

Update on Solid Waste Feasibility Study

Algonquins of Pikwakanagan First Nation



March 2021, Information Package

This package includes important information about your landfill!

We encourage you to review this information, learn about the waste options for AoPFN, and provide your input in this project by completing the survey.

Topics in this booklet include:

- Introduction and Project Team
- Studies done
- Environmental Findings
- Landfill Closure and Transfer Station Development
- Waste Diversion Options
- Next Steps



Introduction & Project Team

Golder Associates Ltd. (Golder) was hired by Algonquins of Pikwakanagan First Nation (AoPFN) to create a Solid Waste Management Plan that would improve waste management in AoPFN, and guide waste management in the community for the next 20 years.

- This Project started in September 2019.
- Golder has visited AoPFN several times to collect information about the landfill.
- Maybe you have noticed us on site installing wells and collecting groundwater and surface water samples!
- We have collected important information about the community that is included in our studies.



To keep you involved and informed of this work, this newsletter provides an update on the Project, including options for the dump and future waste management.

If you have any questions about this work, Patrick Schmidt at Golder would be happy to answer!

Please contact him via email at: Patrick_Schmidt@golder.com



What studies have been done?

Studies of the existing landfill AoPFN were completed to:

- Determine impacts on groundwater and surface water from the landfill by drilling boreholes and collecting water samples.
- Determine what needs to be done to operate the landfill in a safe way.
- Provide recommendations on how to improve waste management in AoPFN.

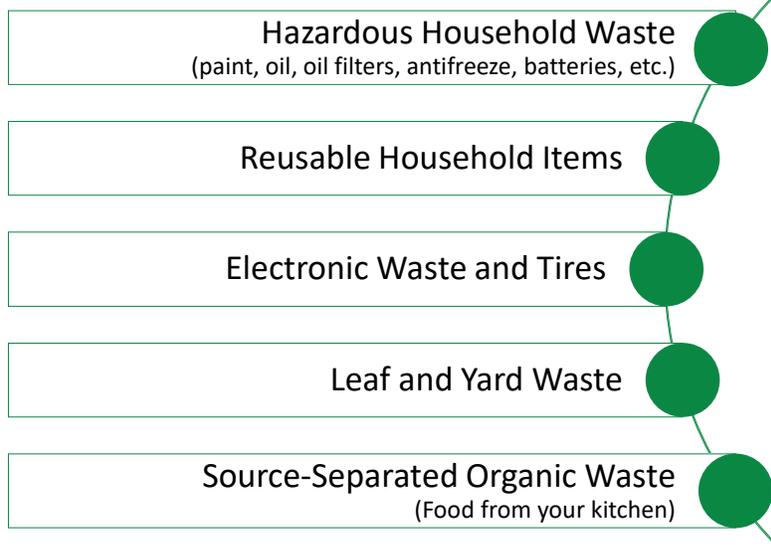


Investigation of Options for Waste Diversion



What does waste diversion mean?

Waste diversion means reusing, recycling or composting materials that would otherwise be put in the dump.



Golder researched options to find out how these items could be handled instead of going into the dump.



Soil & Groundwater Studies

Are there impacts from the landfill site in AoPFN?

- We have collected groundwater samples and surface water samples from the well locations (black circles) and water testing locations (blue triangles).
- Samples were collected in Spring and Fall, 2020.
- Results show that there are impacts to the groundwater within and along the property boundary at the northeast side (MW19-06, MW19-03).
- The results do not suggest that groundwater impacts from the landfill have moved beyond the site property.
- The results suggest there are no impacts to surface water from the landfill.



Closing the Landfill ...and Opening a Transfer Station

Why is the Landfill being closed?

- The landfill is becoming full and the land around the landfill is not suitable for more waste disposal.
- The landfill does not have a liner to reduce impacts to water and soil. Continuing waste disposal at the landfill would increase impacts to the environment.
- The quantity of waste produced by AoPFN is relatively small and can be transferred to another nearby landfill.

What is a Transfer Station?

- A Transfer Station is a location where waste can be collected for bulking and transfer to the final disposal destination.
- It can be designed to accept any type of waste: hazardous household waste, electronics, organic waste, etc.
- You can still bring your own garbage to the dump. It would go in a bin instead of being dumped in the landfill.



Waste Diversion

Why is Waste Diversion Important in AoPFN?

- Waste diversion means reusing, recycling or composting materials that would otherwise be buried in the dump. To achieve diversion, materials need to be sorted into different categories.
- Materials lose their value when they are mixed together. Waste materials that are sorted retain their value and can be reused or made into new products - saving valuable resources, energy, and money.
- Diverting materials like metals, organic waste, electronic, and hazardous waste from the dump helps protect the groundwater and soil.

Organic Waste Options

Organic waste is made up of food scraps and yard waste. These types of waste are managed in two different ways:

1. Kitchen waste (or Source-Separate Organics)

A. Community Composting: Organic kitchen waste is separated by each household and transported (individually or by an AoPFN collection service) to one site where it is composted in a large batch. This will require complex equipment and careful operation to process the compost. The process is more challenging to operating than landfilling and can cause odours.

B. Home Composting: Each household is responsible for composting their own organic waste. This would likely be in the form of a “backyard” composter that each household must manage themselves, but the equipment could be sponsored by the community.

1. Leaf and Yard Waste: This can be hauled or collected for stockpiling at the Transfer Station. AoPFN would use specialized equipment to monitor and turn the leaf and yard waste to compost until it’s ready for reuse and possible sale. This is a different and much less complex process than managing kitchen waste.



Waste Diversion Options

Household Hazardous Waste (HHW)



Waste oil in AoPFN is currently being stockpiled in the utility building at the landfill. This is great but it could be improved by collecting other hazardous waste types and using better storage systems. Properly disposing of HHW will reduce the impacts of these chemicals on the environment.



The HHW drop-off depot could be in the form of a modified shipping container or sea-can.

A trained landfill attendant would be responsible for ensuring the HHW is stored properly within the depot. As needed, a contractor would come from the nearest service location to collect and transport the HHW out of AoPFN for proper disposal.

Reuse Centre

- This could be set up to accept items that are not ready to be disposed of. The Reuse Centre would allow AoPFN residents to drop off and pick up items to reduce waste and save money for those people in need of household goods.
- Examples of items that could be reused are appliances, furniture, toys and sporting goods. These items would be inspected before they would be available for pick-up by someone else.



Next Steps

- Now that you've read about the different options for waste management, AoPFN Chief and Council want to hear from you!
- Using the online surveys distributed to the community on the **Algonquins of Pikwakanagan First Nation Facebook Page** and on paper in your community, let the Golder team and AoPFN Chief and Council know what you think about these options!
- The Project Team has already started the design process for the closure of the landfill and the development of a Transfer Station. But we need YOUR input to find out what waste types should be handled in AoPFN, and how.

Please try to complete the survey by **March 26**.

