

Discussions are currently underway between the Ministère de l'Environnement et de la lutte aux changements climatiques and Hydro-Québec regarding whether a request for exemption for the La Grande-1 generating facility must be submitted. This document is hereby submitted to you subject to and without prejudice to the position defended by Hydro-Québec during these discussions.

Preliminary Information on the Project to Replace the Sewage Treatment System for the La Grande-1 Community Centre

Project proponent

Hydro-Québec Production, Direction Régionale – La Grande Rivière
NEQ: 8811141181

Project goal

Hydro-Québec has to replace the sewage treatment system at the La Grande-1 community centre because the existing disposal field has reached the end of its service life. The ideal solution would have been to build a new disposal field, but the type of soil surrounding the workers' residences is not conducive to proper seepage. For that reason, Hydro-Québec obtained the necessary approvals on April 17, 2015, to build aerated ponds at LG1 (ref. 3214-10-008). However, pond construction costs proved to be much higher than expected, and we were forced to find another solution.

Rather than building aerated ponds, we have chosen to install a BIONEST bioreactor. This system is easier to put in place, less expensive and more effective.

Project location

The new sanitary facilities for the La Grande-1 community centre are located about 25 km from the village of Chisasibi, on Category III land, mainly on Lot 2 of the "La Chesnay" Block, based on the original survey of the Bassin-de-la-Grande-Rivière. Latitude: 53°43' 32" North and Longitude: 78°35' 34" West. See the enclosed aerial photo, "Emplacement ciblé pour le Bionest."

Description of the project and its variants

Preliminary information on the project to replace the sewage treatment system for the La Grande-1 community centre, January 2019, Hydro-Québec Production, Direction Régionale – La Grande Rivière

The BIONEST system has been approved (validated) by the Ministère de l'Environnement. The treatment chain that we wish to set up at LG1 comprises a septic tank, a BIONEST biological reactor and an ultraviolet (UV) disinfection system.

The system's design flow remains the same. There is no increase in sewage volume to be treated. The planned work includes replacing the septic tank and sewer lines connecting the building to the septic tank and BIONEST reactor.

Once the project is finished and the facilities are operational, Hydro-Québec's personnel will maintain and monitor the system in accordance with the requirements of the Ministère de l'Environnement et de la Lutte contre les changements climatiques.

Environmental components

An ecological study was conducted to obtain more information on the site. The site consists mainly of shrubland, resulting from a forest fire that likely occurred in 2002. There is also a black spruce-lichen stand and a developed area, where the current disposal fields are located. None of the plant species identified on the site have at-risk status.

The site selected for the BIONEST system is within 50 metres of the residences, on the western side. It is bordered to the west by a wooded area and a watercourse located over 300 metres away.

Main environmental impacts and planned mitigation measures

The anticipated environmental impacts are limited to the work area located close to the workers' residences and will be of short duration. Mitigation measures are planned to reduce these impacts as much as possible. For example, mitigation measures are planned for managing wastewater (runoff in the work area, water from dewatering the excavation area, washwater from the concrete mixer), managing and storing hazardous materials and preventing accidental contaminant spills, maintaining and protecting roadways and managing waste. No wastewater will be discharged into the environment during the work.

Project schedule

The project will be carried out during the summer of 2019, provided all government approvals are obtained (authorization certificate from the Ministère de l'Environnement et de la Lutte contre les changements climatiques, ref. Section 32 of the *Environment Quality Act*).