e-Mission Control
A MOMENTUM COMPANY

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RE: Comments on the Washington Clean Fuels Program Rulemaking

Energy Mission Control, Inc. (e-Mission Control, eMC) appreciates the opportunity to comment on the proposed Clean Fuels Program Rulemaking. e-Mission Control is a Sacramento-based technology company that helps facilitate participation in California's Low Carbon Fuel Standard (LCFS) and Oregon's Clean Fuels Program (CFP) for hundreds of small- and medium-sized businesses operating electric material handling equipment, cargo handling equipment, electric refrigeration units, and on-road light, medium, and heavy-duty vehicles. Building upon nearly two decades of clean-transportation industry and funding experience, eMC has developed a comprehensive and streamlined software set that eliminates many of the administrative roadblocks that traditionally preclude small fleets from opting into clean fuel programs. This allows them to take clear, affirmative, and immediate steps to reinvest in the electrification of their goods movement and material handling operations.

We offer additional background on typical industry practice, information on the current state of affairs on electric fleet participation, and request the following adjustments to the proposed draft regulation:

1. **We suggest the first reporting entity and credit generator for electric forklifts be the entity that makes facility and equipment use decisions, operates the equipment, and pays utility and maintenance costs, i.e. the "Facility Operator."**

   Unlike most other electric vehicle and equipment types (light or heavy-duty electric vehicles, eOGV, cargo handling equipment, or transportation refrigeration units), businesses utilizing propane and electric forklifts occasionally utilize long-term lease agreements with forklift suppliers/dealers, typically in the three to five-year range. These lease agreements are almost always packaged with associated chargers and batteries. The mix of owned vs. leased equipment within any specific fleet varies substantially from business to business, with many businesses leasing/renting a small portion of their fleet to support temporary needs or for seasonal purposes. However, it is always the case that the facility operator makes the procurement-use decision on the equipment type, quantity, charging/fueling systems utilized, and ultimately foots the bill for fuel and operational costs. In the case where additional infrastructure is required to support new equipment, it is the facility operator that must manage the project and include the associated installation costs into their bottom line. Additionally, it is almost always the case that the facility operator or business owner develops and manages internal company greening initiatives, which frequently includes decisions on use of more energy efficient and less

carbon-intense vehicle types.

In Port ecosystems (for eCHE) and on-road trucking logistics ecosystems (for eTRU[1]), the terms "Fleet Owner" and "Facility Operator" may typically be used interchangeably[2], however in warehousing, cold storage, food and beverage, or the myriad of other industries utilizing electric forklifts (often in disadvantaged communities), the definition of "Fleet Owner," and by extension, the right of claim to first fuel reporting entity causes significant disruption in the LCFS/CFP systems. Most importantly, this has led to current in-use practices where leasing companies have opted-in leased equipment (having claimed title of "Fleet Owner"), retained credit ownership, and have seen financial returns, while not disclosing their actions to the actual operator of the equipment. In our experience with such situations, we've found that no financial net benefit is returned to the facility operator to help them advance their own business operations in a "greener" direction through the terms of the lease agreement or otherwise. Frequently, the only time a facility operator becomes aware of this situation is when they try to opt-in their owned equipment at the same facility, but, due to the mechanics of the Fuel Supply Equipment (FSE) registration process, are rejected due to facility coordinate conflicts. Or worse, during the FSE registration process, if serial numbers are not accurately compared between submissions, a duplicate registration occurs, resulting in potential double counting of the leased equipment. As discussed later in this letter, a potentially large portion of the newer electric forklift LCFS/CFP participation (in terms of FSE registration) can be attributed to this practice.

Additionally, with regard to how existing clean fuel programs address calculating energy consumption by eMHE, both Oregon and California administrators permit the use of the CA LCFS Regulatory Guidance 17-02 (which references "fleet operators" not "fleet owners"). Because of how difficult it is to access metered data in material handling fleet facilities, this allows for the estimation of kWh values based on a variety of equipment and shift operation variables. As is currently practiced, leasing companies laying claim to credit generation at a particular facility where their equipment is leased, regularly do not disclose this to the facility operator, and therefore do not have an accurate method of collecting necessary operational variables required by Guidance 17-02 (i.e. shifts per day, days per quarter, charge cycles per shift, etc.). Even if extremely conservative values are assumed, this short-changes the LCFS/CFP with under-generation. e-Mission Control strongly recommends the WA Department of Ecology also utilize the CARB's Guidance 17-02 since it adds a lot of needed support for eMHE fleets, increases liquidity in the program, and addresses significant on-site data-collection logistical issues. We also suggest that this guidance be made available to facility operators exclusively.

Importantly, e-Mission Control sees the intent of the CFP program to help facilitate increased

[1] e-Mission Control has additional comments on shipping-containerized eTRUs typically owned by large shipping conglomerates.

[2] e-Mission Control understands and can expand greatly on the relationship between Port's and Terminal Operators and how CHE/eCHE equity, operational costs, and utility costs reflect FSE ownership, if requested.

market penetration of low-carbon fuels. In the most-granular sense, helping offset increased fuel costs, electricity in this case (especially increased zero-carbon electricity costs), is a fundamental underpinning of the program. Redirecting these funds to "facility operators," who are in the most direct need and in the best position to advance electric forklift adoption should be considered as the First Fuel Reporting Entity.

Some industry stakeholders suggest that manufacturers should retain the ability to generate credits to advance their marketing/advertising capabilities, buy down capital expenditure for new units to lease out, and offer cost rebates. However, in the case of leased forklifts, the financing company, typically large institutional banks, manage the lease agreement and take ownership of the forklift (via executed bill of sale) and the forklift dealer is paid in full for their original investment plus a dealer markup. The agreement then is then between the lessor/owner of the equipment (the institutional bank) and the lessee (the forklift operator). In this very common situation, the forklift dealer no longer has any financial ties to the equipment as they have already recouped their initial investment and made a profit on the lease transaction and are no longer owners of the equipment. At the end of the lease term, which is typically three to five years, the lessee or the original forklift dealer has the option to purchase back the equipment or the financing company sells the forklift. In this scenario, forklift dealers do not have any claim to CFP credits as they do not operate or own the equipment. It is the forklift operator who has made the decision to transition their fleet to zero-emission, is making the ongoing financial investment to have the forklift at their facility, is paying for the maintenance costs, and is also paying for the electricity to power the forklifts. Facility operators should have first right to credit generation.

Specific changes are suggested as follows:

WAC 173-424-220 Designation of Fuel Reporting Entity for Electricity
(5) Electric forklifts

(a) For electricity used as transportation fuel supplied to electric forklifts, the facility operator is the fuel reporting entity and the credit generator.

WAC 173-424-110 Definitions

"Facility Operator" means the legally-registered state entity, including subsidiaries or affiliates, responsible for ultimate vehicle procurement and fuel purchasing decision making. In the case of electricity, this typically is the entity reporting to, and paying for, local utility electrical costs.

"Fleet" means the collective group of vehicles or equipment operated together, whether wholly owned, partially owned, leased, or rented, at any one particular location, under the same management and operational direction.

2. **We suggest the first reporting entity and credit generator for eTRUs, eCHE, and eOGV be the entity that makes facility and equipment use decisions, operates the equipment, and pays utility costs, i.e. the "Facility Operator," and that for eTRU the FSE refer to the "Facility or location where electricity is dispensed."**

   As the current regulation is proposed, the "Charging Equipment Owner or Service Provider'' is the credit generator for each category. For eTRUs, this is applicable to both over-the-road, dry-box style containers as well as shipping-containerized units.

   e-Mission Control is concerned that unique finance, rental, or other EVSE ownership structure business models will arise from the attribution of credit generation to the charging equipment owner. As with the California and Oregon programs, for the eOGV and eCHE categories, the FSE is attributed to the "Facility or location" where charging occurs, and we suggest that to apply in WA as well, however in those programs the eTRU FSE refers to each eTRU. We suggest that the FSE refer to the facility or location.

   In practice, shipping container eTRUs are often moved from the ship then plugged in on-site akin to shore-powering a vessel before they are unloaded/loaded and shipped out again. Operationally, these eTRUs are moved at the same frequency and with the same global footprint as typical dry-box shipping containers. They are almost exclusively owned by shipping lines and leasing companies but plugged in and managed by facility and terminal operators. As a container arrives it is plugged in, then may never see that same facility again after it leaves. Any single container is typically only on site for no more than seven days. These facilities have the capability to independently meter electricity consumption to just the eTRUs in bulk, but can't track the serial numbers of the eTRUs receiving power.

   Importantly, there are many facilities state-wide that have no or very little infrastructure in place to directly plug-in eTRUs on-site. These facilities must rely on diesel gensets to power the electrical componentry of the eTRUs. Facilities that have opted to green their operations by installing associated electrical infrastructure have spent millions of dollars to do so and are also the entities paying utility costs. These facility owners are perfect candidates for the CFP program to lessen the use of diesel fuel in thousands of gensets and increase penetration of grid-connected eTRUs.

   As with electric forklifts, and as new EVSE business models (such as leasing charging systems) find their way into the eTRU industries, delineating the credit generator as the charging equipment owner may cause confusion in practice at many facilities operating eTRUs.

   We propose that the first fuel reporting entity be the "facility operator" and to redefine the FSE as the "facility or location" where electricity is dispensed, or as the physical meter monitoring energy consumption to the eTRU(s).

Specific changes are suggested as follows:

WAC 173-424-220 Designation of Fuel Reporting Entity for Electricity
(6) Electric Transport Refrigeration Units (eTRU), Electric Cargo Handling Equipment (eCHE), Electric Power for Ocean-Going Vessel (eOGV).

(b) For electricity supplied to eTRU, eCHE, or eOGV, the facility owner is the fuel reporting entity and the credit generator.

WAC 173-424-300 Registration
(G) For eTRU, FSE refers to the facility or location where electricity is dispensed for fueling. If there are multiple FSEs capable of measuring the electricity dispensed at the facility or location, then it is optional to provide serial number assigned to each equipment by the OEM and the name of OEM.

3. **We suggest the Department of Ecology remove language from the draft specifying any model year cutoff for purposes of reporting energy consumption by fixed guideways and electric forklift fleets and application of an EER displacement benefit.**

In the 2015 amendment process of the Low Carbon Fuel Standard, the California Air Resources Board approved the inclusion of electrified equipment already deployed at the time of implementation (specifically fixed guideway vehicles and electric forklifts), stating "*displacement of diesel fuel [could not] be attributed entirely to the LCFS for the forklifts [or fixed guideways] that were already operating in 2010*[3]*."* CARB's solution was to apply displacement crediting to those with model year 2011 and newer, and exclude displacement crediting to those 2010 and older. At the time, adoption rates of other electric equipment such as light-duty cars, was still very low. Oregon's Department of Environmental Quality implemented a similar practice, referencing the program implementation year as the cutoff date for displacement crediting. e-Mission Control suggests that this practice overly complicates the program and its administration, and reflects misalignment of the intent of the WA Clean Fuels Program in general.

Unlike many voluntary carbon markets, the strict philosophical application of "additionality" of a regulated clean fuel standard is not the only consideration in its implementation. While it is important for agencies to consider additionality, that is, mitigation activity (i.e. diesel use/consumption reduction) that would have not taken place in the absence of this market mechanism, they also consider community cost/benefit, technology adoption rates, fossil fuel reliance, and a myriad of other influencing factors. We suggest that the use of any electrified vehicle or equipment is beneficial to the longevity of the program, advances program goals,

[3] *Staff Report: Initial Statement of Reasons for Proposed Rulemaking* from 2014, on pages 85 - 86.

benefits public health, and should be rewarded accordingly, whether or not it was implemented prior to the clean fuel program itself. In fact, this theory will be implemented in the WA Clean Fuels Program for other already-electrified equipment and vehicles other than electric forklifts. For example, as the regulation draft is currently written, a port-modal facility having deployed a subset of battery electric Class 8 trucks with model year 2022 or prior will still benefit from displacement crediting, unlocking much needed additional funds for continued electrification efforts.

Additionally, a model year cutoff disincentivizes older fleets from participating in clean fuels programs and creates a barrier for socio-economically disadvantaged fleet operators who wish to acquire newer equipment. Increasing revenue to older equipment allows operators to offset increasing maintenance costs, deferring new equipment acquisition. Continuing to operate older equipment is the least carbon-intense option of equipment procurement, which achieves the regulation's goal of reducing GHG emissions. Further, model year data is typically not available or visible on the data plates of forklift, making registration processes difficult. Because obtaining model year information for an entire fleet is challenging, it causes an undue administrative burden on both the fleet operators and the service providers registering on their behalf.

For these reasons, we endorse the removal of the current language imposing a model year criteria for the application of an EER displacement benefit in the electric forklift provision of the regulation.

Thank you for the consideration of this material. e-Mission Control is a strong supporter of the hard work of the CFS team and greatly appreciates the opportunity to provide these comments. We look forward to continued discussions.

Sincerely,

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