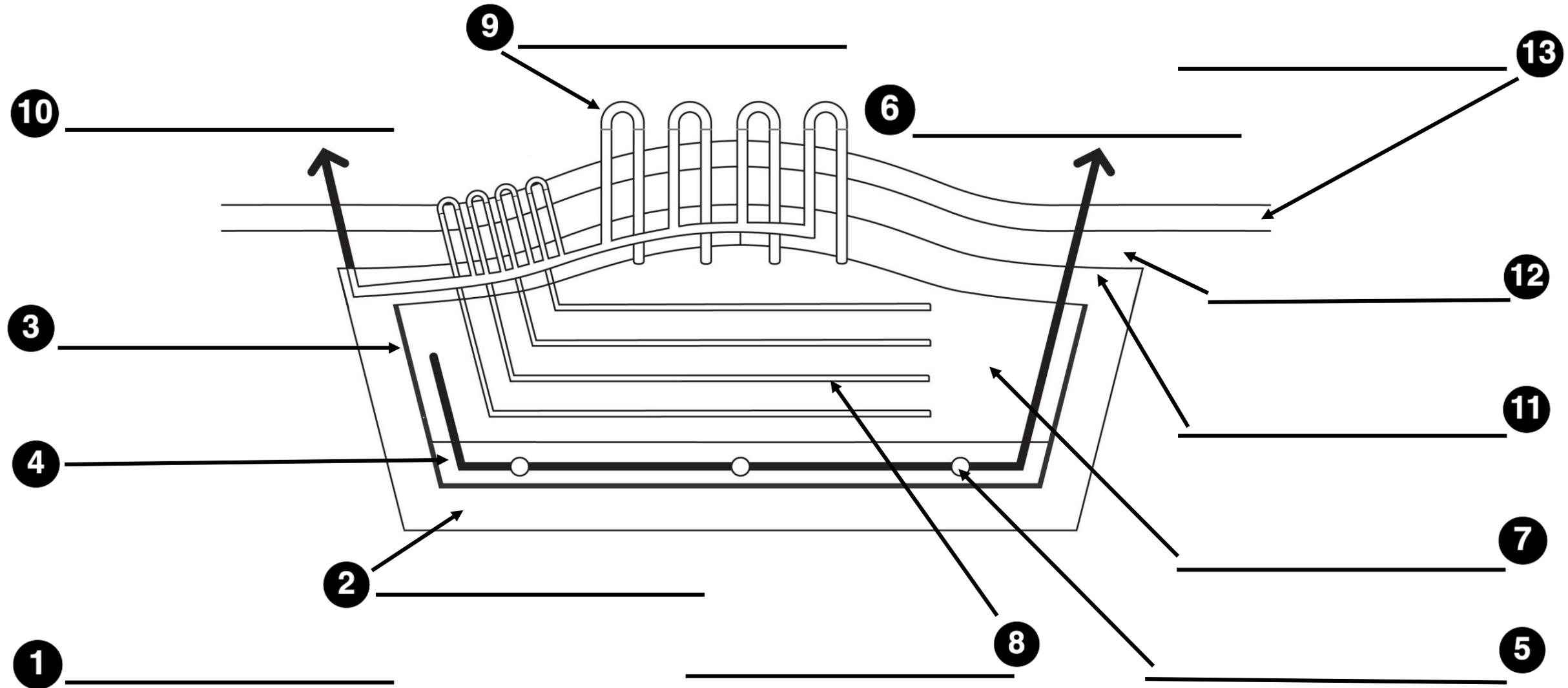


# Cross-section of a landfill cell



# Label the parts of the landfill cell

1. Dirt under the landfill
2. Compacted clay liner
3. Geotextile
4. Gravel layer
5. Leachate collection pipe
6. To leachate pump station
7. Waste
8. Gas collection trenches
9. Gas collection wells
10. To gas plant
11. Clay cover
12. Topsoil
13. Vegetation

# What does it all mean?

**Landfill cell:** A hole in the ground that is engineered and designed to protect the soil and water supply from waste that is put in the space.

1. **Dirt under the landfill:** Dirt and soil that is naturally part of the earth.

2. **Compacted clay liner:** Clay is a type of soil found in the earth in this area. When clay is pressed tightly together it gets firm and doesn't let moisture run through it easily. The liner holds the waste inside the landfill and stops it from leaking into the ground.

3. **Geotextile:** A fabric material laid to protect the clay liner.

4. **Gravel layer:** Crushed rocks and stones create support for leachate pipes.

# What does it all mean?

5. **Leachate collection pipe:** Pipes at the bottom of the cell collect leachate as it trickles down and help move it out of the landfill. Leachate is a liquid created when water from rain and snow mixes with waste inside the landfill as they try to breakdown.

6. **To leachate pump station:** Leachate that is collected from the leachate collection pipes goes to a pump station, then it moves to the sanitary sewer and then to the local wastewater treatment plant for cleaning.

7. **Waste:** Garbage, recyclables and organics (food) that get put into the landfill.

8. **Gas collection trenches:** A group of horizontal pipes laid on each layer of waste within the cell that collect gas and move it into gas wells.

# What does it all mean?

9. **Gas collection wells:** Large pipes that have more storage space to collect gas from the trenches and then moves it to the gas plant.

10. **To gas plant:** Gas from the landfill goes to a gas plant where it is changed into electricity.

11. **Clay cover:** Same as #5 (Compacted Clay Liner). This clay cover is added to the top of the landfill cell to close it.

12. **Topsoil:** Soil that is placed on top of the clay cover to help vegetation grow.

13. **Vegetation:** Trees, grass, plants, bushes and shrubs are planted all over the closed landfill cell to make it part of the natural environment.