*Northwest Innovation Works-Kalama*
VOLUNTARY GREENHOUSE GAS MITIGATION PROGRAM FRAMEWORK
August 16, 2019

***Purpose and Overview***

Northwest Innovation Works (NWIW) is committed to producing a cleaner, less greenhouse gas ("GHG") intensive methanol to reduce the environmental impacts of producing everyday products from polar fleece to contact lenses. In furtherance of this mission, NWIW proposes to voluntarily mitigate for 100 percent of all in-state direct and indirect GHG emissions from the Kalama Manufacturing and Marine Export Facility ("Facility"), as more fully described in **Attachment A**. In implementing the Voluntary Mitigation Program Framework ("VMPF"), NWIW will partner with stakeholders with shared interests and expertise in GHG mitigation and climate impacts, including state, tribal and local governments, environmental and environmental health nonprofit organizations, and labor organizations.

As explained in the Facility's Draft and Final Supplemental Environmental Impact Statements (collectively the "EIS"), NWIW's VMPF is intended to encompass and exceed permit conditions that have been applied to our Project, including Condition 4 of the June 8, 2017 Shoreline Conditional Use Permit ("SCUP"). Now, NWIW has not only committed to fulfilling the mandate of the state's Clean Air Rule (legal challenge notwithstanding), we have committed to fully offsetting in-state GHG impacts as identified in the Supplemental EIS.

Our VMP is also committed to looking first to opportunities for GHG mitigation and reduction in southwest Washington and Washington State, where our facility will operate, and in communities that will suffer disproportionately from a changing climate. In so doing, NWIW is doing its part to reduce environmental impacts from manufacturing and demonstrating its commitment to go beyond regulatory requirements in limiting environmental impacts in Washington.

The VMPF is structured to accommodate updates in climate science, GHG modeling and climate regulations over the operational life of the Facility. NWIW has built accountability into the VMPF through the Department of Ecology and Cowlitz County's roles in assessing GHG impacts in Washington, reviewing qualified mitigation projects identified by a VMP advisory board ("VMP Board") and by requiring that NWIW submit GHG emission reporting and mitigation compliance to the Department of Ecology and Cowlitz County. Additionally, consistent with the approaches employed in existing GHG regulatory frameworks, like the protocols used to calculate offsets before the California Air Resources Board, the carbon benefit of qualifying mitigation projects must be confirmed by an independent third-party verification entity.

This VMPF provides an outline of what will ultimately be implemented as part of NWIW's Voluntary Mitigation Program ("VMP"). Additional specificity and required implementing documentation will be developed, in coordination with Cowlitz County and the Department of Ecology, following the completion of the environmental review of the Facility. These documents will be subject to review and oversight by Cowlitz County and the Department of Ecology.

### *VMP Oversight*

NWIW will implement the VMPF with the approval of Cowlitz County and the Department of Ecology and in partnership with representations from the environmental, business and community stakeholders who will serve on an independent VMP advisory board ("VMP Board"). NWIW will facilitate VMP costs and administration, but the VMP Board will independently review and provide recommendations on the emissions obligations and subsequent audits to the regulatory agencies, identify and nominate cost-effective GHG mitigation projects to the regulatory authorities, and award and disperse funding for voluntary mitigation projects or, where necessary, the purchase of carbon credits.

The VMP Board will provide independent, knowledgeable, objective and unbiased facilitation of the VMP. The VMP Board shall be comprised of representatives from, state, tribal and local government and the public, including, for example, representation from labor, the Department of Ecology and Cowlitz County (*ex officio*), environmentally focused nonprofit organizations and environmental justice organizations.[1] The VMP Board will also be charged with formally drafting the VMP governing documents consistent with this document and the recommendations of Cowlitz County and the Department of Ecology with the purpose of funding verified cost-effective carbon reduction or offset projects. In the event the VMP Board is unable to discharge its duties, NWIW is required to fulfill its mitigation obligations and functions in accordance with the purposes and intent of this VMP framework.

With reporting from the VMP Board, the Department of Ecology and Cowlitz County will set the total annual VMP obligation and verify that the verified cost-effective mitigation projects recommended by the VMP Board are consistent with VMP goals and parameters. The VMP Board shall provide a regular accounting of mitigation actions and outcomes to Cowlitz County and the Department of Ecology, subject to their approval and/or further direction on VMP administration of this program.

### *VMP GHG Mitigation Methods and Priorities*

#### *Mitigation Methods*

The VMP Board will build and recommend a mitigation project portfolio that meets the 100 percent GHG mitigation commitment for in-state emissions by first soliciting proposals from third parties for GHG mitigation or reduction projects. Ultimately, NWIW seeks to have a portfolio of cost-effective, verifiable carbon sequestration and reduction projects in Washington that achieve full mitigation for VMP Emissions.

Qualifying offset verification protocols will be those that qualify for use in regulated carbon markets (for example protocols used to calculate offsets for the California Air Resources Board) and/or through protocols published by established registries, including, but not limited to, Verra (formerly Verified Carbon Standard), American Carbon Registry, Climate Action Reserve, or the

[1] NWIW is undertaking research as to how to configure and account for the VMP, including consideration of forming an independent nonprofit arm to administer the funds.

Gold Standard.[2] The VMP Board will require project applicants to verify their GHG reduction or offset benefits. Qualified verification protocols are subject to review and approval by the Department of Ecology and Cowlitz County.

The VMP obligations based on Project VMP GHG Emissions may be accomplished through a variety of methods, including:

1. Investments made by the VMP Board in projects and programs that cause additional and verifiable carbon emission reductions and carbon sequestration in the state of Washington;
2. Investments made by the VMP Board in projects and programs that cause additional and verifiable carbon emission reductions and carbon sequestration in the Pacific Northwest; and/or
3. Investments made by the VMP Board in U.S.-based projects and programs that cause additional and verifiable carbon emission reductions.

The implementation of these methods and mitigation priorities are discussed in greater detail in the following section.

The intent of this program is to develop a cost-effective suite of mitigation projects that maximize carbon reduction benefits (in no case less than the total VMP obligation identified by the Department of Ecology and Cowlitz County, with recommendations from the VMP Board), addressing the local and project priority preferences described below. Where the available cost-effective verified local mitigation projects do not fully discharge the VMP obligation, the VMP Board shall purchase carbon credits from U.S. carbon credit markets or voluntary U.S. carbon registries as an option of last resort.

Examples of qualifying GHG mitigation markets include the Regional Greenhouse Gas Initiative or California Cap-and-Trade allowances/credits. Whether the portfolio is "cost-effective" is measured by whether the total cost of the VMP portfolio is equal to the total VMP obligation multiplied by the then-current cost of U.S. carbon market credits. Where the portfolio exceeds this benchmark, the VMP Board shall discharge its project selection obligations through the purchase of carbon credits from regulated U.S. carbon markets only to the extent necessary to remain cost-effective.

*Mitigation Priorities*

In making its recommendations and requests to the Department of Ecology and Cowlitz County, the VMP Board will prioritize projects which are located in southwest Washington and Washington State. The VMP Board will also prioritize projects that generate co-benefits, including benefits to ecological systems, endangered and threatened species, and communities

[2] Note that this nonexclusive list of offset verification programs are examples of protocols used to calculate offsets before the California Air Resources Board. *See* https://www.arb.ca.gov/cc/capandtrade/offsets/offsets.html. Over the life of the project, other protocols and regulatory resources are likely to become available. The VMP is structured to accommodate those updates in science and regulatory frameworks.

that suffer economic hardships and have high environmental and health disparities that may be exacerbated by climate change.

In the selection of third party carbon reduction projects, the VMP Board will make all reasonable and good faith efforts to invest GHG mitigation funds in local projects, giving priority to:

1. Projects within Cowlitz County
2. Projects within Southwest Washington
3. Projects within the state of Washington
4. Projects within the Pacific Northwest

Recognizing that some communities have a disproportionate share of environmental burden, the VMP will give preference to:

- Projects located within communities defined by the Washington State Department of Health as having high Environmental Health Disparities
- Projects located in communities with high unemployment, with priority on Cowlitz County

***Duration***

NWIW's voluntary GHG mitigation program will commence upon start of construction of the Facility and will continue for the life of its operation (currently estimated at 40 years). If, during that time, it is determined there is a comparable national, state, or local programmatic, regulatory, or statutory framework adopted for reducing and/or mitigating GHG emissions (including, for example, imposition of a carbon tax or GHG emission cap and/or reduction programs for industrial facilities) that directly applies to the proposed project and replaces some or all of the full mitigation contemplated, then that alternative GHG emission mitigation requirement shall replace whatever portion of the VMP obligation that is addressed by the replacement program.

***Greenhouse Gas Emission Accounting***

NWIW is committed to accounting for its VMP obligation based on the best available scientific information, including information from international associations who publish consensus approaches to GHG accounting.[3] The VMP shall include all direct and indirect emissions from the Facility that occur within the State of Washington ("VMP Emissions"). This number generally tracks the "Baseline Scenario" in the Project EIS, associated Life Cycle Analysis and Supplemental Life Cycle Analysis (collectively "LCA"), and as detailed in **Attachment A**.

As set forth in **Attachment A,** VMP Emissions that can be directly tracked will be included in the VMP using actual emissions data. For those VMP Emissions subject to reporting requirements under WAC Chapter 173-441, *Reporting of Emissions of Greenhouse Gases*, the methodologies for measuring and calculating Project VMP GHG Emissions shall be as provided

[3] For example, the Intergovernmental Panel on Climate Change ("IPCC") publishes assessment reports providing guidance of GHG accounting methodologies.

in that WAC chapter, including the provisions of 40 C.F.R. Part 98 that are incorporated by reference. This approach is consistent with the state's Clean Air Rule (legal challenge notwithstanding). VMP Emissions that are not subject to the provisions of WAC Chapter 173-441, shall be measured, calculated or estimated as described in **Attachment A**, or by such other method as may be recommended by the VMP Board, and approved by Ecology and Cowlitz County.

*Construction Emissions*

VMP Emissions includes all project-related construction emissions. Construction emissions will be offset in the year they are emitted rather than being pro-rated over the life of the Facility as estimated in the EIS and SEIS. If the VMP Board is not yet constituted and operational prior to Project construction, VMP obligations may be banked and spent in conjunction with the first-year of VMP operational obligations. Alternatively, the County may pre-determine a GHG mitigation project that meets the GHG offset requirement for estimated construction emissions. Following the completion of construction, estimated VMP Emissions from construction will be updated to account for actual emissions (where available) and updated estimates (where actual emissions cannot accurately be obtained). Any surplus or deficiency between first year estimates and actual construction emissions shall be added or subtracted (as needed) from year two VMP obligations

*Operational emissions*

The year one VMP Emissions from operations will be based on the Baseline Scenario minus prorated construction emissions, and incorporating any additional mitigation that NWIW commits to prior to the commencement of operations that reduce GHG emissions. At the end of the first year of Facility operation, the actual Project VMP Emissions shall be calculated using the methods provided in WAC Chap 173-441, as augmented by **Attachment A**, and by Department of Ecology and Cowlitz County approved accounting methodologies. Any surplus or deficiency between first year estimates and actual VMP Emissions shall be added or subtracted (as needed) from year two VMP obligations.

For each subsequent year, VMP Emissions shall be measured, calculated or estimated using the methods provided in WAC Chap 173-441, together with the additional source methods for those sources not covered by WAC 173-441, as described in **Attachment A** or as authorized by the VMP Board in the future.

***Verification of Emissions***

Unless or until the Washington Clean Air Rule (WAC Ch. 173-442) (which provides for certified third party verification of GHG reporting and mitigation) is re-instated, the Department of Ecology may provide verification of all Project VMP GHG Emission reporting that would otherwise be subject to the reporting requirements of WAC Chapter 173-441. The VMP Board, with the assistance of the Department of Ecology and Cowlitz County, will develop acceptable methods for third-party verification of those Project VMP GHG Emissions that are not covered by WAC Chapter 173-441.

## Attachment A

### Project VMP GHG Emissions Scope (Within Washington)

| GHG Emission Source | Methodology |
|---|---|
| Construction Emissions | |
| GHG emissions embedded in construction materials produced in WA | Apply LCA Methodology as updated based on the actual construction materials used. The VMP Board may recommend updates to the VMP accounting methodology over the life of the project based on methodologies used by state, federal and international regulatory authorities. |
| Construction equipment emissions | Apply WAC Ch. 173-441 and 40 C.F.R. Part 98 to actual data on facility operations; if not covered by WAC Ch. 173-441, LCA Methodology will be used, but final accounting will be updated based on actual emissions. The VMP Board may recommend updates to the VMP accounting methodology over the life of the project based on methodologies used by state, federal and international regulatory authorities. |
| Other mobile source emissions, including transport of people and materials to and from the site by vehicle, rail, marine vessel, as applicable | Apply WAC Ch. 173-441 and 40 C.F.R. Part 98 to actual data on mobile sources related to the project; if not covered by WAC Ch. 173-441, LCA Methodology will be used, but final accounting will be updated based on actual emissions to the extent feasible. The VMP Board may recommend updates to the VMP accounting methodology over the life of the project based on methodologies used by state, federal and international regulatory authorities. |
| Onsite Direct Operations Emissions | |
| Facility operations emissions covered by WAC 173-441 | Apply WAC Ch. 173-441 and 40 C.F.R. Part 98 to actual data on facility operations. |
| Onsite combustion, process and fugitive emissions not covered by WAC 173-441<br>• Mobiles sources used in operations<br>• HVAC and refrigeration equipment<br>• Other chemical processes<br>• Equipment leaks not in 173-441<br>• Waste and wastewater | These emissions will be accounted for using actual data or, where actual data is not available, LCA Methodology will be used. The VMP Board may recommend updates to the VMP accounting methodology over the life of the project based on methodologies used by state, federal and international regulatory |

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|---|---|
| • Accidental spills, accidents or releases,<br>• Research and development | authorities. |
| Transportation Emissions | |
| Marine vessel emissions to 3-mile state limit | Apply WAC Ch. 173-441 and 40 C.F.R. Part 98 to actual data to the extent feasible. Where actual data is not available, distances traveled and fuel efficiency of ships may be estimated. |
| On-road or off-road vehicle emissions is used to transport people or materials to site for operations | Apply WAC Ch. 173-441 and 40 C.F.R. Part 98 to actual data to the extent feasible. |
| Upstream Natural Gas in-state | |
| Compressors | Apply WAC Ch. 173-441 and 40 C.F.R. Part 98 to actual data to the extent feasible. |
| Regional, lateral and project distribution pipeline losses in state | Apply WAC Ch. 173-441 and 40 C.F.R. Part 98 to prorated leakage estimates based on proportion of gas in pipe consumed by Facility operations. |
| Purchased Power Supply | |
| Emissions associated with purchased electricity | Based on actual data, including, if applicable, any project-specific commitments to purchase renewable power, or, where actual data is not available, use the most current Washington average mix at time of emission reporting, including implementation of SB 5116 or other regulatory frameworks that reduce GHG emissions related to power generation, as applicable. |