

# CHEAM LANDFILL REMEDIATION UPDATE

Information Package and Survey  
APRIL 2021



Dear Cheam Members,

We want to provide you with an update on the Cheam Landfill remediation project. The long-term project's goal was and is to fix outstanding issues related to settlement and leachate. In the last year we've made significant progress with our team to ensure closure will happen this year.

Thanks to the engineers at Sperling Hansen Associates and environmental consultants at Rocky Point Environmental, we've put together important information and a timeline with the steps we're taking to complete this project. As a result of this work, we estimate the Cheam Landfill will reach design capacity and the site will be closed by July 2021. The site will then be properly capped and closed to later be redeveloped.

We look forward to sharing the ongoing progress. You can find important information below that explains technical aspects and frequently asked questions. Please get in touch with our team if you have any questions.

**CHEAM ENTERPRISES INC.**

# CHEAM LANDFILL FAQ

Below we've included frequently asked questions, examples of the future site end use as well as a timeline of the landfill closure. We invite you to call or email us if you need more information.

## *What is landfill remediation?*

On-site landfill remediation is a proven method to minimize environmental risk from closed landfills and eventually reclaim the land for the benefit of our members and the public. To close and remediate a landfill is to stop putting waste into the area—to cover the existing landfill cells with dirt, and possibly a membrane or other technology, to reduce hazards from fires, leachate, storm-water runoff, vermin, windblown dust and other contaminants.

In North America, many known dumps or landfills have safely become parks and other recreational sites, or they have been converted to industrial lands for truck parking, container storage, even building of light industrial tilt ups, a type of building and a construction technique using concrete. There are many great examples of landfill remediation sites in the Metro Vancouver area, including North Vancouver's Inter River Park or Delta's South Fraser Perimeter Road, that are now being used for recreation, light industrial or commercial use.

## *Is the site still open?*

The site is open and continues to accept new non-hazardous fill material (gravel, rock, soil, construction/demolition waste etc.). Landfilling will continue until the ground level reaches the design final grades that will allow for proper closure. This final design grade will allow for the proper packing of fill materials and the re-leveling of the site which will then be fully capped during the final closure phase.

The remediation plan is designed to improve the landfill conditions and protect the environment from the effects of landfill waste. The fill acceptance process controls the material added to the site, and our partners and Sperling Hansen Associates have implemented a monitoring program to monitor the groundwater as well as the site for gaseous emissions.

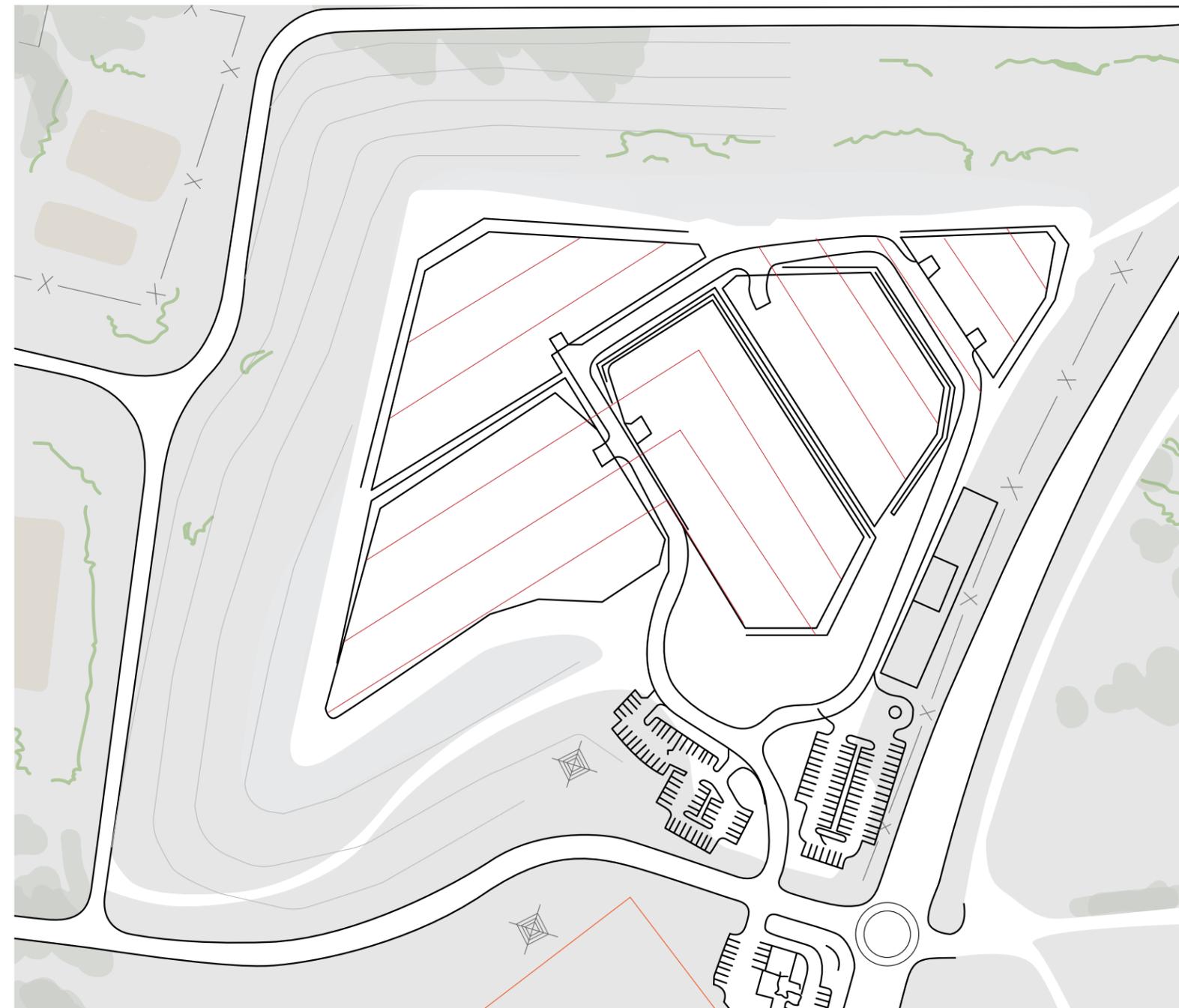
## *Are there any financial benefits to the Nation?*

Yes. The restoration plan has the additional benefit of generating significant revenue for Cheam Nation and Cheam Enterprises Inc. In 2020, Cheam Nation received approximately \$870,000 in royalties from the revenues of the landfill and approximately \$145,000 in remediation fees for closure costs and monitoring.

Once the site is restored, it will be repurposed for future community-owned development, another potential revenue source for the Nation.

## *What will replace the landfill?*

Once the site is fully remediated, we'll be working on options for the future site. We've been working with engineers and architects to determine the best use, including everything from a solar farm to leasable lands and potential office space along the highway.



**1992**

The landfill site, once a gravel pit, started in 1992.

The site was built with clay and synthetic membrane, and although technology has changed since, it was reasonable at that time.

**2001**

The landfill was capped with an engineered cover to control rainfall drainage, reduce water infiltration, and prevent leachate.

This site was chosen for remediation due to potential safety hazards posed by uncovered debris on the closed site.

**1991-2001**

The landfill was functioning and open to all residents of the City of Chilliwack.

Most of the waste included construction and demolition materials known as C&D waste.

**2017**

The site was re-opened due to concerns about leachate and ground water breaches.

The objective was to bring in material to properly regrade the landfill crest which had developed low spots due to differential settlement.

Cheam Enterprises Inc. hired Ayelstexw, a local environmental consultant, to take on the permit and oversee the management of the site. CEI hired Timbro to run the fill operations.

**Fall 2020**

The final phase of remediation started in October 2020.

**2020**

Cheam Enterprises Inc. and Cheam Landfill LP assumed the permit and oversight from Ayelstexw with the help of Rocky Point Environmental and Sperling Hansen Associates to research and plan for remediation engineering.

Cheam Timbro Group LP was retained as the site operator for daily operations.

**Summer 2021**

Landfill capacity is expected to be reached in July 2021.

Fill operations will stop, and a temporary cover will be placed on the facility to prepare for the Fall/Winter season.

The Cheam Landfill leachate collection and treatment system will be overhauled and re-sequenced to ensure proper collection and treatment.

The collection ponds will be stripped of overgrowth, cleaned and re-lined.

**Summer 2022**

Final construction/ closure and capping of the facility with a geomembrane cover will start at the end of the winter season in Spring/Summer 2022.

**2022-2023**

Application of topsoil and revegetation will be completed upon completion of capping.

Remediation observation and testing will be carried out to ensure that the landfill closure is meeting all design objectives with respect to landfill gas, leachate, and storm water control.

**2022-2024**

The site will be fully remediated, and we'll be working with architect firm Ekistics in conjunction with our engineers from Sperling Hansen & Associates to determine the best use for the site.

## HISTORY OF THE CHEAM LANDFILL

The following timeline is a summary of the Cheam landfill since it started in 1992. The landfill is situated on Reserve No. 1 and covers approximately 8 hectares of land (that's 14 football fields!).

The site has seen many changes and we're working to finalize the need for closure.

# Please Take the Cheam Landfill Survey!

With the landfill set to close in 2021, we want to hear from you on next steps for the site.

Please scan the QR code and help us inform what we do next. [fill](#)



## ABOUT CHEAM ENTERPRISES INC.

Cheam Enterprises Inc. (CEI) is working to build a sustainable economic foundation for Cheam First Nation and its community members. CEI is building long term partnerships and relationships with First Nation and Non-First Nation businesses to create lasting opportunities for the Cheam community and its members and surrounding communities.

CEI and its business partners are focused on connecting and creating with businesses operating within our traditional territory. CEI has a wide range of business partners with the capacity to assist in completing project-related work.

If you have any questions, please contact us at [info@cheamenterprises.ca](mailto:info@cheamenterprises.ca) or 604-845-5174 as we'd like to hear your concerns, comments and feedback directly.

Visit [cheamenterprises.ca](http://cheamenterprises.ca) for more information.

