The three ponds at site that hold clean water prior to discharge to Douglas Channel.

What is Effluent?

Effluent describes liquid waste introduced into the environment. Effluent is a defined term in the *Environmental Management Act.* LNG Canada's effluent contains stormwater, cooling tower blowdown, treated sanitary wastewater and wastewater from the demineralization process. Most of the discharged water is stormwater which is an accumulation of rainwater and snow melt. As there isn't sufficient space to retain all the water that accumulates on site, we must return it to the environment by discharging it.

How will wastewater be treated?

Some key examples include:

- **Segregation:** Streams with different water qualities will be segregated, so that each can be treated appropriately
- **Physical separation:** Some streams containing oil will be treated in a corrugated plate interceptor, where oil will be removed from the top. Filtration is also used to remove solids and contaminants. Chemicals will be added to assist water treatment in some cases
- **Biological:** Certain streams such as sanitary wastewater will be treated with the help of micro-organisms in a bioreactor

Where will the discharged effluent go?

Effluent from the LNG Canada facility will be safely discharged into Douglas Channel via two underwater outfall pipes. These pipes are used to transport treated water that meets regulatory criteria for discharge from the LNG Canada site into Douglas Channel. The outlet design of the pipes and their placement ensures dispersion of the discharge.

What effluent quality guidelines must be met by LNG Canada?

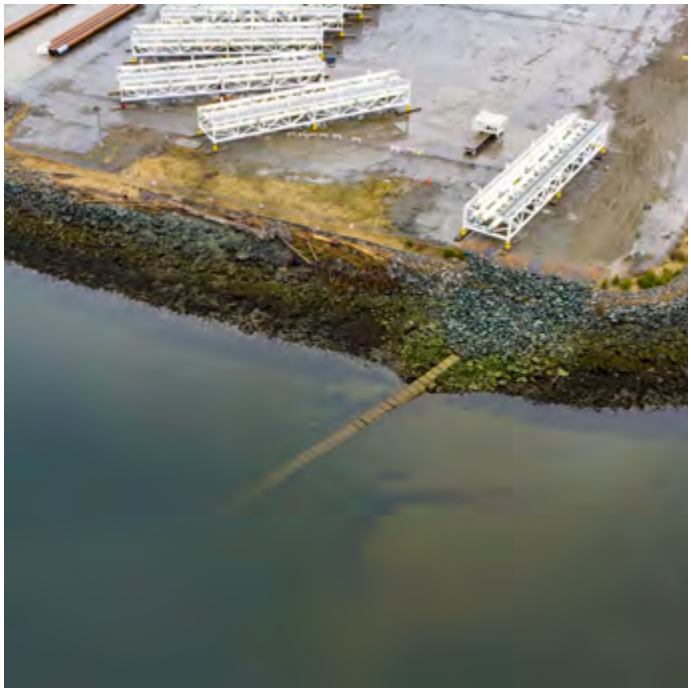
Effluent must be within discharge limits that will be prescribed in LNG Canada's effluent waste discharge authorization (WDA). LNG Canada has submitted its permit application for normal operations to the BC Energy Regulator via the WDA application process. As part of the permit application, LNG Canada modelled contaminants of concern against applicable BC Approved Water Quality Guidelines approved by the BC Ministry of Environment and Climate Change Strategy to ensure any impact to the environment is as low as reasonably practicable.

How will you monitor to make sure that marine life is not affected?

LNG Canada has established several monitoring programs:

- **Discharge Monitoring Program**, which includes measures for monitoring effluent discharge, including location, frequency, parameters, quality assurance / quality control measures, and compared to discharge limits
- **Marine Water Quality Monitoring Program**, which will validate model predictions, and assure that water quality guidelines are being met and detect change and impacts to the receiving environment
- **Aquatic/Environmental Effects Monitoring Program**, which will include weight of evidence assessment and cumulative effects monitoring in areas that may potentially be affected by the effluent discharge. The monitoring program will be sufficiently robust to assist in detecting a biologically significant predetermined change

River water intake, where there are water inlet screens and a pumphouse to bring water from the Kitimat River to the LNG Canada site.



The marine outfall that is located at the southern end of former Terminal B and discharges at depth to Douglas Channel.

For more information,
visit **lngcanada.ca/safestartup**

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