

# GAS TO METHANOL FACILITY AT THE PORT OF TACOMA

February 2016

Northwest Innovation Works (NWIW) is a multinational venture committed to constructing and operating the most environmentally responsible methanol manufacturing facilities in the world. The proposed Tacoma facility will generate jobs and local revenue, and return the site to productive use.

## WHY TACOMA?

Tacoma offers:

- A skilled workforce experienced in constructing and operating industrial facilities
- Available resources for natural gas, including natural gas, water, and clean energy
- Existing infrastructure and property zoned for heavy industry



## CONVERTING METHANOL TO OLEFINS – PRODUCING OUR EVERYDAY ITEMS

Methanol, also known as “methyl alcohol” or “wood alcohol,” is a light and colorless liquid that evaporates in air. It is biodegradable and not carcinogenic. Methanol serves as one of the world’s most widely used industrial chemicals since the 1800s, and is an important industrial building block that is produced and shipped around the globe every day.

## WHAT ARE OLEFINS?

To meet global demands, NWIW will manufacture methanol and export to Asia, where companies will convert it to olefins. Our facilities offer a cleaner way to produce items that we need every day – including medical supplies, safety and industrial equipment, smartphones, kayaks, clothing and toys.

### OLEFINS ARE USED TO MAKE



FLEECE JACKET



KAYAK



CELL PHONES



TIRES



GLASSES



TOYS

## PRIORITIZING ENVIRONMENTAL RESPONSIBILITY

Today, the primary feedstock for the olefins produced in China for use in manufacturing is coal. NWIW will reduce carbon emissions from methanol production up to 70 percent by generating methanol from natural gas. Demand for methanol is forecasted to increase substantially. By offering a cleaner way to produce this feedstock, NWIW facilities will help reduce China's overall dependence on coal – a significant goal in addressing climate change.

In response to community concerns, NWIW is making significant investments in innovations and technology that reduce our environmental impact even further. NWIW will employ ultra-low emission (ULE) reforming technology for each of its proposed facilities, reducing emissions by an additional 75% from traditional methods. This efficient technology converts natural gas to methanol by using a combination of electricity and process-generated heat to power production.

## SUPPORTING THOUSANDS OF JOBS

NWIW will bring jobs to the greater Tacoma area. This two-phased \$3.4 billion gas-to-methanol plant will create up to 1,000 construction jobs during the multi-year construction period. Once operational, the facility will employ approximately 260 full-time managers and workers, in permanent jobs that pay a family wage.

The Port of Tacoma approved a lease agreement with NWIW in May 2014. This step means that permitting with the appropriate regulatory agencies can begin.

## SAFETY IS OUR FIRST PRIORITY

Safety is the first priority for NWIW – for our facility and for the surrounding community. Our safe and proven technology uses an enclosed system for handling natural gas, process chemicals, and the finished methanol product. This system helps prevent spills, fires, and other risks to the public and the environment.

Along each step of the process, the company and facility will follow state and federal environmental regulations, along with local fire, zoning, and other laws and regulations. NWIW is proactively working with first responders and regulatory agencies to develop emergency response plans that include dedicated and trained on-site fire brigade and equipment to support any potential emergency response.

## WORKING WITH THE LOCAL COMMUNITY

NWIW will work with the community to address any concerns that are identified during permitting and design, such as traffic, noise, safety, environmental impacts, or other questions about the facility.

## SCOPING PROCESS NOW UNDERWAY

The City of Tacoma serves as the lead agency for development of an Environmental Impact Statement (EIS) under the State Environmental Policy Act (SEPA). The EIS will determine likely environmental impacts of the proposed development actions, and identify ways to reduce or mitigate those impacts. The first step in the process is a scoping period that runs Dec. 15, 2015 through March 4, 2016. To provide official public comment, please visit the City of Tacoma's website or attend one of the public meetings.

### TACOMA PERMITTING SCHEDULE

If you would like to receive regular updates about the proposed facility at the Port of Tacoma or have questions, please send an email to [tacomainfo@nw-iw.com](mailto:tacomainfo@nw-iw.com) or visit [www.nwinnovationworks.com](http://www.nwinnovationworks.com).

2015		2016				2017	
Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3

Environmental Review (18-24 months)

Scoping period and public comment  
(12/15/2015 - 3/4/2016)

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