

Organics Virtual Tour

Teacher Guide



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Introduction

Introduction

Welcome to Peel's virtual tour of our waste management facilities. This resource has been developed to support you as you lead your students through the Composting process at the Peel Integrated Waste Management Facility and Peel Curing Pad. This guide will provide you with practical suggestions and ideas to support inquiry-based learning, as you explore every page of the virtual tour with your students. The suggested discussion questions and extension activities can be adapted to meet the Ontario curriculum expectations for grades 3 to 12. This tour covers topics such as proper waste sorting, primary and secondary composting and how composting organic waste is a step toward a circular economy.

The virtual tour can be used as a stand-alone activity or can kick-start further exploration and learning.

Why a virtual tour?

We produce organic waste every day, whether this is in the form of food scraps, yard waste, non-hazardous wood-waste, etc. But when thinking of our waste management system, we rarely think of our composting facility or this process. The Organics Virtual tour was designed to highlight to individuals the importance of this system in the path to a circular economy. It is a tool that gives both teachers and students exclusive access to Peel's Integrated Waste Management Facility on a level not seen before with in-person tours. It also allows teachers a platform to educate their students on waste management within our region to showcase what happens to their organic products past throwing them in the organics bin.

Program Overview

Key Themes:

- Composting Process, Waste Sorting, Decomposition, Circular Economy

Learning Goals:

At the end of the virtual tour, students will be able to:

- Identify the main stages of the composting process.
- Explain the importance of the composting in the path to a circular economy.
- Identify what should go into the organics bin.

Technology requirements:

To access the tour, students will need access to a computer lab, tablets or other internet-enabled devices or have shared access to a smart board/projector screen. The tour can be accessed on a smart phone but works best on a large screen.

The virtual tour can be accessed in different internet browsers but is optimized for Google Chrome.

Introduction

How to use the tour:

There are two delivery methods for this tour:

Student self-exploration: Students can access and explore the tour on their own devices while using the provided handout as a guide.

Teacher-led: If there is access to a class smart board/projector screen, the teacher can facilitate the virtual tour, and use this guide and accompanying discussion questions to facilitate class-wide discussions.

Navigation



The virtual tour is easy to navigate. There are 10 tour stops and each stop can be navigated to using the left-hand panel of

images. You can also navigate between stops by selecting the “past location” and “next location”



buttons at the bottom of the screen. As you move between stops, a text box will pop-up summarizing the importance of that stage in the tour.

Each tour stop has clickable interactive icons to provide more information and photos.

Button	Purpose
	Additional information
	Video clips

You can use the computer mouse or trackpad to click and drag around each stop for a 360-degree panoramic view. You can also zoom in on areas of the tour for a closer look – simply scroll forward and backwards using your mouse or pinch your laptop trackpad. If you’re working from a touch screen, you can move by touching the arrows icons, dragging across the screen to move, and pinching out to zoom in.

Below you will find a step-by-step guide for exploring the virtual tour as a group, including speaking notes, a summary of interactive points within the tour and suggested discussion questions.

Introduction—Aerial View

What happens at the Peel integrated Waste Management Facility?

This is an aerial view of the Peel Integrated Waste Management Facility. This Facility is located in Brampton and processes garbage, organics and recycling for the Region of Peel.



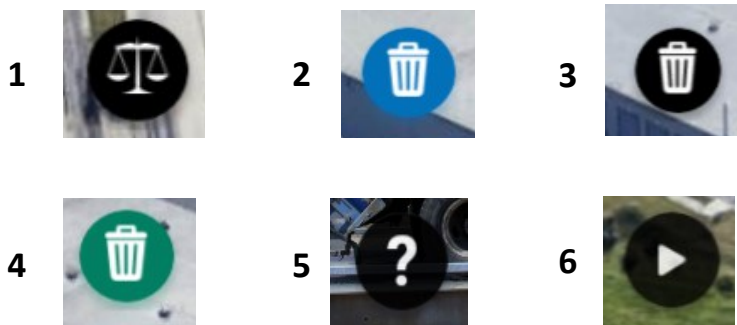
Discussion Questions

How does composting benefit the environment?

Composting is beneficial for several reasons. For example, it recycles organic material which promotes plant growth and keeps unnecessary waste out of landfills. Moreover, compost holds moisture and runoff. Lastly, compost reduces the need for chemical and/or synthetic fertilizers.

Navigation

There are six interactive icons to help students learn more about the Peel Integrated Waste Management Facility. The icons include text and a video.



1. **Scale House:** Navigate to the interactive icon to see where the Scale House is located.
2. **Material Recovery Facility:** Navigate to the interactive icon to see where the Material Recovery Facility is located.
3. **Waste Transfer Station:** Navigate to the interactive icon to see where the Waste Transfer Station is located.
4. **Primary Composting Facility:** Navigate to the interactive icon to see where the Primary Composting Facility is located.
5. **The Integrated Waste Management Facility:** Select this icon to learn more about how much waste the whole facility receives.
6. **Video:** Select this video to see a 360° view of the facility.

Some food products have expiration dates while others have best before dates. What is the difference between the two? Instead of throwing it out immediately, how might you tell if a food is still good to eat after its best before date?

An expiration or “use by” date is in place for safety. It is not safe to eat food after its expiration date.

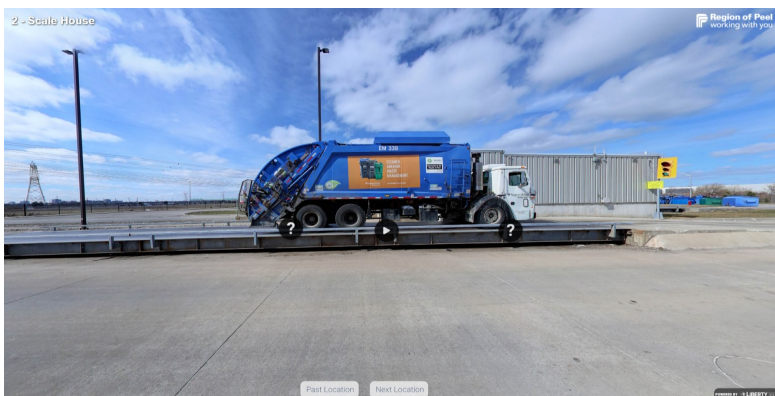
A “best before” date identifies the quality of food. The flavour and texture may not be as appealing, but it is still safe to eat.

Use your senses! *Does it smell different? Is the colour irregular? Has the texture changed? If safe to taste, does it still taste the same?*

Scale House

What happens at the Scale House?

When Collection Trucks arrive at the Facility they first go to the scale house to be weighed. Trucks drive onto a scale then can head to their respective area to drop off waste, in this case the Primary Composting Facility.



Discussion Questions

Why do you think we weigh our waste before we bring it into the Facility?

We want to monitor how much waste is brought to the facility. It can also help measure "landfill diversion," how much waste was diverted somewhere else instead of bringing it to landfill.

Extension Activities

Check out our website for activities, online games, and ideas that you can host at your school and get everyone in the school community to think about waste reduction

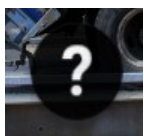
Link:

[Waste education resources - Region of Peel \(peelregion.ca\)](https://www.peelregion.ca/waste-education/)

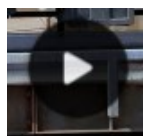
Navigation

There are three interactive icons to help students learn more about the Scale House. The icons include text and an accompanying video.

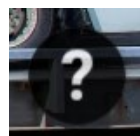
1



2



3

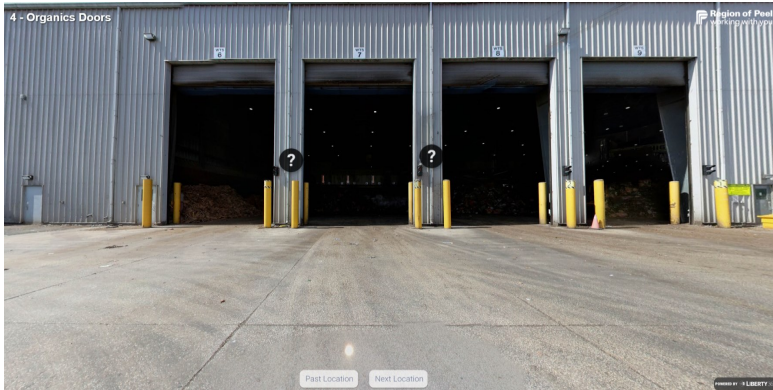


1. **Collection Truck:** Navigate to the interactive icon to see the collection truck.
2. **Video:** Select this video to see the process of collection trucks driving entering the Scale House.
3. **Scale House:** Select this icon to learn how much waste the collection trucks bring to the Scale House.

Organics Doors

What happens at the Organics Doors?

This is entrance to the Primary Composting Facility. The organics doors are the first stop for Organics collection trucks after exiting the scale house. Collection trucks enter here to offload waste in the Facility.



Discussion Questions

Why is it important for us to collect our organic waste? Where would it go if we did not collect it?

If we did not collect our organic waste for composting it would end up in the landfill where it would not decompose properly.

When food waste is sent to landfill, during its breakdown by bacteria it releases methane, a very strong greenhouse gas.

The organic waste we send to the Primary Composting facility is composed of different materials. One big component is food waste. Avoidable food waste is uneaten or unfinished food (half eaten sandwiches or fruits and food left to spoil. Unavoidable food waste, like food scraps that are not edible (banana peels etc.)

Can you think of some ways to reduce the food waste you produce at school?

- *Only bringing what you will finish to school.*
- *Taking food that is uneaten, like an apple, back to school the next day as snack.*
- *Planning lunches with your family to pack things you'd like to eat.*

Navigation

There is one interactive icon to help students learn more about the organics doors. The icon includes text.

1

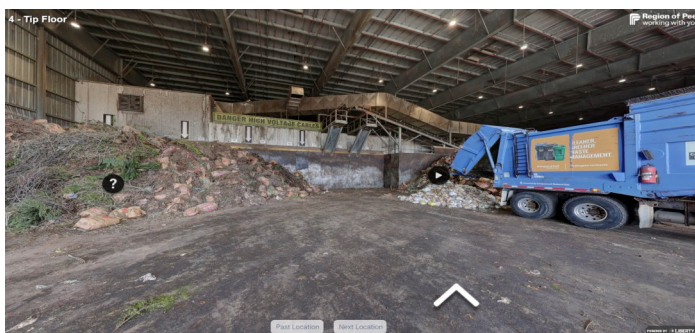


1. **Collection Truck:** Navigate to the interactive icon to see the collection truck.

Tip Floor

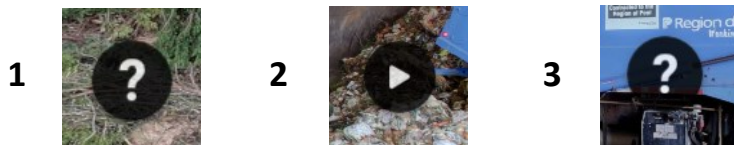
What happens at the Tip Floor?

This is where the collection trucks offload their organics waste. Here on the Tip Floor a machine called the “Front-end Loader” picks up the material from the Tip Floor and inspects it to ensure that there is no contamination, objects that should not be put in the organics bin. The operator of the “Front-end Loader” then mixes organics and yard waste to balance the piles moisture levels.



Navigation

There are four interactive icons to help students learn more about the tip floor. The icons include text and accompanying videos.

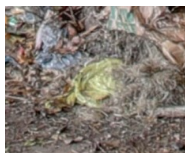


- 1. Yard Waste Pile:** Select the icon to learn more about how much organic waste the tip floor receives.
- 2. Video:** Select the video icon to see the offloading and process.
- 3. Collection Truck:** Select the icon to learn more about how much organic waste the Primary Composting Facility processes each year.
- 4. Engagement Question:** Scroll the image and quiz students on what they see that should not be in the pile.

Potential Answers: Indicate to students that this organics pile contains both yard waste and food waste. But, there are also items that don't belong like:

- Plastic grocery bags
- Printer paper (that can get recycled)

a



b



Discussion Questions

Why is it important for the Front-end Loader Operator to search for contamination?

If items that are not compostable make their way into the system, they will not breakdown properly. This may result in a toxic material being produced that can leak into our waterways.

What can you as someone who lives in Peel do to reduce the amount of contamination sent to our Waste Management Facilities?

(If the engagement question was asked)

You can learn what goes into your organics cart, garbage bin and recycling bin.

You can also share your knowledge on the top contaminants found in the Organics: plastic bags and glass.

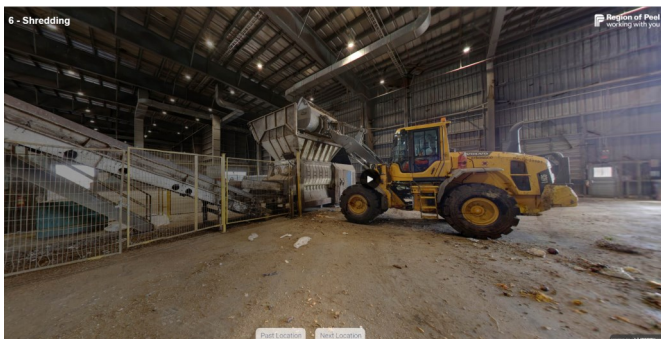
Contamination happens because people may not know what goes into our organics bins. Thankfully, Peel has a search tool that makes deciding where an item goes easy!

[How to sort your waste - Region of Peel \(peelregion.ca\)](https://www.peelregion.ca/how-to-sort-your-waste/)

Shredding

What happens at the Shredding Machine?

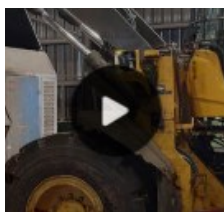
After searching for contamination, the front-end loader transports yard waste and food scraps to the shredding machine. This machine will convert items up to 30.5 cm in diameter to items that have a diameter of 10 cm or smaller. The shredded waste is then known as “feedstock” the precursor to compost.



Navigation

There is one interactive icon to help students learn more about the shredding machine. This icon includes a video.

1



1. **Video:** Select this video icon to see the front-end loader load food and yard waste into the shredding machine.

Discussion Questions

Why do you think we shred the organic waste?

We shred the organic waste to increase the surface area where the microbes (bacteria) can work on the organic items. When there's more room for the microbes to work, it allows for this process to happen faster.

Think of when you put a big marshmallow in your hot chocolate vs. putting lots of small marshmallows. The smaller ones will breakdown faster than the larger one because their surface is more in contact with the hot chocolate.

Extension Activities

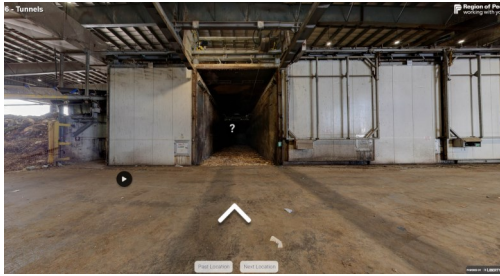
When we think of organic material, we often think of food waste and yard waste. However, did you know that there are other items that can be put there as well, like greasy pizza boxes, paper scraps, paper towels and tissues?

Test your sorting skills with the Rot or Not Sorting Activity that can be found here: [Waste](#)

Tunnels

What happens at the Tunnels?

The feedstock from the shredding machine moves to the tunnels via a conveyor belt. The tunnels are enclosed temperature-controlled rooms. Feedstock is loaded as layers and left to process for 7 to 10 days. The enclosed room is then aerated underneath via the concrete flooring system. This process allows microbes to aerobically, in the presence of oxygen, breakdown the organic items. This also generates heat which aids in destroying any unwanted microbes that do not assist in the breakdown.



Navigation

There are six interactive icons to help students learn more about the tunnels. The icons include text, images and accompanying videos.



1. **Tunnel Entrance:** Select the icon to learn more about how much feedstock tunnels can hold.
2. **Video:** Select the icon to see the conveyor loading the tunnel with feedstock.
3. **Tunnel:** Select the icon to learn more about the phases of composting that happen during the about 10 days the feedstock spends in the tunnel.
4. **Video:** This video contains the same information as 3, however provides visuals. Select the video to learn more about composting within the tunnel.
5. **Tunnel Door:** Select the icon to learn a fun fact about how much compost these tunnels process each year.
6. **Stacks:** Click this icon to learn about the role a stack plays in filtering the air from the tunnels.

Discussion Questions

If one tunnel can hold 250 tonnes of feedstock, how many tonnes of feedstock can fit in all 6 tunnels?

To solve this, we have to multiply 250 by 6 because we have 6 tunnels that each hold 250 tonnes. That means that all together the tunnels can hold 1500 tonnes of feedstock! That's the same weight as 210 elephants!

Whenever we perform a process, we always try to minimize the negative impacts on the environment. What's one way Tunnel composting minimizes damage to the environment?

By having the Tunnel Stacks filter the air we prevent contaminants and odours from being sent outside.

Extension Activities

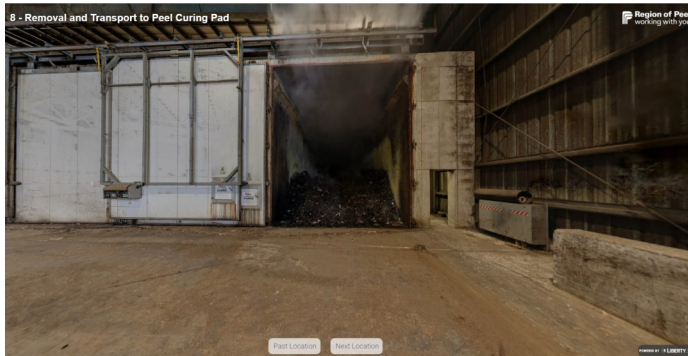
This facility relies on "Aerobic Composting," composting in the presence of oxygen. But there are other methods of composting out there. For example, Vermicomposting relies on earthworms to break down organic material! Methods like vermicomposting are great on a small scale.

Watch [this video](#) to see a time lapse of how worms break down leaves, cardboard and paper.

Removal and Transport to Peel Curing Pad

What happens during the removal and transport to the Curing Pad?

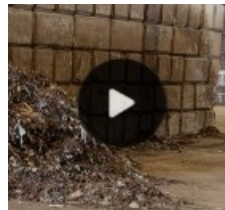
The feedstock has now been processed in the tunnel, converting it into immature compost. This compost can now be transported out of the tunnel and into a truck for transport to the Peel Curing Pad. This process is completed by a front-end loader.



Navigation

There is one interactive icon to help students learn more about the remove and transport process. The icon includes a video.

1



1. **Video:** Select this video to see a collection truck being loaded with immature compost by a front end loader.

Discussion Questions

Have you heard of other methods of composting? (These are just examples)

- *Anaerobic composting (digesting organic waste without oxygen)*
- *Vermicomposting (using earthworms to breakdown organic material)*

Extension Activities

Considering the organic waste stays in the Tunnel for almost 10 days and this is only one of the first steps you can see that composting is a long process! You may be thinking, why bother composting when it takes so long?

Well...all for the purpose of reusing the resources we use! To learn more about why we compost, check out [Organics - Region of Peel \(peelregion.ca\)](https://www.peelregion.ca/organics/)

Peel Curing Pad

What happens at the Peel Curing Pad?

The Peel Curing Pad is located in Caledon. This Facility receives immature compost from the Peel Integrated Waste Management Facility and is where secondary composting occurs.



Extension Activities

Other municipalities like the City of Toronto use a different method of composting called Anaerobic Composting. Read [this article](#) to learn more.

Based on the reading and your own research, why do you think other municipalities use anaerobic composting over traditional aerobic composting?

Discussion Questions

Composting food can help it to break down around 50 times faster than if you throw it in the garbage. Guess how long it takes these common items found in the landfill to break down when not sorted properly:

Food waste, cotton t-shirt, wooden popsicle stick

Food: 5-18 years in landfill or 1-3 months composted.

Cotton T-shirts: 13-32 years in landfill or 2-4 months composted.

Wood popsicle stick: 23-92 years in landfill or 1-3 months if composted

Navigation

There is one interactive icon to help students learn more about the Peel Curing Pad. The icon includes text.

1

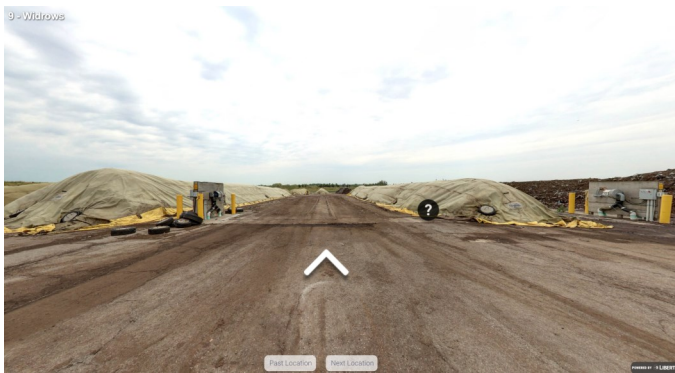


1. **Peel Curing Pad Land:** Select the icon to learn more about the history of the Peel Curing Pad.

Windrows

What happens at the Windrows?

The windrows are the site for the secondary composting process. Immature compost from the Peel Integrated Waste Management Facility gets loaded onto the windrows by a front end loader. A “windrow” is a long row of composting materials. Each windrow also has a ventilation system at the end that supplies air to the compost to encourage decomposition. This part of secondary composting usually lasts about 8 weeks with the windrow being turned by a windrow turner and supplied with air and water to encourage decomposition. The windrows are also kept covered in order to prevent strong odours and to encourage the decomposition of the organic material.



Navigation

There are two interactive icons to help students learn more about the windrows. The icons includes text.



1. **Windrow:** Select the icon to learn more about the phases of secondary composting on a windrow.
2. **Windrow Turner:** Select the icon to learn more about the windrow turner’s role in the secondary composting process.

Discussion Questions

If it takes about 1 ½ tunnels of compost from the PIWMF to create one windrow, how many tunnels are needed to make the 24 windrows at the Peel Curing Pad?

To calculate this, we have to multiply 24 by 1 ½, which would be 36. That means we need to fill 36 tunnels at the PIWMF to create the 24 windrows we see! That would be the same weight as 90 blue whales!

Extension Activities

Many schools lack a way to dispose of organic waste, all this food waste during lunches ends up going in the garbage instead!

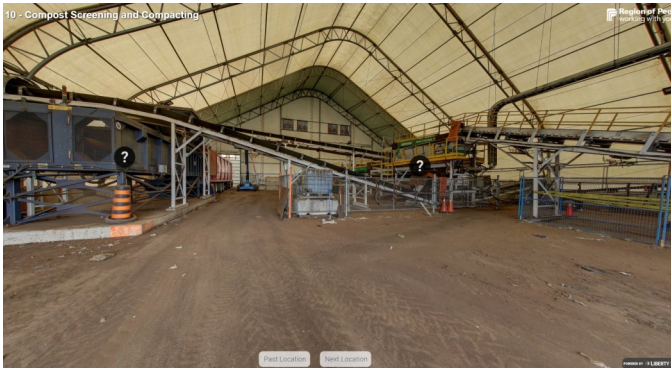
But, did you know that you can compost at home or in school? Read this resource to learn about an indoor compost alternative called [the FoodCycler](#).

Keeping a compost bin at school can be a fun hands-on learning experience for students who want to learn about composting themselves and take action to reduce food waste being sent to landfill. It can also contribute to the EcoSchools certification! Remember to also inform your school administrator to learn about any health and safety standards to be met.

Compost Screening and Compacting

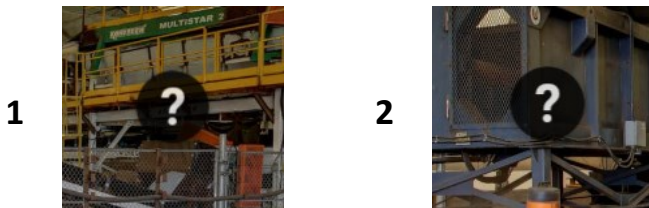
What happens during Compost Screening and Compacting?

After the immature compost has been cured during the 8 weeks at the windrows, it is moved to a screening machine. The screening machine will separate pieces of compost that are ready to be sold, those that are less than 7.5 cm in size, from pieces that are too large that must be compacted and sent back to the Integrated Waste Management Facility for additional processing in the tunnels.



Navigation

There are interactive icons to help students learn more about the Screening and Compacting process. The icons include the names of the machines.



1. **Screener:** Navigate to the interactive icon to see the Screener.
2. **Compacter:** Navigate to the interactive icon to see the Compacter.

Discussion Questions

All of these processes you've seen have used energy and resources. What energy and resources are being used and how can we conserve these items?

Some of these processes use fossil fuels or electricity as energy to power machines and for transportation. Meanwhile, we use food to create compost! By creating compost, we are conserving and reusing organic materials instead of having it's lifecycle end at a landfill.

Extension Activities

When food waste is sent to landfill, it produces greenhouse gases that contribute to climate change. Although many municipalities divert organic material like food waste from landfill to facilities such as the Primary Composting Facility, there is still a lot of food waste produced being sent to landfill. This is not only a problem within Canada, it occurs worldwide. It is even estimated that if food waste was considered to be a country its green house gas emissions would be [third to the U.S. and China](#).

To learn more about this global problem and to see some ways to reduce food waste, [select this video](#).

Finished Compost

What happens when we have finished compost?

After screening and the testing of the compost to meet Ontario's Compost Quality Standards, the compost is piled. It is now ready to be sold to farmers, landscapers, nurseries and to residents of Peel.



Discussion Questions

Can you think of some negative and positive impacts on the environment from composting?

Negative:

- *Fossil Fuels used during operation of machinery and transport.*
- *Organic waste generates, methane, a greenhouse gas, that is more potent than CO2*

Positive:

- *Reusing organic material*
- *Steps it a circular economy*

Navigation

This stage does not include an interactive icon.

Test your knowledge

Play our Kahoot, designed to test your learning of the Organics process.

Link:

<https://create.kahoot.it/share/organics-virtual-tour-peel-region/eea25e51-a5e3->



Almost everywhere in the world there are people who practice farming. How do you think farming affects the soil?

Farming can be considered to be a linear system. We plant crops, the crops use the nutrients in the soil, we harvest the crops and thus take the nutrients. Soil overtime will lose these nutrients needed to grow our crops. Thus, moving towards a more circular lifestyle we create compost to add back into our soils to replace the nutrients we used during farming.

Farming is something we rely on to provide us with food so we cannot stop to prevent the effects to the soil. We have to make smart choices, like composting, in order to minimize the negative effects farming has on the soil.

Appendix A: Curriculum Connections

Grade 3

Subject & Unit	Specific Expectations
Science & Technology: Understanding Earth and Space Systems	Investigate the process of composting, and explain some advantages and disadvantages of composting. Assess the impact of human action on soils, and suggest ways in which humans can affect soils positively and/or lessen or prevent harmful effects on soils.

Grade 4

Subject & Unit	Specific Expectations
Science & Technology: Understanding Life Systems	Analyse the positive and negative impacts of human interactions with natural habitats and communities (e.g., human dependence on natural materials), taking different perspectives into account (e.g., the perspectives of a housing developer, a family in need of housing, an ecologist), and evaluate ways of minimizing the negative impacts.
Social Studies: People and Environments	Evaluate evidence and draw conclusions about issues and challenges associated with balancing human needs/wants and activities with environmental stewardship in Canada.

Grade 5

Subject & Unit	Specific Expectations
Social Studies: People and Environments	Describe some different ways in which citizens can take action to address social and environmental issues.
Science & Technology: Understanding Earth and Space Systems	Analyse the immediate and long-term effects of energy and resource use on society and the environment, and evaluate options for conserving energy and resources.

Grade 6

Subject & Unit	Specific Expectations
Social Studies: People and Environments	Explain why some environmental issues are of international importance and require the participation of other regions of the world, along with that of Canada, if they are to be effectively addressed (e.g. disposal of electronic waste) Sample question: “Why can the disposal of your old computer be an environmental issue of international importance?”

Appendix A: Curriculum Connections

Grade 7

Subject & Unit	Specific Expectations
Science & Technology: Understanding Life Systems	Describe how matter is cycled within the environment and explain how it promotes sustainability affect soils positively and/or lessen or prevent harmful effects on soils.

Grade 8

Subject & Unit	Specific Expectations
Science & Technology: Understanding Structures and Mechanisms	<p>Assess the impact on individuals, society, and the environment of alternative ways of meeting needs that are currently met by existing systems, taking different points of view into consideration.</p> <p>Describe systems that have improved the productivity of various industries.</p> <p>Assess the personal, social, and/or environmental impacts of a system, and evaluate improvements to a system and/or alternative ways of meeting the same needs.</p>

Grade 9

Subject & Unit	Specific Expectations
Geography: Liveable Communities	Identify various ways in which communities in Canada dispose of their waste material (e.g., landfilling, composting, incineration, primary and secondary sewage treatment), and describe potential environmental impacts of these methods

Grade 10

Subject & Unit	Specific Expectations
Technological Education: Technology, The Environment, and Society	Identify best management practices, environmentally sustainable practices, and technologies that can be used to reduce the harmful effects of green industry operations (e.g., composting, recycling, use of renewable energy sources, land retirement, minimal use of fertilizers and pesticides).

Appendix A: Curriculum Connections

Grade 11

Subject & Unit	Specific Expectations
Science: Microbiology	<p>Assess some of the effects, both beneficial and harmful, of microorganisms in the environment (e.g., decomposers break down waste...)</p> <p>Plan and conduct a waste audit within their school, and propose a plan of action for waste reduction based on their findings (e.g., review the school's policy regarding paper and plastic recycling, monitor actual practices, and propose strategies to improve them)</p> <p>Describe different categories of waste (e.g., biodegradable, recyclable, toxic, organic, inorganic)</p>
Technological Education: Industry Practices, the Environment, and Society	<p>describe environmentally friendly disposal procedures for waste food products and food packaging (e.g., composting, recycling);</p>

Grade 12

Subject & Unit	Specific Expectations
Family Studies: Food Fundamentals	<p>Describe ways of using leftovers effectively (e.g., in casseroles, soups, salads, stir-fries, sandwiches)</p> <p>Outline strategies for eliminating waste in menu planning and meal preparation (e.g., freezing individual-size portions; using most or all parts of vegetables or cuts of meat)</p>
Technological Education: Industry Practices, the Environment, and Society	<p>Describe how the food and beverage services sector can both protect the environment and encourage the sustainable use of natural resources (e.g., composting organic waste from restaurants, reusing cooking oil as a biofuel, using locally grown produce to reduce the need for long-distance transportation);</p> <p>Identify ways in which the food and beverage services sector could offset its impact on the environment (e.g., develop or support a tree planting program, develop or contribute to a carbon offset fund).</p>

Student Handout Grade 3-5

Organics Virtual Tour

Fill in the table below as you complete the Organics Virtual tour.

	Draw this stage of the Composting Process	What did you find interesting about this tour stop?
1. Introduction— Aerial View		
2. Scale House		
3. Organics Doors		
4. Tip Floor		
5. Shredding		
6. Tunnels		
7. Removal and Transport to Peel Curing Pad		
8. Peel Curing Pad		
9. Windrows		
10. Compost Screen- ing and Compacting		
11. Finished Compost		

Student Handout

Organics Virtual Tour

Fill in the table below as you complete the Organics Virtual tour.

	Describe the importance of this stage to the Composting Process	What did you find interesting about this tour stop?
1. Introduction— Aerial View		
2. Scale House		
3. Organics Doors		
4. Tip Floor		
5. Shredding		
6. Tunnels		
7. Removal and Transport to Peel Curing Pad		
8. Peel Curing Pad		
9. Windrows		
10. Compost Screen- ing and Compacting		
11. Finished Compost		

Student Handout Answer Key

Organics Virtual Tour

Fill in the table below as you complete the Organics Virtual tour.

	Describe the importance of this stage to the Composting Process	What did you find interesting about this tour stop?
1. Introduction— Aerial View	<ul style="list-style-type: none"> This stage is where garbage, organics and recycling is processed for the Region of Peel 	
2. Scale House	<ul style="list-style-type: none"> This stage portrays the location trucks go to weigh waste Weighing waste is important for metrics calculating how much waste is brought to the facility and landfill diversion 	
3. Organics Doors	<ul style="list-style-type: none"> This stage portrays the entrance to the Primary Composting Facility where waste is offloaded 	
4. Tip Floor	<ul style="list-style-type: none"> This stage is where trucks offload organic waste onto the “Front-end Loader” This stage is important because it ensures that there is no contamination between objects The organics are later mixed with yard waste to balance the pile’s moisture levels 	
5. Shredding	<ul style="list-style-type: none"> The shredding machine is where yard waste and organics are taken to and converted from 30.5 cm in diameter to items with a diameter of 10 cm or smaller. This stage is important because shredding increases the surface area which allows more room for the microbes (bacteria) to work at a faster rate 	
6. Tunnels	<ul style="list-style-type: none"> This stage is important because it allows microbes to breakdown organic items aerobically and it generates heat which helps destroy any unwanted microbes that do not assist in the breakdown 	

Student Handout Answer Key

Organics Virtual Tour

Fill in the table below as you complete the Organics Virtual tour.

	Describe the importance of this stage to the Composting Process	What did you find interesting about this tour stop?
7. Removal and Transport to Peel Curing Pad	<ul style="list-style-type: none"> This stage is important because the feedstock is converted into immature compost which can be transported into a truck for transport to the Peel Curing Pad 	
8. Peel Curing Pad	<ul style="list-style-type: none"> The Peel Curing Pad, located in Caledon, is important because it receives immature compost and undergoes secondary composting processes 	
9. Windrows	<ul style="list-style-type: none"> This stage is the site where secondary composting processes occur Immature compost gets loaded onto the windrows by a front end loader A “windrow” is a long row of composting materials which consists of a ventilation system that supplies air to the compost to encourage decomposition Windrows are kept enclosed to prevent strong odours and to encourage decomposition of organic material 	
10. Compost Screening and Compacting	<ul style="list-style-type: none"> At this stage, compost is screened to see if it is ready to be sold 	
11. Finished Compost	<ul style="list-style-type: none"> Finished compost must meet Ontario’s Compost Quality Standards, At this stage, compost is sold to farmers, landscapers, nurseries, and residents of Peel. 	