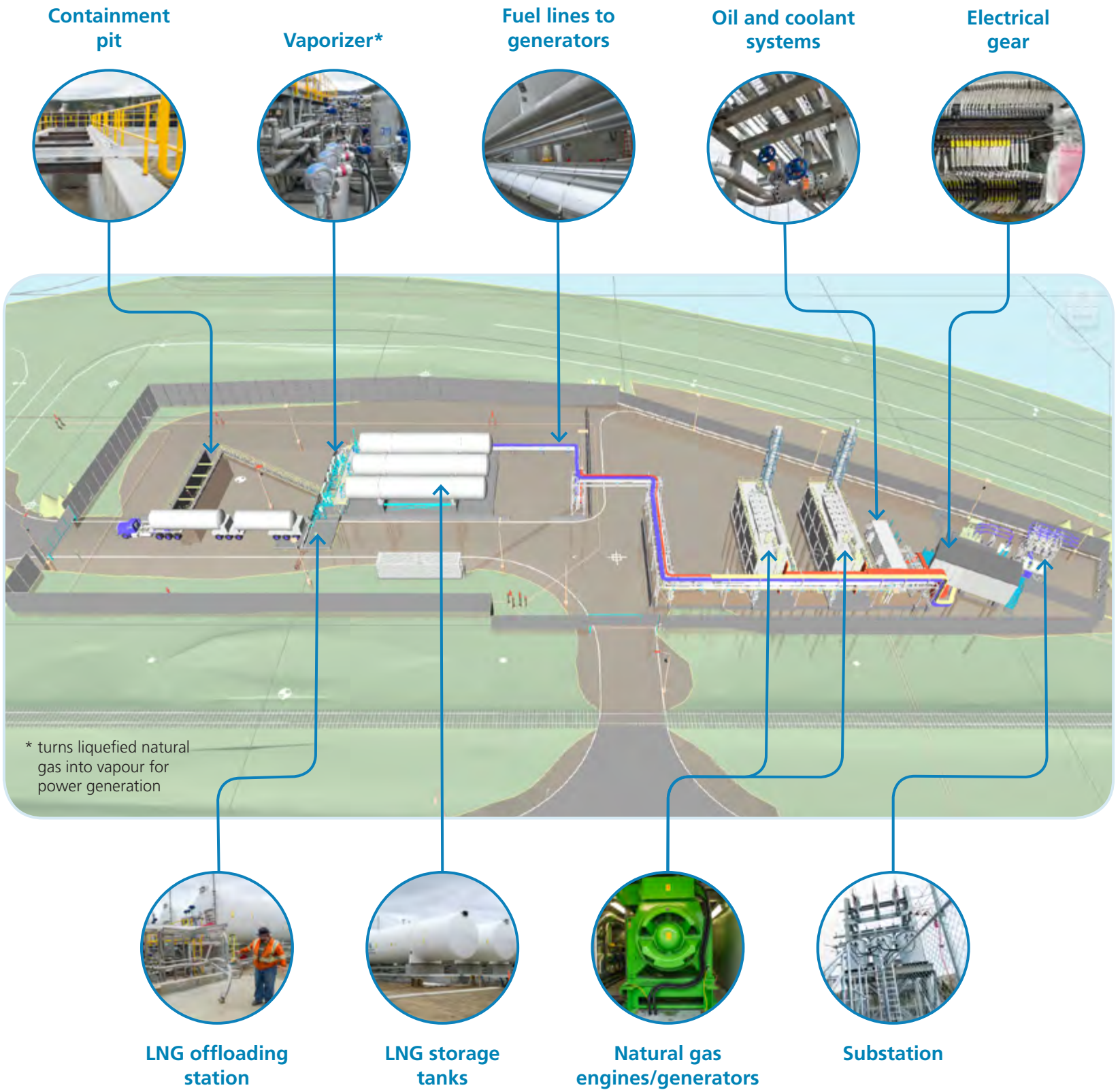


# Our facility features



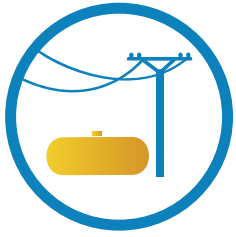
## Safety and the Whitehorse Natural Gas Facility

Most of us use hydrocarbon fuels in our daily lives – gasoline or diesel in our vehicles, and propane and heating oil in our homes. LNG is as safe, if not safer, than other hydrocarbons. Here are the facts about LNG and how Yukon Energy is ensuring safety at the new LNG facility.

*Disponible en français sur demande.  
Veuillez téléphoner au 393-5333.*







## Safety facts

- LNG has no colour or odour and is non-toxic.
- In its liquid state it is not flammable.
- In its vapour state it can burn, but only produces a “lazy flame” similar to a candle.
- LNG has been safely transported around the world by ship and truck for more than 50 years.
- LNG is stored at a relatively low pressure, minimizing the risk of a significant release if a tank is ruptured.



## A safe facility

We’ve built numerous safety features into the site to prevent mishaps and ensure early detection of any problems. They include:

- **Closed circuit TV** for continuous monitoring of the site by our staff.
- **Automated monitoring systems** can detect leaks or flames and immediately shut down the site. Green means normal, yellow is an alarm, red is an emergency.
- **A containment pit** will contain any leaked or spilled LNG, where it will be contained until it warms, becomes a vapour, and disperses into the air.
- **Emergency stop buttons** are located in all areas. They will trigger a shutdown of facility equipment when pushed.
- **Fire hydrants and dry chemical fire extinguishers** are placed at several locations around the site.



## No venting

As LNG warms up, it changes over several months from a liquid to a gas. This is called “boil-off” and it increases pressure in the fuel tank. Usually, when pressure builds to a certain point at an LNG plant, the gas is vented into the air. However at our Whitehorse LNG facility, we don’t plan to vent. Instead, we’ll use the boil-off gas to warm the building and the engines in our back-up diesel plant. Our tanks are double lined with a vacuum in between, similar to a coffee thermos, to minimize heat loss. We can store the boil-off gas for at least 200 days.

## Compared to propane and diesel

- Vapour from natural gas is harder to ignite, at 580° C. Diesel ignites at 260° C and propane at 470° C.
- The storage pressure of LNG is much lower, typically half that of propane tanks.
- Natural gas disperses readily into the atmosphere because it is lighter than air. Propane is heavier than air and flows into low areas and persists over time.
- The amount of LNG stored at our facility (about 500,000 litres) is no greater than the amount of propane now stored in Whitehorse.



Emergency stop buttons

Automated monitoring system



Containment pit

Yukon Energy has proceeded with this project because we are totally confident in the safety of LNG and this facility for all Yukoners, including our staff.

In the unlikely event that there is an accident of some kind, Yukon Energy’s detailed plan kicks in, which was developed with Yukon’s emergency responders using industry best practices. Our first step will be to contact 911, and the appropriate first responders will be called to the site. We’ll then work closely with the City of Whitehorse’s Emergency Measures personnel on many levels, including public communications.

Please contact us if you would like more information.

yukonenergy.ca  
(867) 393-5333

