

Northwest Innovation Works Manufacturing and Marine Export Facility Environmental Impact Statement



Draft Scoping Report

February 5, 2016

Comments received December 15, 2015 through January 22, 2016

This report will be updated after the March 4, 2016, close of the EIS scoping comment period.



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1. Introduction

How to use this report

The City of Tacoma is the lead agency overseeing the preparation of an environmental impact statement (EIS) under the State Environmental Policy Act (SEPA) for a project proposed by Northwest Innovation Works Tacoma, LLC (NWIWT) located in the Port of Tacoma. An EIS must be prepared when the lead agency determines a proposal is likely to have significant adverse environmental impacts. The EIS provides an impartial discussion of significant environmental impacts, reasonable alternatives, and mitigation measures that would avoid or minimize adverse impacts.

The purpose of scoping is to identify the issues to be analyzed in the EIS. The purpose of this scoping report is to summarize the issues identified by individuals, tribes, organizations, and agencies during the scoping comment period for the manufacturing and marine export facility proposed by NWIWT. This report distills the comments into key themes; it does not contain all comments received verbatim nor does it quantify comments by topic.

Scoping comments will be used by the lead agency, here the City of Tacoma, to help determine the issues and extent of the analysis to be included in the EIS, as well as options for reasonable alternatives to the proposed project and mitigation measures that could be considered. The lead agency and its consultants will have the opportunity to review comments as they develop the draft EIS.

The City of Tacoma is awaiting anticipated comments from the Puget Sound Clean Air Agency and the Tacoma-Pierce County Health Department.

Please note that comments often mix statements of fact with statements of opinion.

Proposal overview and context

NWIWT proposes to develop and operate a natural gas-to-methanol production plant and export facility on approximately 125 acres leased from the Port of Tacoma (Port). The project location is on the Blair-Hylebos Peninsula, Port of Tacoma: 3400 Taylor Way, Tacoma. The project objective is the manufacture and shipment of methanol (a liquid) to global markets for use as a feedstock for manufacturing olefins used in the production of plastics and other materials. The characteristics of the proposed project are described below.

As proposed, the plant will include up to four methanol production lines, each with a production capacity of 5,000 metric tons per day, for a total of 20,000 metric tons per day. The plant will also include ancillary elements such as an administrative and lab building, employee parking, access roadways, fire suppression facilities, air separation units, air storage, water storage and treatment facilities, wastewater treatment facilities, cooling towers, a flare system for the disposal of flammable gases and vapors, substations and emergency generators. Plant components are proposed to be primarily located on approximately 110 acres of Port property situated at the southwest base of the Blair-Hylebos peninsula. Construction is expected to proceed in two phases, each including two production lines totaling production capacity of 10,000 metric tons per day.

The plant will utilize ultra-low emissions (ULE) reforming technology, which will emit substantially lower greenhouse gas and other air pollutants compared to conventional technologies for reforming natural gas to methanol.

Natural gas will be delivered to the methanol plant via a new lateral pipeline, which will transmit odorized gas. Northwest Pipeline GP will be responsible for obtaining permits and constructing this lateral pipeline. This lateral pipeline will connect the existing regional pipeline to the NWIWT project site over an approximately 10-mile corridor through unincorporated Pierce County, the Puyallup Tribe of Indians Reservation, and the cities of Sumner, Puyallup, Fife, Tacoma, and potentially others. Separately, Northwest Pipeline GP is pursuing expansion of its regional pipeline between Sumas and Longview, Washington which is being permitted through the Federal Energy Regulatory Commission; this is most likely a two year process. NWIWT anticipates using natural gas distribution capacity that will be provided by that portion of the Northwest Pipeline regional expansion project between Sumas and Tacoma.

It appears that there is no direct federal or State regulatory approval for the project siting decision itself. Rather, key permits for this project include the City of Tacoma Shoreline Substantial Development Permit, Department of Ecology Water Quality Certification, the Department of Fish and Wildlife's Hydraulic Approval, the U.S. Army Corps of Engineers' Sections 10 and 404 permits, and a Notice of Construction air contaminant permit from Puget Sound Clean Air Agency; the federal permits will likely involve a thorough review of waterway operations by the US Coast Guard. Under the State Environmental Policy Act (SEPA) environmental review precedes any permit decisions. Given the large-scale of the proposed project an Environmental Impact Statement (EIS) is being prepared, with all costs borne by the applicant (NWIWT). This work could have been overseen by the Washington State Department of Ecology (WSDOE), or another State agency, but WSDOE has delegated this responsibility to the City of Tacoma.

The production process will require up to approximately 10.4 million gallons per day of water, which will be supplied by the City of Tacoma. Domestic water and sanitary services for on-site personnel use will be obtained from the City of Tacoma. Treated process wastewater (up to approximately 1.44 million gallons per day) will be discharged to the City of Tacoma's wastewater treatment works. A construction stormwater permit will be required. Stormwater management post-construction will be discharged through Port of Tacoma outfalls or through the City of Tacoma's stormwater system.

At full production, the project will require up to approximately 450 megawatts of electrical power, which will be transmitted through the existing transmission system with localized upgrades if necessary.

The anticipated yearly production at full capacity is approximately 7.2 million metric tons of methanol. Up to approximately 300,000 metric tons of methanol will be stored in storage tanks at atmospheric pressure and ambient temperature and surrounded by secondary containment. Storage tanks will be co-located with plant components, as well as on approximately 15 acres of land adjacent to or in close proximity to the main 110 acre plant site. Methanol product will be transferred by pipeline across Port property from the storage area to the Port's existing deep draft marine terminal (the "East Blair One terminal) on the Blair Waterway. Roadway improvements to access the EB 1 terminal may be necessary. NWIWT anticipates loading between four and seven ships per month depending on vessel size. The Port will be responsible for obtaining permits for modifications to the dock, as well as localized dredging, if necessary, in the vicinity of the berth.

The plant will be operated in compliance with applicable fire, health, and safety regulations and codes. Plant safety features will include fire suppression systems, fire safety equipment, and storage and containment systems designed to current industry standards and regulatory requirements. NWIWT will conduct process safety management assessments and develop emergency response plans in accordance with applicable local, state and federal regulations.

Purpose of the scoping process

The first step in the development of an EIS is called scoping. During scoping, agencies, tribes, local communities, organizations, and the public may comment on factors that should be analyzed and considered in the EIS. Specifically, the scoping process is intended to collect input on the following topics:

- Range of reasonable alternatives
- Potentially impacted resources and extent of analysis for those resources
- Potential measures to avoid, minimize, and mitigate impacts of the proposal

While the lead agency is not required under SEPA to respond to individual comments during scoping, this report allows them to review and consider all comments when developing the scope of the EIS.

2. Scoping process

Notification of scoping

Determination of Significance

On December 15, 2015, the lead agency released a Determination of Significance (DS) that stated NWIWT's proposed project, Manufacturing and Marine Export Facility, may have a significant adverse impact on the environment and, therefore, required the development of an EIS under SEPA (Appendix A).

The scoping period began with the issuance of the DS. Washington State law mandates a 21-day public comment period for the scoping phase of an EIS. The lead agency elected to extend the standard comment period to an expanded 60-day scoping comment period scheduled to end on February 17, 2016. The DS notice also included announcement of two scoping meetings with verbal public comment sessions scheduled at the City Convention Center on January 21 and in North East Tacoma on February 16 at Meeker Middle School.

Following a larger than expected turnout at the first scoping meeting held on January 21, an additional scoping meeting was added on February 10 at the City Convention Center in a larger meeting venue and the scoping comment deadline was extended to March 4. A revised and updated DS that included details about the additional scoping meeting as well as the extended comment deadline was issued on January 27, 2016 (Appendix B).

Public and media notification

The lead agency notified key stakeholders, interested parties, agencies, and the general public of the DS and scoping comment period using a variety of communication tools. Notifications included:

- Announcement of the scoping comment period
- Description of the proposed project and area map
- Identification of the City of Tacoma as the lead agency
- Scoping process deadlines
- Description of opportunities to provide scoping comments
- Details about the scoping meetings

The tools used to announce the release of the DS and start of the scoping period included:

- Mailer to approximately 925 addresses and key stakeholders identified by the lead agency
- Email sent to approximately 75 email addresses and key stakeholders identified by the lead agency
- Print ad placed in the Tacoma Daily Index published on December 15 and 22, 2015

After a larger than expected turnout at the first scoping meeting on January 21, 2016, an additional scoping meeting was added on February 10, 2016, and the comment deadline was extended to March 4, 2016. Notice of the revised and updated DS was sent out on January 27, 2016, and included:

- Mailer to approximately 1000 addresses and key stakeholders identified by the lead agency
- Email sent to approximately 560 email addresses and key stakeholders identified by the lead agency
- Print ad placed in the Tacoma Daily Index

Opportunities to provide comment

The lead agency invited comments through a variety of methods as described below. The table below provides a count for the number of comments submitted during the scoping comment period using each option.

Comment option	Approximate number of comments submitted through January 22, 2016
Verbal public comment at scoping hearing	83 (at January 21 hearing)
Email	144
Written (letters and comment forms)	317
Voicemail	1
Total	545

Scoping meetings

Three in-person scoping meetings will be hosted by the lead agency. All three meetings included a verbal public comment session and the January 21 and February 16 meetings offered an open house with information about the proposed project (see below).

Meeting Date and Time	Location	Attendance
January 21, 2015 6:30 pm	City Convention Center 1500 Broadway	700+
February 10, 2016 6:30 pm	City Convention Center 1500 Broadway	TBD
February 16, 2016 6:30 pm	Meeker Middle School 402 Nassau Ave NE	TBD

Verbal public comment sessions

A total of three verbal public comment sessions were held, one at each scoping meeting. More than 85 people have provided verbal public comments as of January 22, 2016 (below). Each speaker was given up to three minutes to provide comments, which were documented by a court reporter.

January 21, 2016 Scoping Meeting	
Position	Number of People Signed Up
Neutral	5
Opposed	112
Supportive	62
Total	179*

* Due to time constraints only 83 people were able to speak.

A fourth sign-up sheet titled “Not Commenting” was also available for interested parties wishing to be added to the mailing list for project updates and information. 97 people signed up on the “Not Commenting” list.

Voicemail

Commenters were invited to call City of Tacoma staff to discuss the project. In the event that staff were unavailable, the call was forwarded to voicemail and later transcribed for comment analysis. One voicemail comment was received.

Email

Stakeholders were encouraged to email tacoma.methanol.sepa@cityoftacoma.org to submit their comments. Any emails received directly by staff during the comment period were reviewed and included for analysis. More than 144 email comments were received by staff during the scoping comment period through January 22, 2016.

Written

Those who wished to provide written comments could either submit them at the scoping meetings, mail them the City of Tacoma Planning & Development Services Department, or hand deliver them to Planning & Development Services during regular office hours. A total of 317 written comments were received through January 22, 2016.

Comment analysis process

The scoping period began December 15, 2015, and will end on March 4, 2016. As of January 22, a total of 547 scoping comments were received through the various methods described in the previous section. All submissions were reviewed and analyzed to prepare this report.

For the purpose of this summary, every comment has value, whether it is stated only once or multiple times. The analysis represented in this report does not tally the number of comments received on any given topic, nor determine whether comments supported or opposed the proposed project. Scoping is designed to help identify issues that should be addressed and analyzed in the EIS and is not intended to function as a “voting” process.

3. Public comments summarized by issue of concern

Organization of this section

The following sections are organized into categories that reflect the issues and concerns heard during the scoping period through January 22, 2016. Additional versions of this report will be published that incorporate comments heard through the end of the scoping period on March 4, 2016. These issues and concerns are summarized; they do not capture every comment verbatim for each category and they are not quantified.

Geographic scope

A variety of comments were received regarding the geographic scope of the EIS. No clear geographic area of study was widely agreed upon. Comments ranged from suggesting the EIS focus upon the specific site of the proposed project to the entirety of the City of Tacoma, Pierce County, the Puget Sound and Salish Sea regions, and the State of Washington.

Other commenters requested that the EIS study of the impacts of the proposed project as far upstream as Alberta, Canada, where the natural gas will originate, and as far downstream as China, where the final product will be shipped for plastic production. Many of those same comments requested information and further study of the impacts of the methods of natural gas extraction, including fracking, and the method of natural gas transport, including the existing and proposed pipelines.

Comments summarized by topic

Air quality

Commenters emphasized the need to evaluate the direct, indirect, and cumulative impacts of air pollution in the area near the proposed project as well as in the City of Tacoma and the Puget Sound region.

Commenters asked that the EIS state what permitting agency or agencies have jurisdiction over the proposed project and the permits required by such agencies.

Commenters expressed a desire for continuous air quality monitoring at the proposed facility.

Commenters noted that increased shipping and ground transportation needs would contribute to air pollution and increased particulate matter and requested the scope of the EIS include such impacts.

Commenters requested that the EIS study vapor plumes and potential toxic gases associated with the plant. Toxins specifically mentioned for analysis and inclusion in the EIS include:

- benzene
- formaldehyde
- sulfur dioxide
- fine particulates
- carbon dioxide
- carbon monoxide
- copper
- naphthalene
- nickel
- nitrogen oxide

- sulfur dioxide
- toluene
- volatile organic compounds (VOCs)

Commenters noted that the Port of Tacoma and other portions of Pierce County are often in violation of existing clean air regulations and expressed concern that the methanol plant would exasperate the problem.

Commenters requested that the EIS compare the proposed project's expected air pollution levels with other existing industries within the City of Tacoma.

Commenters were concerned that there would be an increase of burn-bans due to increased air pollution resulting from the proposed project.

Commenters expressed concern about odor coming from proposed project and pointed out that natural gas has an additive to make it smell bad. Quantities of potential escapement of natural gas were requested to be included in the scope of EIS. This particular issue was highlighted due to past "aroma" associations with the City of Tacoma. Commenters did not want to see another odor producer located in the Port of Tacoma to perpetuate a negative image of Tacoma.

Commenters suggested that air pollution associated with the project could reduce property values in the area near the proposed project and in all of Tacoma.

Commenters stated that pollution generated at the proposed facility might encourage current residents to move out of the area and discourage others from moving to the area.

Commenters referenced the United States Environmental Protection Agency's list of Hazardous Air Pollutants. This list establishes workplace and emission standards for such substances. Commenters requested that the EIS identify all hazardous substances and the projected levels to be released at the proposed facility, even if found to be at or below minimum levels. Additionally, commenters requested that the EIS identify any non-regulated substances that may be released at the proposed facility that may constitute a nuisance.

The link between air pollution and health including cancers and respiratory diseases, were noted as a concern by commenters. The health impacts on vulnerable populations, such as children, the elderly, were also mentioned. The health risks for workers at the proposed facility and at existing or new City of Tacoma sewer treatment facilities were also emphasized by commenters.

Commenters noted that increased shipping and vehicle traffic would result in higher levels of exhaust from diesel engines, which impacts human health and increases risk of asthma and cancer.

The impact of potential air pollution on health was noted by commenters as well as impacts to lost work time and increased medical costs for residents which would serve to reduce overall quality of life.

Commenters noted that gas pipelines leak methane. Commenters also stated that methane is more potent than CO₂ and request that the EIS analyze health and environmental impacts associated with methane leaks.

Commenters expressed concern about historical air pollution in the City of Tacoma by the Asarco Smelter and industrial activities at the Port of Tacoma.

Commenters expressed concern that toxic emissions would be carried by winds, and would impact populations outside of the immediate proposed project vicinity.

Climate change and greenhouse gases

Commenters expressed concern about the proposed project's potential to contribute to potential direct, indirect, short-term, long-term, and cumulative impacts of climate change and asked that this be analyzed in the EIS.

Commenters asked that the EIS review what the types and quantities of greenhouse gases that will be released as a result of the construction and continued operation of the proposed project.

Commenters noted that the Port of Tacoma is the area's largest contributor to greenhouse gas emissions.

Commenters asked that the EIS analyze if the processes used to generate the power that will be used by the proposed facility will result in increased greenhouse gas production.

Commenters ask that the EIS study the climate change predictions for sea level rise on the tideflats of Tacoma, where the project is proposed to be constructed.

Commenters noted that climate change coupled with more intense and frequent rain events may increase the risks of flooding and damaging high tides at the proposed project site.

Commenters asked that the EIS include the Port of Tacoma's plans to address rising tides and sea level rise associated with global climate change.

Commenters stated that this region will be facing a loss of hydroelectric power due to diminished snow pack and glacier melt as a result of global warming and this project will exacerbate the reduction in the generation of hydroelectric power.

Commenters stated that allowing the proposed project to utilize natural gas obtained through fracking would be contrary to the State of Washington's effort to decrease its use of fossil fuels and slow climate change.

Commenters noted that China is one of the world's worst polluters and supplying them with materials to create plastics would contribute to global warming.

Cumulative and indirect impacts

Commenters request that the scope of the EIS include the cumulative and indirect impacts plastic manufacturing will have on the environment and human health on a global scale.

Commenters requested that the EIS analyze how increased greenhouse gas production will affect global climate changes and what the impacts will be.

Commenters asked that the EIS analyze the effects that fracking has on the environment and human health.

Commenters requested the EIS include a description of what the plastics produced will be used for, where the plastics will be shipped, and if said plastics can be recycled.

Commenters asked that the EIS study the effects of increased plastics manufacturing, product disposal, and waste by-product storage on a regional and global scale.

Commenters noted that the proposed project could help third-world industries to consider cleaner fuel choices.

Economics

Commenters stated that NWIWT would profit from this project, but the risks and costs of the project are being passed onto the community and tax payers.

Commenters expressed support for the proposed project because tax payments will benefit local schools and public entities such as fire, emergency services, and police.

Commenters stated that home values would be negatively impacted if the proposed project is constructed.

Commenters asked that the EIS provide an analysis of land and home values and how the values may be affected if the proposed project is approved.

Commenters suggested that the proposed project would encourage current residents to move out of the area and discourage others from moving to the area.

Commenters explained that it would be hard to attract new people and businesses to the area if the proposed project is approved due to the risk of disaster and pollutants.

Commenters stated that the City's reputation as a livable city will be diminished and/or lost.

Commenters expressed fears that the proposed project would harm Tacoma's image as a desirable place to live and work, an image it has been cultivating for the last quarter of a century and longer.

Commenters noted that the increase in rail traffic, noise, and vibration could negatively impact the economy by reducing tourism and recreation.

Commenters pointed out that large sums of tax dollars have been invested in encouraging tourism and public recreation. Commenters noted that tourism and recreation contribute economic benefits, including job creation, to the region and need to be analyzed in the EIS.

Commenters expressed extreme concern about the impacts to residents and businesses if there is a reduction in the availability of water due to the consumption needs of the proposed plant.

Commenters expressed concern about the economic impacts of increased utility rates for residents and businesses.

Commenters asked that the EIS study impacts to businesses that rely on the Green River watershed.

Commenters stated that there will ultimately be a cost savings to the City if the methanol plant is not built because there will be not be increased energy and water demands and infrastructure costs.

Commenters asked the EIS to consider how much of the cost to construct the proposed project will be spent abroad on building components.

Commenters want the EIS to identify what, if any, financial incentives are being offered to the developer of this project.

Employment/Jobs

Some commenters expressed their support for the proposed project stating that it will promote economic growth for Tacoma and the region. One of the main themes in a large number of comments was the many benefits of job creation to the City of Tacoma and the region.

Commenters asked that the EIS include a model of the total employment effect, including indirect and induced jobs.

Commenters requested that the EIS include a study of the impacts that the project will have on job creation within the City.

Commenters stated that the number of jobs created will not justify the potential risk to the safety of Tacoma's citizens or environment.

Commenters stated that the approval of the proposed project will produce hundreds of family wage jobs in the region.

Commenters stated that there will be a negative impact to jobs because new or existing businesses will not want to locate or expand in the area if the proposed project is approved.

Commenters stated that the jobs within the methanol industry are risky and difficult to maintain.

Commenters expressed a desire for the potential newly created jobs to be "diverse."

Commenters stated that the potential newly created jobs will be "jobs with dignity."

Impacts from accidents/emergencies

Commenters questioned the true cost of a potentially catastrophic disaster at the proposed facility including spills, explosions, leaks, fires, earthquakes, high tides, floods, lahars, tsunamis, sabotages, terrorist attacks and requested that the EIS include an economic assessment that factors in the costs of the following:

- Commercial marine traffic
- Damage to the marine and terrestrial environment
- Impacts water resources, including the Puget Sound, aquifers, rivers, and streams
- Agricultural lands
- Lost local businesses
- Lost property and decreased property values
- Lost tourism and recreation opportunities
- Protecting detainees at the regional Immigration and Customs Enforcement detention facility
- Infrastructure construction and improvement
- Increased healthcare needs
- Externalized cost of climate change

Commenters expressed concerns that costs of emergency response, planning, and staffing would be a financial burden to local and regional governments and the general public.

Commenters noted that emergency response training and equipment costs will be spent by local and regional governments and request that the EIS evaluate who will pay for such training and equipment.

Commenters asked that the scope of the EIS include costs of future environmental clean-up required for potential site contamination.

Commenters requested the EIS consider the potential for property damage in the event of a spill, explosion, fire, accident, or natural disaster.

Commenters asked that the EIS include the cost of expanding to the City's wastewater treatment capabilities if the construction of the proposed facility requires it.

Commenters stated that Tacoma Rail trains travel near the proposed project site and that Tacoma Rail is currently underinsured. Further, commenters stated their fears that City of Tacoma rate payers will be financially responsible for train accidents that could involve the refinery.

Commenters want the EIS to state whether NWIWT will indemnify the City of Tacoma and the Port of Tacoma in the event of a major catastrophe at the proposed facility.

Commenters asked that NWIWT prove that it will carry insurance sufficient to cover all costs of an emergency or disaster. Commenters expressed worry that taxpayers will end up covering the cost of potential disasters associated with the project.

Commenters requested that the EIS investigate NWIWT's capital structure, available insurance, and ability to legally conduct business in the United States.

Commenters feared that NWIWT might avoid paying potential environmental cleanup cost by declaring bankruptcy or litigating.

Earth, geology, and soils

Commenters stated that the proposed facility is located in the tideflats area of Tacoma and that the soils of the tideflats are subject to liquefaction during a seismic events and volcanic eruptions.

Commenters submitted fact sheets from the United States Geological Society to which show that the proposed facility is vulnerable to seismic events and volcanic eruptions.

Commenters would like the EIS to examine the environmental, safety, and economic impacts of potential seismic events affecting the proposed project.

Commenters requested that the EIS analyze how the proposed project will ensure that the methanol storage tanks used will withstand the maximum feasible seismic event and subsequent soil movement under the tanks.

Commenters requested that the EIS analyze how the secondary containment of storage tanks will be constructed to withstand the maximum feasible seismic event and that a worst case scenario analysis be performed by an independent entity.

Commenters asked if the storage tanks to be used at the proposed facility have been utilized in facilities in other locations where they have been subject to real-world seismic events and successfully contained their contents. Commenters request that the EIS list those instances and results in detail.

Commenters asked what superfund soils clean-up activity is currently underway in the City of Tacoma.

Commenters want the EIS to disclose what toxins will be released and in what amounts during construction of the proposed project.

Commenters stated that the site of the proposed facility is industrial land and emphasized that this will be a “redevelopment” project, not a new development.

Commenters asked if there are any limitations on the parcel that the project is proposed to be built on due to past remediation.

Commenters requested that the EIS analyze the long term geological effects that will result from the extraction of the natural gas that will be piped to and used in the proposed facility.

Asarco

For almost 100 years, the Asarco Company operated a copper smelter in Tacoma. Air pollution from the smelter settled on the surface soil over more than 1,000 square miles of the Puget Sound basin. Arsenic, lead, and other heavy metals are still in the soil as a result of this pollution. Many commenters expressed concern that the methanol plant would add to the contamination in Tacoma and the Region’s soils and did not want to see “another Asarco” contaminating Tacoma.

Kaiser Aluminum Plant

The proposed project would be constructed on the former Kaiser Aluminum Plant site in the Port of Tacoma. Kaiser Aluminum operated an aluminum smelter and manufacturing plant there for over 60 years. The mill closed in 2001. In 2003, the Port of Tacoma bought the property and began cleanup of the site.

Commenters questioned whether the Kaiser Aluminum site has been cleaned up adequately.

Emergency response

Commenters requested a comprehensive analysis of the adequacy of federal, state, and local emergency response capabilities in the event of a spill, explosion, leak, fire, earthquake, high tide, flood, lahar, tsunami, sabotage, terrorist attack, or other disaster at the proposed facility.

Commenters noted the proximity of the plant to an urban population and expressed concerns about community safety and the adequacy emergency response. Commenters expressed a desire to know who would pay for disaster preparedness and emergency response.

Commenters also requested that the scope of the EIS include:

- Detailed emergency incident prevention, management, and response plans

- Evacuation routes with traffic flow analysis for communities, neighborhoods, businesses, and schools
- Detailed emergency notification plans for residents, businesses, and other persons
- Entrance and exit points for the proposed facility
- Emergency spill protocol for aquatic terrestrial and aquatic environments
- How a large volume of methanol would be recovered and/or neutralized
- Safeguards proven to contain leaks of toxic gases in order to immediately protect the public
- Safeguards to be used should the first line of containment fail
- Hazardous materials storage, handling, disposal, and monitoring
- Fallout or blast zone delineation and potential impacts
- Volcanic eruption and associated lahar impacts
- Exploration of financial liability beyond the amounts typically held by the plant operators

Commenters noted that the proposed project would be the largest methanol refinery in the world and an industrial accident at the site would pose direct danger to nearby residents and detainees at the nearby Immigration and Customs Enforcement detention center.

Commenters referenced the Aliso Canyon methanol leak in California and the negative impacts it has had on that community and environment citing concerns that something similar could happen in Tacoma if the proposed methanol plant is built.

Commenters requested that the EIS include a report of the safety record of the existing natural gas pipeline that will supply the natural gas to the proposed facility and that report disclose any past leaks.

Commenters asked what safety protocols will be in place for the existing and proposed natural gas pipeline.

Commenters were concerned about the risks associated with chemicals required to clean up methanol spills and leaks and would like the EIS to disclose those chemicals.

Commenters requested analysis of the health impacts to emergency response personnel that could result from exposure to hazardous materials.

Commenters stated that the local hospitals will likely not be adequate should an emergency or disaster occur at the proposed facility.

Commenters requested that the EIS include an analysis of federal, state, and local code revisions that would be required to be in effect prior to the operation of the proposed facility to ensure adequate emergency response and safety measures are in place in the event of a disaster or emergency at the proposed facility. Commenters also requested that said code revisions be adopted prior to the proposed facility's operation, should it be approved.

Energy

Commenters expressed a desire for the EIS to include an analysis of the power demand of the proposed facility and how the power will be provided to the plant.

Commenters asked that the EIS analyze if the generation of power to be supplied to the proposed project would result in increased greenhouse gas production.

Commenters asked for the specific sources of electric power that will be supplied to the plant.

Commenters requested the EIS include an analysis of the effects of the proposed project's power usage on residential utility rates over the life of the plant.

Commenters requested that the EIS analyze the electricity consumption rates provided by NWIWT to ensure they are valid.

Commenters expressed a desire for the City of Tacoma to seek out clean energy developments in the future.

Historic and cultural preservation

Commenters expressed concerns that their historic properties would be negatively impacted as a result of pollution generated at the proposed facility.

Land use and social elements

Agriculture

Commenters would like the EIS to analyze the impacts of the proposed facility on agriculture in the region.

Aesthetics

Commenters noted that the proposed project would impact the natural beauty of the area and expressed concern that there would be damage to the health and beauty of the region.

Employee Safety

Commenters asked that the EIS include mitigation that ensures the proposed project will be required to comply with the most up to date safety standards for workers involved with construction activities and future employees.

Commenters requested that the EIS include requirements for high safety standards, oversight control, and liability insurance assurances for workers and operators at the proposed facility.

Commenters noted that the proposed facility will produce contaminated wastewater which may be handled by City of Tacoma employees and expressed concerns about employee safety.

Land use

Commenters stated that the Port of Tacoma is the right place for the proposed facility because the proposed site is in an established industrial area, and the proposed project is consistent with the types of uses, noises, odors, aesthetics, processing, and shipping activity that is already occurring in area.

Commenters expressed a concern that the concentration industrial uses in the port is potentially dangerous.

Commenters expressed concern that the proposed project is not consistent with the visions and plans of the surrounding neighborhoods including the Dome District, Brewery District, and University of Washington.

Commenters noted that the Tacoma City Council approved plans for Puget Sound Energy to build a liquefied natural gas facility near from the proposed facility in the Port of Tacoma.

Commenters stated that that proposed facility would be within the blast zone of the liquid natural gas facility.

Light and glare

Commenters noted the close proximity of neighborhoods and businesses to the proposed facility and expressed concerns about light pollution associated with the increased shipping needs; shipboard lighting was specifically mentioned for further study in the EIS.

Public Health

Commenters requested the EIS study the direct, indirect, and cumulative impacts of the project on public health.

Commenters requested that the EIS include a Health Equity Impact Review.

Commenters emphasized the relationship between air pollution potentially caused by the project and public health, noting that air pollution could be related to various cancers, respiratory diseases, and neurological diseases.

Commenters noted that chemicals released through the process of methanol refining are cancer- and lung disease-causing. Similarly, other commenters requested that the EIS review the cancer rates near existing methanol refineries, both before and after facility operation.

Commenters are concerned with the potential for exposure to methanol and cite the hazardous effects including negative impacts to the neurological, ophthalmologic, gastrointestinal, and nervous systems.

Multiple comments described the physical properties of methanol and the exact reactions that take place in human body if exposed.

Commenters noted that the potential water pollution could negatively impact public health.

Commenters expressed concern regarding potential soil pollution and asked that the EIS analyze potential impacts to crops and foods grown in the region.

Commenters noted that the proposed facility will produce contaminated wastewater which may be handled by City of Tacoma employees while in the City of Tacoma wastewater system and raised concerns about worker safety.

Commenters request that the EIS review the chemicals employees could be exposed to through skin contact with the water or respiration, and in what quantities the chemicals would be present.

Commenters asked if any chemicals could escape at City of Tacoma pumping stations, treatment plants, or manholes that would be harmful to human health.

Commenters requested that new MSDS (Material Safety Data Sheets) be created for the chemicals found at the proposed facility and published for full disclosure of potential harm.

Commenters asked that the EIS study the potential negative impacts to vulnerable populations including:

- Children

- Elderly
- Those with compromised immune systems
- Those with compromised respiratory systems
- Detainees at the nearby Immigration and Customs Enforcement detention center

Commenters requested that the EIS analyze the bioaccumulation rates of the chemicals used at the proposed facility in the human body and natural environment.

Commenters asked that the EIS determine if persistent organic pollutants would be created at the proposed facility.

Property values

Commenters stated that home values would be negatively impacted if the proposed project is approved.

Commenters asked that the EIS provide an analysis of land and home values and how the values may be impacted if the proposed project is approved.

Commenters requested the EIS consider how lost property values could impact the economy and the cumulative financial impact from decreases in property value.

Commenters suggested insurance be acquired by NWIWT to cover potential property damage.

Recreation and tourism

Commenters pointed out that tax dollars have been invested in public recreation and tourism.

Commenters noted that recreation and tourism provide economic benefits and job creation that need to be included in the scope of the EIS.

Commenters stated that loss of recreation or tourism opportunities could cause businesses and individuals to move away from the area.

Mitigation

Commenters were concerned that there are no adequate mitigation measures to address potential impacts caused by the project.

Commenters expressed concerns regarding the costs of mitigation and asked who would be responsible for:

- Compensation for decreased property values
- Disaster preparedness and emergency response
- Health impacts of the building of the facility and pollution created on-site
- Payment of medical expenses due to increased exposure to harmful pollutants
- Property damage
- Reduction in tourism
- Replacement/repair/improvement of infrastructure
- Spill, fire, explosion, or disaster

Commenters stated that insurance should be obtained by NWIWT to cover worst case scenarios and costs of mitigation measures. Additionally commenters noted that there may be no amount of money that could cover the impacts from this project.

Tribal Governments and Native Americans

Commenters expressed concerns about the proximity of the Puyallup Tribe of Indian Members to the proposed project.

Noise and Vibration

Commenters noted the close proximity of neighborhoods and businesses to the proposed facility and expressed concerns about noise impacts coming from the plant and the increased shipping needs. Fog horns were specifically mentioned for additional study in the EIS.

Permitting

Commenters stated that the permits for the proposed project should be denied for several reasons, including:

- Risk to human life
- Impact on climate change
- Inability to mitigate impacts
- Risks to wildlife, including endangered species

Conversely, commenters expressed support for NWIWT's proposed project and their confidence in the required processes, permits, and regulations.

Commenters asked if the proposed methanol refinery is congruent with the City of Tacoma's Climate Action Plan and other City of Tacoma codes and plans in general.

Commenters asked that the EIS analyze whether or not proposed project is compatible with the City of Tacoma's vision for growth and with the Puget Sound Regional Council's Vision 2040.

Commenters asked that the EIS provide an analysis of the following statutes and regulations and their applicability to the proposed project:

- National Environmental Policy Act
- Toxic Substances Control Act
- Clean Air Act
- Resource Conservation and Recovery Act
- Clean Water Act
- Comprehensive Environmental Response Compensation and Liability Act
- The Rivers and Harbors Act
- State of Washington Growth Management Act
- Title 40 of the Code of Federal Regulations
- All EPA rules and regulations
- All applicable City of Tacoma plans, codes, and regulations

Commenters asked that proposed project be required to obtain the following permits and that the EIS include the processes and timing of such permits:

- Water quality certification from the Department of Ecology
- Hydraulic project approval from the Department of Fish and Wildlife
- Section 10 and 404 permits from the US Army Corps of Engineers

- Notice of Construction Air Containment Permit from the Puget Sound Clean Air Agency
- Review of waterway operations from the US Coast Guard
- Shoreline Substantial Development Permit from the City of Tacoma

Commenters request that all permitting agencies' names, addresses, and staff contacts are included in the EIS.

Commenters asked that the EIS analyze what flexibility the Port of Tacoma has to lease the land to NWIWT as well as how leasing the land to NWIWT relates to required permitting decisions.

Commenters want the scope of the EIS to include if it is possible for a permitting agency to approve a permit with conditions, how such conditions would be enforced, and who would make those decisions.

Commenters expressed concern with NWIWT's lack of track record and experience with quality control measures, environmental policy, and regulations.

Commenters stated that under the Comprehensive Environmental Response and Compensation and Liability Act, section (a)(42 USCA sect. 9607), the City of Tacoma is jointly and severally liable for the costs of any response action required at the facility.

Plants and animals

Wildlife

Commenters asked that the scope of the EIS analyze effects on the natural environment and specifically mentioned the following plants and animals:

- Fish
- Salmon
- Orca
- Plankton
- Birds

Commenters noted that plastics pollution in the oceans is known to kills sea birds and sea life.

Commenters requested that the EIS analyze the bioaccumulation rates of the chemicals used at the proposed facility.

Commenters asked that the EIS analyze how this project could affect natural variability and the predicted changes to variability due to climate change.

Project alternatives, design, and extraction methods

Alternatives

Commenters suggested permitting agencies consider supporting a no-action alternative due to lack of community support or if the proposed project could not mitigate impacts.

Commenters stated that there will ultimately be cost savings to the City if the methanol plant is not built due to a reduction in energy and water demands and infrastructure costs.

Design

Commenters requested that the EIS analyze the types of methanol storage tanks to be used at the proposed facility and the measures that would be taken to prevent spills.

Commenters want the EIS to analyze the life cycle of the proposed facility.

Commenters requested that the EIS review what methanol production facilities have been constructed worldwide since the 1960s and all methanol production facilities in the United States. Further, commenters asked what facilities are still in operation, what their conditions are, and what the employment counts are.

Commenters requested that the EIS provide details about NWIWT including if NWIWT operates other methanol plants anywhere else in the world, the capacity of those facilities, how long the plants have been online.

Commenters ask the EIS include maps of other facilities operated by NWIWT.

Extraction Methods

Commenters requested that the scope of the EIS include assessment the extraction of natural gas including direct, indirect, and cumulative impacts.

Commenters were concerned about the environmental impacts of hydraulic fracking used to extract natural gas.

Public involvement

Commenters expressed concerns that the City has not done enough outreach to community members regarding the proposed project and permitting processes.

Commenters stated their disappointment in the meeting venue chosen for the January 21 hearing stating that the venue was too small and there was limited opportunity to provide feedback and participate.

Commenters stated a desire to ensure that in the future the public process for this project will include adequate space, clear communication, government transparency, and basic technology in order to allow community members to observe and participate fully.

Commenters asked why every single resident in the City of Tacoma was not notified of the proposed project and stated that all citizens should be notified of future meetings and project news.

Commenters asked that City of Tacoma staff explain the sequence and timing of this project's required permits to the public and requested a schematic or flow chart to help illustrate said processes. Commenters also asked that the EIS include the same information.

Commenters asked that City of Tacoma staff and the EIS make it clear who the decision makers for each step of the permitting process is, for example, city staff, city council, hearing examiner, other permitting agencies, etc.

Commenters asked that public involvement process for the EIS is thorough and evaluative of all perspectives, as well as honest and transparent.

Commenters noted their appreciation for the public process to date, and alternately, others noted public process failure in that they did not receive adequate notice of public hearings and opportunities to comment.

Commenters made recommendations for improving the public EIS scoping process and request the following:

- Additional public meetings
- Additional publicity to ensure the public is aware of meetings
- Larger meeting venues
- Not asking oral commenters to sign up as “for” or “against” the project at future public meetings
- Future public meetings to be transit accessible

Commenters asked that all of the agencies involved with the public process provide updated project and meeting information on their respective websites.

Commenters asked that the results of any independently reviewed environmental research be made available to the public.

Commenters asked that the decision to approve or reject the project be put to a vote.

Commenters requested a moratorium on this project to delay the process in order to gather additional public input.

Commenters noted that the City of Tacoma did not ask the Sustainable Tacoma Commission to review the proposed facility prior to conducting public outreach on the project.

Commenters asked for public review of Hazardous Materials documents.

Safety

Commenters expressed outrage and concern with the safety of the proposed project and stated that the risks are unacceptable.

Commenters stated that the dangers of the proposed project are being forced upon the community with no benefit in return. Conversely, other commenters stated that while risks are present, they are acceptable and to be expected in a society that requires plastics and for a project that provides jobs for the community.

Comments included requests for the EIS to study all direct and indirect impacts of potential spills, explosions, leaks, fires, earthquakes, high tides, floods, lahars, tsunamis, sabotages, terrorist attacks, or other disasters at the proposed facility.

Commenters noted the highly-flammable nature of methanol and the danger it poses to human health and safety.

Commenters noted concerns about the safety of children and proximity of schools to the project site.

Commenters expressed their support for the proposed project as long as it is in compliance with industry-standard safety regulations and best practices.

Commenters noted that this facility will be brand new and state-of-the-art and that such facilities benefit from safety assistance provided by organizations such as the Chemical Safety Board.

Commenters expressed concern over NWIWT’s safety record and requested that the EIS consider NWIWT’s previous safety violations and experience operating facilities similar to the one proposed.

Commenters noted the proximity of the plant to urban populations and expressed concerns about community safety and the adequacy emergency response.

Commenters asked that the EIS study how long it would take to restore a variety of different ecosystems in the event of a disaster at the proposed facility, the methods and techniques that would be used, and the associated costs.

Commenters noted that local, state, and federal regulations should all be enforced, including clean air regulations and clean water regulations.

Commenters added that the existing regulations may not be strong enough and should be reevaluated prior to a project approval.

Commenters noted that the Tacoma City Council approved plans for Puget Sound Energy to build a liquefied natural gas facility blocks away from the proposed facility.

Commenters noted that that proposed methanol refinery would be within the blast zone of the liquid natural gas facility.

Transportation

Commenters stated that the scope of the EIS should include potential direct, indirect, and cumulative impacts of increased shipping traffic on Commencement Bay and the Puget Sound.

Commenters requested that the EIS identify the number of additional ships that will be associated with the proposed project as well as any secondary impacts that may occur through the increased risk of spills or dumping.

Commenters are concerned about the potential for terrorist attacks on the additional shipping traffic in the Puget Sound as a result of the proposed project and request that the EIS analyze those threats.

Commenters noted the Port of Tacoma has aging infrastructure and expressed concerns that first responders could be hindered by this fact and requested that the EIS analyze what infrastructure should be improved.

Commenters noted that the Port of Tacoma currently suffers from poor traffic circulation and expressed concerns that the construction of the proposed facility would add to the problem.

Commenters noted that the facility could be damaged by other nearby industries or vehicular and train operations.

Commenters noted that the plant has the potential to cause risks to other industries or transportation systems operating within the Port of Tacoma including the Tacoma Wastewater Treatment Plant, pump station, and distribution systems.

Commenters are concerned that the proposed facility and similar uses within the Port of Tacoma are relying on aging rail infrastructure and want the EIS to analyze what upgrades and improvements should be required.

Commenters stated that Tacoma Rail trains travel near the refinery and that Tacoma Rail would be negatively impacted by train accidents that could involve the refinery.

Water resources

Commenters expressed concerns and outrage about the total amount of water the proposed facility will require for its daily operations.

Commenters cited recent State and City directives for water use reduction due to recent drought conditions. Commenters requested justification for the proposed project's water consumption as well as assurance that the high levels of water consumption will not negatively impact or exasperate future water shortages and droughts.

Commenters requested a determination if the water consumption rates provided by NWIWT are valid.

Commenters requested that the EIS analyze the proposed facility's effect on Tacoma and the region's water supply in the short and near terms.

Commenters asked that the scope of the EIS include potential effects on water rates for commercial and residential consumers.

Commenters requested that the EIS analyze how future restrictions on water will be determined and if the proposed facility will be required to restrict water consumption during the times of low levels and droughts.

Commenters requested that any reduction/cessation of operation requirements for the proposed facility should be available for public review as part of the EIS process as should as enforcement mechanisms for such requirements.

Commenters stated that the population of Tacoma is expected to grow and expressed concerns about if there will be enough water to meet future demands.

Commenters asked that the water utility rate and price structure is included in the scope of the EIS especially if NWIWT uses potable water from City of Tacoma sources.

Commenters are concerned about impacts to the City's watersheds and local aquifers.

Commenters asked that the EIS analyze the impacts of the proposed facility's water consumption on neighboring communities' water supplies.

Commenters want the scope of the EIS to detail specifically where the water supplied to the proposed facility will come from and if wells and aquifers will be used to meet the proposed water demands.

Commenters request that the EIS study the impacts to the Green River watershed including impacts to its flow, recreational use, ecosystem, and salmon species. Impacts to business that rely on the Green River were also requested for inclusion in the scope of the EIS.

Commenters expressed concern about the health of the South Tacoma Aquifer should additional water resources be allocated to the proposed facility and ask that the EIS review impacts to the South Tacoma Aquifer over the course of the next 30 years.

Commenters requested that the EIS include a study of potential water vapor released from the plant citing concerns about toxins that may have unknown impacts on the natural environment and human health.

Commenters ask the EIS study the dispersion of the water vapor released at the proposed facility which would be subject to winds and weather patterns.

Commenters asked that the EIS analyze what the impact of the plastics manufactured in China will have on the area's waterways.

Commenters stated that Tacoma has spent the past two decades cleaning up Commencement Bay from pollutants and ask that the EIS explore what impacts the proposed facility will have on those efforts.

Commenters requested that the EIS compare the proposed methanol plant's water pollution levels with other existing industries located within the City of Tacoma.

Commenters asked that the EIS also evaluate:

- The specific amount and quality of water required for each reaction and stage of industrial process at the proposed facility
- The temperature requirements of the water at each stage of its use at the proposed facility
- The demonstrated technology for effectively recycling and cooling water at the facility
- The environmental implications of recycling and cooling water in this way
- Alternatives that require less water usage and the environmental impacts of those alternatives
- The proposed project's ability to scale back use during drought periods
- Specific processes at the facility that can be curtailed under defined drought conditions
- NWIWT's plans or processes for water conservation during drought
- The means that the City of Tacoma has to enforce water conservation during drought at the facility
- How tidal forces will affect the water consumption and wastewater discharge from the proposed facility and environment
- The ecological impacts of the proposed facility's water use on the aquatic and terrestrial life near those water sources
- How impacts from the proposed facility may affect water customers, wildlife, and minimum in-stream flows in different seasons during and during periods of drought.

Commenters noted that climate change coupled with more intense and frequent rain events may impact the risks of flooding and damaging high tides at the facility.

Wastewater

Comments received included questions and concerns about wastewater associated with the plant and requested that the scope of the EIS include:

- The chemical composition of the wastewater emitted from the plant
- The chemicals present in the wastewater
- Whether the project can effectively use water sourced from wastewater treatment plants for some or all stages of the industrial process

- A description of the pretreatment process that will be implemented for discharged water if it is determined that the proposed facility cannot reuse such water
- Temperature of wastewater and its direct and indirect impacts
- If there will be a requirement to reduce the temperature of the wastewater, to what degree, and how it will be done
- Impacts from the wastewater on ecosystems including the tideflats, Commencement Bay and the Puget Sound
- If the proposed facility can use wastewater from the Tacoma Wastewater treatment plant in its operations and if it would require additional treatment
- A cost analysis of the City of Tacoma's water and on-site treatment requirements and costs

Commenters requested the EIS to analyze the acidity of the project's discharged water and potential impacts.

Commenters expressed concern over the additional load placed upon the Tacoma wastewater treatment plant and associated infrastructure.

Commenters wanted to know how the wastewater produced at the facility would affect the City's production of Tagro.

Appendix A: Determination of Significance

Determination of Significance, Notice of Request for EIS Scoping Comments, and Notice of Public Scoping Meeting

Proponent: Northwest Innovation Works, Tacoma, LLC
Project Name: Tacoma Manufacturing and Marine Export Facility (TMMEF)
Location of Proposal: Blair-Hylebos Peninsula, Port of Tacoma: 3400 Taylor Way, Tacoma, tax parcels: 0321363034, 0321363037, 0321363033, 0321363013, 0321363033, 0321363036, and 0321354035; see attached map (also at www.citwof_tacoma.org/planning, under 'Proposed Methanol Plant')
SEPA Lead Agency: City of Tacoma – File No. SEPA2015-40000260025

Project Description: Northwest Innovation Works, Tacoma, LLC (NWIWT) proposes to develop and operate a natural gas-to-methanol production plant and export facility on approximately 125 acres in the Port of Tacoma (Port). The project objective is the manufacture and shipment of methanol (a liquid) to global markets for use as a feedstock for manufacturing olefins used in the production of plastics and other materials. The characteristics of the proposed project are described below.

As proposed, the plant will include up to four methanol production lines, each with a production capacity of 5,000 metric tons per day, for a total of 20,000 metric tons per day. The plant will also include ancillary elements such as an administrative and lab building, employee parking, access roadways, fire suppression facilities, air separation units, air storage, water storage and treatment facilities, wastewater treatment facilities, cooling towers, a flare system for the disposal of flammable gases and vapors, substations and emergency generators. Plant components are proposed to be primarily located on approximately 110 acres of Port property situated at the southwest base of the Blair-Hylebos peninsula. Construction is expected to proceed in two phases, each including two production lines totaling production capacity of 10,000 metric tons per day.

The plant will utilize ultra-low emissions (ULE) reforming technology, which will emit substantially lower greenhouse gas and other air pollutants compared to conventional technologies for reforming natural gas to methanol.

Natural gas will be delivered to the methanol plant via a new lateral pipeline, which will transmit odorized gas. Northwest Pipeline GP will be responsible for obtaining permits and constructing this lateral pipeline. This lateral pipeline will connect the existing regional pipeline to the NWIWT project site over an approximately 10-mile corridor through unincorporated Pierce County, the Puyallup Tribe of Indians Reservation, and the cities of Sumner, Puyallup, Fife, Tacoma, and potentially others. Separately, Northwest Pipeline GP is pursuing expansion of its regional pipeline between Sumas and Longview, Washington which is being permitted through the Federal Energy Regulatory Commission. NWIWT anticipates using natural gas distribution capacity that will be provided by that portion of the Northwest Pipeline regional expansion project between Sumas and Tacoma.

The production process will require up to approximately 10.4 million gallons per day of water, which will be supplied by the City of Tacoma Domestic water and sanitary services for on-site personnel use will be obtained from the City of Tacoma. Treated process wastewater (up to approximately 1.44 million gallons per day) will be discharged to the City of Tacoma's wastewater treatment works.

A construction stormwater permit will be required. Stormwater management post-construction will be discharged through Port of Tacoma outfalls or through the City of Tacoma's stormwater system.

At full production, the project will require up to approximately 450 megawatts of electrical power, which will be transmitted through the existing transmission system with localized upgrades if necessary.

The anticipated yearly production at full capacity is approximately 7.2 million metric tons of methanol. Up to approximately 300,000 metric tons of methanol will be stored in storage tanks at atmospheric pressure and ambient temperature and surrounded by secondary containment. Storage tanks will be co-located with plant components, as well as on approximately 15 acres of land adjacent to or in close proximity to the main 110 acre plant site. Methanol product will be transferred by pipeline across Port property from the storage area to the Port's existing deep draft marine terminal (the "East Blair One [EB1] terminal) on the Blair Waterway. Roadway improvements to access the EB1 terminal may be necessary. NWIWT anticipates loading between four and seven ships per month depending on vessel size. The Port will be responsible for obtaining permits for modifications to the dock, as well as localized dredging, if necessary, in the vicinity of the berth.

The plant will be operated in compliance with applicable fire, health, and safety regulations and codes. Plant safety features will include fire suppression systems, fire safety equipment, and storage and containment systems designed to current industry standards and regulatory requirements. NWIWT will conduct process safety management assessments and develop emergency response plans in accordance with applicable local, state and federal regulations.

Determination of Significance: NWIWT acknowledges the issuance of a Determination of Significance as the SEPA Threshold Determination in order to initiate SEPA scoping for an Environmental Impact Statement ("EIS") for the TMMEF Project. The EIS is not a substitute for permit review. It is a process that develops information that is used to support permit review and development of recommended mitigation measures related to potential impacts associated with matters such as transportation, fire, health and safety. Key permits for this project include the City of Tacoma Shoreline Substantial Development Permit, Department of Ecology Water Quality Certification, the Department of Fish and Wildlife's Hydraulic Project Approval, the U.S. Army Corps of Engineers' Sections 10 and 404 permits, and a Notice of Construction air contaminant permit from Puget Sound Clean Air Agency. The federal permits will likely involve a thorough review of waterway operations by the US Coast Guard.

Scoping: Consistent with TMC Chapter 13.12, the City of Tacoma, as SEPA lead agency, is initiating a 60-day scoping process beginning December 15, 2015 and ending on February 17, 2016 to narrow the scope of the EIS. The NWIWT Project EIS will discuss the probable significant adverse impacts of the proposed action, the no-action alternative, and alternatives that are capable of attaining the proposal's objectives stated above. The Blair-Hylebos Terminal Redevelopment Project FEIS (Feb. 2009) and the Tacoma LNG FEIS (Nov. 2015) are proposed for incorporation, to the extent relevant, by reference under WAC 197-11-600(4)(b) to provide additional information and analysis in preparation of the project-specific TMMEF EIS. The City has determined that Environmental Health and Safety ("EH&S") will be areas of emphasis in the EIS.

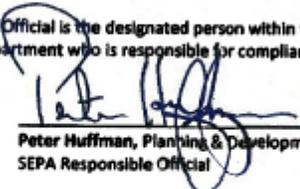
In addition to the foregoing topics, agencies, affected tribes, and members of the public are invited and encouraged to comment on the scope of this EIS. You may comment on alternatives, proposed mitigation measures, probable significant adverse impacts, permits, licenses and/or other approvals that may be required. The City will use the scoping comments to help define the topics to be examined closely in the project-specific EIS. Methods for presenting your comments are described below. All comments are due no later than 5 p.m. on February 17, 2016.

- **EIS Public Scoping Meetings (2)** – The first EIS Public Scoping Meeting is scheduled to begin at 6:30 p.m. on Thursday January 21, 2016 at the City Convention Center, 1500 Broadway; NWWT will have representatives and materials available in the foyer to share currently available information beginning at 5 p.m. The second EIS Public Scoping Meeting is proposed for February 16 in NE Tacoma (taking further public comment and comments on the draft scope developed by City staff and posted on City website February 9); time and location will be posted on the City web page as these are determined.
- The purpose of the public scoping meeting is to provide information about the proposed project and to provide an opportunity to make oral comment on the scope of the EIS. Additionally, written comments will be accepted at this meeting (comment forms will be available) which will be entered in the proposal's environmental review record as scoping comments. Additional information may be found at www.cityoftacoma.org/planning.
- **Submittal of written comments** - Written comments may be submitted via mail, e-mail or fax to the City's Project Manager, as follows

Project Manager:	Ian Munce, AICP, Principal Planner
Address:	City of Tacoma Planning & Development Services Department 747 Market Street, Suite 345 Tacoma, WA 98402
E-mail:	tacoma.methanol.sepa@cityoftacoma.org
Phone#:	(253) 573-2478
Fax#:	(253) 591-5433

Responsible Official: The Responsible Official is the designated person within the City of Tacoma's Planning & Development Services Department who is responsible for compliance with the SEPA lead agency procedural responsibilities.

Issuance Date: December 15, 2015


Peter Huffman, Planning & Development Services Director
SEPA Responsible Official

Tacoma Daily Index Publication: December 15, 2015 and December 22, 2015

The City of Tacoma does not discriminate on the basis of disability in any of its programs, activities, or services. To request this information in an alternative format or a reasonable accommodation, please contact the City Clerk's Office at 253.591.5505. TTY or speech-to-speech users please dial 711 to connect to Washington Relay Services.

PROJECT AREA MAP

Proponent: Northwest Innovation Works, Tacoma, LLC
Project Name: Tacoma Manufacturing and Marine Export Facility (TMMEF)
SEPA Lead Agency: City of Tacoma
Agency File No.: SEPA2015-40000260025



Proposed Tacoma Methanol Manufacturing and Export Facility
□ Project Location*

* Approximately 15 acres of land adjacent to or in close proximity to the location shown above will be needed for storage tanks.



Contact: Ian Munce
Building and Land Use Services
City of Tacoma
747 Market Street, Room 345, Tacoma, WA 98402
(253) 573-2478 | imunce@cityoftacoma.org

Appendix B: Revised Determination of Significance

**Determination of Significance, Notice of Request for EIS Scoping Comments, and
Notice of Public Scoping Meeting: Updated January 27, 2016**

Proponent: Northwest Innovation Works, Tacoma, LLC
Project Name: Tacoma Manufacturing and Marine Export Facility (TMMEF)
Location of Proposal: Blair-Hylebos Peninsula, Port of Tacoma: 3400 Taylor Way, Tacoma, tax parcels: 0321363034, 0321363037, 0321363033, 0321363013, 0321363033, 0321363036, and 0321354035; see attached map (also at www.cityoftacoma.org/planning, under "Proposed Methanol Plant")
SEPA Lead Agency: City of Tacoma – File No. SEPA2015-4000260025

Project Description: Northwest Innovation Works, Tacoma, LLC (NWIWT) proposes to develop and operate a natural gas-to-methanol production plant and export facility on approximately 125 acres in the Port of Tacoma (Port). The project objective is the manufacture and shipment of methanol (a liquid) to global markets for use as a feedstock for manufacturing olefins used in the production of plastics and other materials. The characteristics of the proposed project are described below.

As proposed, the plant will include up to four methanol production lines, each with a production capacity of 5,000 metric tons per day, for a total of 20,000 metric tons per day. The plant will also include ancillary elements such as an administrative and lab building, employee parking, access roadways, fire suppression facilities, air separation units, air storage, water storage and treatment facilities, wastewater treatment facilities, cooling towers, a flare system for the disposal of flammable gases and vapors, substations and emergency generators. Plant components are proposed to be primarily located on approximately 110 acres of Port property situated at the southwest base of the Blair-Hylebos peninsula. Construction is expected to proceed in two phases, each including two production lines totaling production capacity of 10,000 metric tons per day.

The plant will utilize ultra-low emissions (ULE) reforming technology, which will emit substantially lower greenhouse gas and other air pollutants compared to conventional technologies for reforming natural gas to methanol.

Natural gas will be delivered to the methanol plant via a new lateral pipeline, which will transmit odorized gas. Northwest Pipeline GP will be responsible for obtaining permits and constructing this lateral pipeline. This lateral pipeline will connect the existing regional pipeline to the NWIWT project site over an approximately 10-mile corridor through unincorporated Pierce County, the Puyallup Tribe of Indians Reservation, and the cities of Sumner, Puyallup, Fife, Tacoma, and potentially others. Separately, Northwest Pipeline GP is pursuing expansion of its regional pipeline between Sumas and Longview, Washington which is being permitted through the Federal Energy Regulatory Commission. NWIWT anticipates using natural gas distribution capacity that will be provided by that portion of the Northwest Pipeline regional expansion project between Sumas and Tacoma.

The production process will require up to approximately 10.4 million gallons per day of water, which will be supplied by the City of Tacoma Domestic water and sanitary services for on-site personnel use will be obtained from the City of Tacoma. Treated process wastewater (up to approximately 1.44 million gallons per day) will be discharged to the City of Tacoma's wastewater treatment works.

A construction stormwater permit will be required. Stormwater management post-construction will be discharged through Port of Tacoma outfalls or through the City of Tacoma's stormwater system.

At full production, the project will require up to approximately 450 megawatts of electrical power, which will be transmitted through the existing transmission system with localized upgrades if necessary.

The anticipated yearly production at full capacity is approximately 7.2 million metric tons of methanol. Up to approximately 300,000 metric tons of methanol will be stored in storage tanks at atmospheric

pressure and ambient temperature and surrounded by secondary containment. Storage tanks will be co-located with plant components, as well as on approximately 15 acres of land adjacent to or in close proximity to the main 110 acre plant site. Methanol product will be transferred by pipeline across Port property from the storage area to the Port's existing deep draft marine terminal (the "East Blair One [EB1] terminal) on the Blair Waterway. Roadway improvements to access the EB1 terminal may be necessary. NWIWT anticipates loading between four and seven ships per month depending on vessel size. The Port will be responsible for obtaining permits for modifications to the dock, as well as localized dredging, if necessary, in the vicinity of the berth.

The plant will be operated in compliance with applicable fire, health, and safety regulations and codes. Plant safety features will include fire suppression systems, fire safety equipment, and storage and containment systems designed to current industry standards and regulatory requirements. NWIWT will conduct process safety management assessments and develop emergency response plans in accordance with applicable local, state and federal regulations.

Determination of Significance: NWIWT acknowledges the issuance of a Determination of Significance as the SEPA Threshold Determination in order to initiate SEPA scoping for an Environmental Impact Statement ("EIS") for the TMMEF Project. The EIS is not a substitute for permit review. It is a process that develops information that is used to support permit review and development of recommended mitigation measures related to potential impacts associated with matters such as transportation, fire, health and safety. Key permits for this project include the City of Tacoma Shoreline Substantial Development Permit, Department of Ecology Water Quality Certification, the Department of Fish and Wildlife's Hydraulic Project Approval, the U.S. Army Corps of Engineers' Sections 10 and 404 permits, and a Notice of Construction air contaminant permit from Puget Sound Clean Air Agency. The federal permits will likely involve a thorough review of waterway operations by the US Coast Guard.

Scoping: Consistent with TMC Chapter 13.12, the City of Tacoma, as SEPA lead agency, is initiating a 60-day scoping process beginning December 15, 2015 and ending on February 17, 2016 to narrow the scope of the EIS. The NWIWT Project EIS will discuss the probable significant adverse impacts of the proposed action, the no-action alternative, and alternatives that are capable of attaining the proposal's objectives stated above. The Blair-Hylebos Terminal Redevelopment Project FEIS (Feb. 2009) and the Tacoma LNG FEIS (Nov. 2015) are proposed for incorporation, to the extent relevant, by reference under WAC 197-11-600(4)(b) to provide additional information and analysis in preparation of the project-specific TMMEF EIS. The City has determined that Environmental Health and Safety ("EH&S") will be areas of emphasis in the EIS.

In addition to the foregoing topics, agencies, affected tribes, and members of the public are invited and encouraged to comment on the scope of this EIS. You may comment on alternatives, proposed mitigation measures, probable significant adverse impacts, permits, licenses and/or other approvals that may be required. The City will use the scoping comments to help define the topics to be examined closely in the project-specific EIS. Methods for presenting your comments are described below. All comments are due no later than 5 p.m. on February 17, 2016 [March 4, 2016](#).

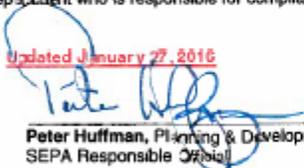
- **EIS Public Scoping Meetings (2-3)** – The first EIS Public Scoping Meeting is scheduled to begin at 6:30 p.m. on Thursday January 21, 2016 at the City Convention Center, 1500 Broadway. NWIWT will have representatives and materials available in the foyer to share currently available information beginning at 5 p.m. [The second EIS Public Scoping Meeting is scheduled to begin at 6:30 p.m. on Wednesday, February 10, 2016, in the 5th Floor Exhibit Hall at the City Convention Center, 1500 Broadway \(doors will open at 5:00 p.m. for speaker sign-up; speakers will be called upon in order of sign-up\).](#) [The third EIS Public Scoping Meeting is scheduled for February 16 at Maeker Middle School in NE Tacoma. Doors will open at 5:00 p.m. for speaker sign-up; the meeting will begin at 6:30 p.m. We are locating the third meeting to make it easier for NE Tacoma residents to attend.](#)

- City staff plan to have a draft Scope of Work available and posted on the project web page no later than February 5, 2016. As much as possible, the second and third hearings should focus on the details of the Scope of Work.
- The purpose of the public scoping meeting is to provide information about the proposed project and to provide an opportunity to make oral comment on the scope of the EIS. Additionally, written comments will be accepted at this meeting (comment forms will be available) which will be entered in the proposal's environmental review record as scoping comments. Additional information may be found at www.cityoftacoma.org/planning.
- **Submittal of written comments** - Written comments may be submitted via mail, e-mail or fax to the City's Project Manager, as follows:

Project Manager: Ian Munce, AICP, Principal Planner
Address: City of Tacoma: Planning & Development Services Department
 747 Market Street, Suite 345, Tacoma, WA 98402
E-mail: tacoma.methanol.sepa@cityoftacoma.org
Phone/Fax #: (253) 573-2478 | (253) 591-5433

Responsible Official: The Responsible Official is the designated person within the City of Tacoma's Planning & Development Services Department who is responsible for compliance with the SEPA lead agency procedural responsibilities.

Issuance Date: December 15, 2015, Updated January 27, 2016



Peter Huffman, Planning & Development Services Director
 SEPA Responsible Official

Tacoma Daily Index Publication: December 15, 2015 and December 22, 2015, Updated January 27, 2016

The City of Tacoma does not discriminate on the basis of disability in any of its programs, activities, or services. To request this information in an alternative format or a reasonable accommodation, please contact the City Clerk's Office at 253.591.5505. TTY or speech-to-speech users please dial 711 to connect to Washington Relay Services.

DRAFT

PROJECT AREA MAP

Proponent: Northwest Innovation Works, Tacoma, LLC
Project Name: Tacoma Manufacturing and Marine Export Facility (TMMEF)
SEPA Lead Agency: City of Tacoma
Agency File No.: SEPA2015-40000260025



Proposed Tacoma Methanol Manufacturing and Export Facility

□ Project Location*

*Approximately 16 acres of land adjacent to or in close proximity to the location shown above will be needed for storage tanks.



Contact: Ian Munce
Building and Land Use Services
City of Tacoma
747 Market Street, Room 345, Tacoma, WA 98402
(253) 573-2478 | Tacoma.methanol.eopa@cityoftacoma.org