

Videos

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Videos are filmed each day on the field trip and edited each night. They are linked here during the field trip.

For help and more information about LEARNZ videos, go to [Help with Videos](#) [2] in the [LEARNZ Support](#) [3] section.

Video question sheet - [Word](#) [4] (31k) | [PDF](#) [5] (217k) | [Google Doc](#) [6] to use for each video (based on SOLO Taxonomy).

Tuesday 5 November

1. The Journey of Waste at Kate Valley

Jump into the cab of one of the CWS truck-and-trailer units and go for a ride into Kate Valley Landfill. On the way Rangi explains the transportation of waste from your home to the landfill. You will get to see what happens to this waste once it reaches the “tip face”.

2. What is Leachate and What do you do with it?

What is leachate? How is leachate made? How is leachate collected from the landfill? What is done with leachate at Kate Valley Landfill? Find answers to these questions in the video.

3. A Liner Made of Tough Stuff

Kelvin Head takes you down into the landfill to show you what the landfill liner is made of and how it works. I wonder how tough the material is.

4. Checking Water Quality

In this video, Rangi explains the process for taking water samples from wells outside the landfill. Why are groundwater samples taken? What can tests on these water samples tell us about the landfill and the surrounding environment?

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Wednesday 6 November

1. Landfill Friendly and Unfriendly Products

What does rubbish that has been buried underground for 10 years look like? See the differences between organic and inorganic waste and discover more about the benefits of organic waste in a landfill. I wonder how this is different to inorganic waste.

2. What's in the Big Bin?

Head down into the landfill at Kate Valley and find out more about an audit that is done to check the composition of waste coming into Kate Valley Landfill. I wonder how much of it will decompose to produce landfill gas.

3. Capping Layers at the Landfill

Find out why it is important to cover waste at the landfill with soil. I wonder if it has something to do with the landfill gas produced from decomposing organic waste.

4. Capturing Methane Gas

You are beside one of about 58 gas wells dotted around the landfill. These wells go right into the waste and connect to large pipes. The wells collect landfill gas produced from decomposing organic waste. Watch to find out more about monitoring gas volumes and changing flow rates.

Thursday 7 November

1. Cleaning Up Landfill Gas

Follow the gas lines all the way to the flare compound and gas facility at Kate Valley Landfill. Find out how the gas actually gets to this area and what is done with it before being used in the generators.

2. Electricity from Landfill Gas

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Get a look inside the engine room of one of the four 1 Mega Watt gas engine generators. Make sure you have your ear plugs in! This is the business end of the waste to energy process as it is these engines that generate the electricity.

3. Using the Energy from Waste

In this video you explore what 'closing the loop' means in terms of the energy cycle at Kate Valley Landfill.

4. Rethinking Waste

This final field trip video is a good opportunity to reflect on the idea of 'waste not wasted'. You could think about the choices we make as consumers and the value products might still have when we don't need or want them any more.

Source URL: <https://www.learnz.org.nz/katevalley194/videos>

Links

- [1] <https://www.learnz.org.nz/katevalley194/videos>
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