Concise Explanatory Statement and Response to Comments Regarding Adoption of Rules for Practicable Use of Alternative Fuels and Vehicles by Local Governments

New Chapter 194-28:
Practicable Use of Electricity and Biofuels to Fuel Local Government Vehicles, Vessels and Construction Equipment

Department of Commerce

August 10, 2016

Introduction

The Washington State Department of Commerce (Commerce) prepared this *Concise Explanatory Statement and Response to Comments* summary to meet requirements of the Washington State Administrative Procedures Act, the law that guides agency rule-making (RCW 34.05.325).

- Section I provides a general description of the process and the scope of work on the proposed rules and the agency's reasons for adopting the proposed rules.
- Section II responds to the comments received regarding the proposed rules, indicating how the final rules reflect agency consideration of the comments.
- Section III summarizes differences between the proposed and adopted rules.

This document is available at: www.commerce.wa.gov/about-us/rulemaking

Section I: Concise Explanatory Statement

Statutory Authority

RCW 43.325.080 requires the director of the Department of Commerce to adopt rules necessary to determine practicable goals for use of biofuels, electricity, natural gas and propane by local government subdivisions of the state that own and operate vessels, vehicles and construction equipment.

Scope of the Rule

The purpose of this rulemaking is to establish standards for practicability (e.g. regional availability of fuels, vehicle costs, cost of program implementation, cost differentials in different parts of the state, differences between types of vehicles, vessels or equipment) for local government planning and compliance with RCW 43.19.648(2). Anticipated effects are clarification and guidance regarding procurement decisions for alternative fuels and vehicles, and annual reporting on compliance efforts to the legislature and the Governor's Office.

How Rules Were Developed

As directed by RCW 43.19.648, rule development began in 2014 with establishment of an advisory committee comprised of organizations representing the various forms of local government and their members, including Association of Washington Cities, Washington State Association of Counties, Washington Public Utility District Association, Washington Public Ports Association, Office of the Superintendent of Public Instruction, Public Fleet Managers Association, Washington State Transit Association, Washington Fire Chiefs, and Washington Fire Commissioners Association, along with Puget Sound Energy representing electrical and natural gas utilities.

The advisory committee met seven times between September 2014 and March 2015. In addition, all local governments subject to annual reporting requirements under the proposed rules were notified of the rulemaking process and opportunity to comment. Draft rules were initially filed June 3, 2015, and a public hearing held July 7, 2015. The draft was subsequently withdrawn to incorporate comments received during the final review period. Revised draft rules were filed May 31, 2016, and a public hearing held July 14, 2016.

Throughout the rulemaking, written comments were invited to be submitted to:

Peter Moulton, Senior Energy Policy Specialist
peter.moulton@commerce.wa.gov
PO Box 42525
Olympia, WA 98504-2525

The following phone and fax numbers, direct to Commerce staff, were provided to the public for questions or to submit comments: phone 360-725-3116, fax 360-586-0049, teletypewriter 360-586-0772.

Other outreach and public involvement steps taken by Commerce include:

- Providing presentations at meetings of the Public Fleet Managers Association, Washington State Association of County Engineers, Washington Association of School Business Officials, Washington State Transit Association and others.
- Establishing an e-mail distribution list that kept interested parties updated on progress throughout the rule development process.
- Establishing a project web site at: electricdrive.wa.gov

Initial Scoping

Commerce filed a Preproposal Statement of Inquiry Form (CR-101) with the Office of the Code Reviser on August 4, 2014 to initiate the rulemaking process. This document is included below.

Proposed Rules: Round One

Commerce filed a Proposed Rulemaking Form (CR-102) with the Office of the Code Reviser on June 3, 2015. Written comments were accepted until July 10, 2015, and 14 letters were received. A public hearing was held July 7, 2015, commencing at 10am, in Olympia, Washington. Five people attended in person, and one via telephone. Only two attendees offered oral comments; the first recommended a price buffer when procuring biodiesel-blend fuels, the second recommended inclusion of renewable propane.

Proposed Rules: Round Two

Based upon the comments received, Commerce withdrew the draft rules for further consideration. Revised draft rules were filed May 31, 2016, and written comments accepted until July 15, 2016. A public hearing was held July 14, 2016, with five people in attendance, three in person and two via telephone. One person offered two oral comments, the first

regarded procurement of biodiesel-blend fuels when the price is within one percent of conventional diesel fuel, and the second regarded transit agencies procurement of natural gas vehicles and use of renewable natural gas. No written comments were received.

Comments regarding both versions of the proposed rules, and associated staff analysis, can be found at: www.commerce.wa.gov/about-us/rulemaking/ev-policies-and-laws/

Adopted Rules

Commerce adopted and filed the final rule in September, 2016 as 194-29 WAC. As required by the Washington State Administrative Procedures Act (RCW 34.05.325), Commerce prepared this Concise Explanatory Statement and Response to Comments Summary to identify the reasons for adopting the rules, describe differences between the proposed and adopted rule, and respond to all comments received regarding the proposed rule, indicating how the final rule reflects agency consideration of the comments.

Section II: Responsiveness Summary

Commerce received 14 written letters, and three oral comments, on proposed rule language during the course of the two public review periods. Below is a summary of Commerce's response to those comments.

SCOPE OF RULEMAKING

Comment: *Allow local governments to establish their own purchasing policies guiding procurement of alternative fuels and vehicles, and determine availability of vehicles that meet their operational needs.*

Response: Commerce believes it is important to establish consistent minimum standards by which to assess compliance, and that allowing local governments to set independent procurement policies would negate the intent of the enabling legislation.

Comment: *Commerce has no authority to create law or unfunded mandates in reporting or procurement procedures. Delete any reporting requirements.*

Response: Commerce is required by RCW 43.325.080 (2) to "determine whether they [local government subdivisions] have meet the goals set forth in RCW 43.19.648 (2)." Commerce cannot make such determinations without the minimum annual reporting requirements in WAC 194-19-080.

Comment: *RCW 43.325 requires a complete change in fuel sources effective June 1, 2018, yet the proposed rule requires only that procurement of replacement assets begin on that date.*

Response: RCW 43.325 requires the rules to address criteria for determining how the goal in RCW 43.19.648(2) will be met by June 1, 2018. Neither section of code requires a complete change in fuel source. RCW 43.325.080 and 43.19.648(2) require only that the rules assess compliance "to the extent determined practicable" by the rules.

Comment: *The proposed rules do not effectively integrate requirements for purchase of vehicles and use of biofuels. An alternative approach is recommended that quantifies reduction based upon powertrain, anticipated usage, well-to-wheels greenhouse gas emissions, and other variables.*

Response: Commerce appreciates the extensive thought that went into preparing an alternative to the procurement section of the proposed rules, yet is concerned that other local governments will balk at the detailed analysis, reporting and associated costs necessary to track compliance. Given the rapid rate at which various alternative fuel and vehicle technologies and markets are evolving, Commerce believes the rules as currently proposed will reasonably achieve the overarching goals of the enabling legislation.

Comment: *Remove reference to vehicle conversion as there are no requirements under law to convert vehicles to other fuel usage, and there is conflicting state law specifically stating conversion is not required.*

Response: The proposed rules do not require vehicle conversion.

Comment: *The proposed rule doesn't allow procurement of a powertrain or fuel judged not to be practicable.*

Response: The proposed rules encompass all powertrain and fuel options currently available in the marketplace. Should new technologies become available that fall outside the definition of practicability, the rules can be modified at that time.

Comment: *Omit sections that prioritize electrification and biofuels in order to provide local governments with the broadest array of fuel choices.*

Response: Per RCW 43.19.648(1), natural gas and propane "may be substituted for electricity or biofuel if the Department of Commerce determines that electricity and biofuel are not reasonably available." Electricity and biofuels, under the conditions contained in these rules, are considered reasonably available. Therefore, the rules will retain the priorities specified in the enabling legislation.

DEFINITIONS OF PRACTICABLE AND LIFECYCLE COST

Comment: *Reword compliance evaluation section to include reference to definitions of "lifecycle cost" and "practicable" as criteria local governments will use to make vehicle and purchasing decisions.*

Response: The need to reword this section is unclear. "Practicable," the overarching intent of the rules, is defined primarily through an assessment of "lifecycle cost." Definitions are provided for both terms.

Comment: *Commerce should provide adequate resources for determining lifecycle costs prior to implementation.*

Response: Commerce believes the variables used to determine lifecycle cost (e.g. vehicle purchase and resale value, depreciation, taxes, maintenance, changes in refueling infrastructure, projected costs of petroleum fuels and electricity, anticipated useful vehicle life, availability of incentives, financing costs) are already considerations local governments largely take into account when making procurement decisions. Commerce will provide technical resources to assist with this process, but at present is unable to provide any financial assistance.

COMPARISON OF VEHICLES

Comment: *Remove reference to "equivalent hybrid vehicle" when considering vehicle procurement.*

Response: Commerce initially proposed that conventional hybrid vehicles, when available, serve as the benchmark for comparison with electric or hybrid electric alternatives. This approach was taken with state agency rules due to existing fuel efficiency requirements guiding state procurement, and as a way to acknowledge extensive use of conventional hybrid technologies by transit agencies. Given the rapid decline in vehicle electrification costs, a comparison that incorporates conventional hybrids is no longer seen as necessary to advance adoption of electric and hybrid electric vehicles, and will be removed from procurement guidance.

Comment: *Allow conventional hybrid vehicles to qualify for compliance.*

Response: Conventional hybrid vehicles rely upon regenerative braking to capture motive energy for improved fuel efficiency. They do not use external sources of electrical energy. Whether, and how, to account for conventional hybrids in government fleets has been debated under federal EPAct rules for many years. RCW 43.19.648(1) states affected governments are to "satisfy…fuel usage…from electricity or biofuel." There is no reference to enhanced fuel efficiency as a policy goal in the enabling legislation. Intent has been interpreted as direct displacement of petroleum fuels; therefore conventional hybrid vehicles will not quality for compliance in the final rules.

Comment: *Allow for a delay in procuring electric pickup trucks, vans, emergency vehicles, and other specialty equipment since the market for these vehicles is not yet mature.*

Response: The proposed rules provide for comparison of alternatives that meet existing service needs. No additional delay is necessary for specialty equipment.

Comment: *Don't require local governments to procure diesel vehicles that are more expensive due to higher biodiesel warrantee requirements.*

Response: The proposed rules do not require procurement of more expensive diesel vehicles based upon biodiesel warrantees, only that the highest level of warranty protection be secured when comparing vehicles with equivalent lifecycle costs.

Comment: *Remove reference to procuring renewable natural gas and renewable propane capable vehicles "regardless of lifecycle cost" as it could be misinterpreted.*

Response: The intent of the draft language was to encourage use of renewable natural gas and renewable propane, and not require procurement of the corresponding vehicles. Commerce agrees with this concern, and will remove the language. Procurement of renewable natural gas and renewable propane is already addressed in the subsequent section. Clarifying definitions of these fuels will also be added.

Comment: *Hybrid electric vehicles increase fuel efficiency and should not be prioritized over alternative fuels.*

Response: Commerce believes the respondent may be confusing hybrid electric vehicles (defined as plug-in hybrid vehicles in the proposed rules) with conventional hybrid vehicles.

SOCIAL COST OF CARBON

Comment: *Remove "social cost of carbon" because it is neither well-defined nor readily available, is not expected to have a significant impact, does not include transit offsets, and was introduced late in the process.*

Response: Executive Order 14-04 (adopted April 29, 2014) directed Commerce to work with the departments of Enterprise Services and Ecology to "evaluate incentives and lifecycle costs for the purchase of electric vehicles and other clean-fuel cars, for use in the state and other public fleets," including "consideration of the benefits of emission reductions." Because the agencies lacked the resources needed to calculate a wide range of emissions, such as those generated through vehicle or fuel production, a decision was made to limit the scope to tailpipe emissions. The resulting white paper, entitled "The Social Cost of Carbon," was published September 29, 2014. It draws from EPA's extensively peer-reviewed technical analysis to estimate tailpipe emissions over the anticipated service life of a vehicle. The intent to integrate the "social cost of carbon" into the "total cost of ownership" tool originally developed for state agencies was discussed at the first full meeting of the advisory committee on December 15, 2014. Both the Commerce and EPA analyses are both readily available online.

As for transit offsets, under the rules local governments may use alternate means of determining lifecycle costs so long as the variables in the "Total Cost of Ownership" tool to be developed by Commerce are taken into consideration.

Given that local governments utilize a much broader array of policy tools than agencies do to address the impacts of greenhouse gas emissions, the requirement that lifecycle costs incorporate the "social cost of carbon" will be removed from the final rules.

BIOFUELS

Comment: *To provide continuity of biofuel use during temporary, minor fluctuations in the price differential between neat diesel and low-level biodiesel blends, require biodiesel procurement when the differential is no more than 1%.*

Response: Given that pricing for B5, and even B20, is often at parity or less than the price of diesel fuel, and the relative volatility of petroleum pricing, it makes sense to provide a price buffer in order to come closer to parity on an annualized basis. The recommendation will be incorporated into the final rules.

Comment: *Acknowledge availability of renewable natural gas, and soon renewable propane, in the marketplace.*

Response: Sections were added that state the practicability of procuring both renewable natural gas and renewable propane. Though availability and pricing are still in flux, local governments are directed to procure these biofuels whenever they are available at a price competitive with conventional natural gas and propane.

Comment: *Remove reference to E85 since it is not commercially available. Replace with requirement to procure gasoline blended with "the highest commercially available percentage of ethanol."*

Response: Availability of E85, also known as flex-fuel, is currently limited to approximately a dozen retail outlets throughout the state. Under current law, E85 may contain anywhere from 51% to 83% ethanol. To avoid confusion and comply with current regulatory nomenclature, the final rules refer to "flex-fuel," and thereby effectively incorporate the recommendation.

Comment: *Clarify what variables need to be considered when determining "practicable" availability of biofuels.*

Response: The only criteria guiding biofuel procurement is price. Expectations vary depending upon the fuel.

Comment: *Local governments should be allowed to switch to buying E85 when its price has dropped below the proposed price differential for consecutive days and is assumed to remain there.*

Response: Under the proposed rules, local governments will be expected to buy flex-fuel ("E85") whenever it is available at retail or for delivery to on-site storage tanks at a 20% price differential with gasoline.

IMPLEMENTATION COSTS

Comment: *Exempt smaller jurisdictions below the 200,000 gallon annual petroleum threshold since compliance with the rules is financially onerous and can't be achieved.*

Response: The proposed rules are designed to limit fiscal impacts on local government by basing procurement decisions upon comparison pricing.

Comment: *Reporting is expensive and local governments will be unable to comply without funding.*

Response: Commerce anticipates that reporting will not be overly expensive, and will be limited to an overview of fleet size and composition, estimate of annual fuel usage, future procurement plans, obstacles experienced in efforts to comply with the rules, and resources needed to support future compliance.

REPORTING

Comments:

- *Since many local governments do not track total fuel consumption, only require reporting from publicly-owned or commercial fueling facilities that track fuel use.*
- *There is a cost associated with reporting, so establish a higher initial threshold for the reporting requirement.*
- *Since emergency response vehicles can be exempted from compliance, don't include their fuel usage when determining a reporting threshold.*

Response: Commerce understands that local governments often track fuel usage as a budgetary matter, and not actual gallons consumed. Usage based on expenditures and estimated per gallon fuel prices is adequate for determining whether a local government is expected to provide annual reports.

Comment: *It is a disservice that smaller local governments be exempt from reporting and not invited to technical coordination meetings. These limitations should be removed.*

Response: All local governments, regardless of whether they are subject to reporting requirements, are welcome to participate in these meetings. Any jurisdiction not required to report under WAC 19-29-040 may voluntarily do so. The reporting threshold was established in order to address the vast majority of local government fuel use without creating an undue administrative burden on Commerce.

Section III: Differences Between Proposed and Adopted Rule

This section summarizes differences between the proposed rules and the final adopted rules, pursuant to RCW 34.05.340(3). You can also find more about the comments and detail on changes in the relevant section under *II: Responsiveness Summary*.

The differences between the proposed and adopted rule are largely technical in nature, reflecting efforts to simplify definitions and compliance criteria for vehicles and fuels. Edits were also made to improve clarity and internal consistency of rule language.

Section	CR-102	Final	Explanation
WAC 194-29-020(1)	"Biofuel" means a liquid or gaseous fuel derived from organic matter intended for use as a transportation fuel, including, but not limited to, biodiesel, ethanol, and renewable natural gas.	"Biofuel" means a liquid or gaseous fuel derived from organic matter intended for use as a transportation fuel, including, but not limited to, biodiesel, renewable diesel, ethanol, renewable natural gas, and renewable propane.	Expanded to specifically note inclusion of renewable diesel and renewable propane.
WAC 194-29-020(9)		"Renewable diesel" means diesel fuel derived from organic matter that has been purified to meet requirements for use as a transportation fuel.	Added definition.
WAC 194-29-020(11)		"Renewable propane" means propane derived from organic matter that has been purified to meet requirements for use as a transportation fuel.	Added definition.
WAC 194-29-070(1)	It is considered practicable for local governments to procure natural gas-fueled vehicles regardless of lifecycle cost so long as the vehicles are fueled by renewable natural gas or blends of renewable and conventional natural gas that contain at least twenty percent renewable natural gas.		Removed as encouragement to utilize renewable natural gas unintentionally incorporated into vehicle procurement requirements.
WAC 194-29-070(1)		When making procurement decisions involving vehicles with gasoline engines, local governments are encouraged to lease vehicles in order to take advantage of new alternative fuel and vehicle technologies in a timely manner.	Added encouragement to utilize leasing as a procurement option for gasoline vehicles.
WAC 194-29-070(2)	(a) Biodiesel. Unless otherwise limited by law, it is considered practicable for local governments to: (i) Use a minimum five percent biodiesel-blended fuel (B5) in all applications when the fuel is available at retail or for delivery to on-site storage tanks at a price no more than one percent higher than #2 ultra-low sulfur diesel. (ii) Use fuel blends up to twenty percent biodiesel (B20) in all applications unless otherwise restricted by warranty or air quality	(a) Biodiesel and Renewable Diesel. Unless otherwise limited by law, it is considered practicable for local governments to: (i) Use five percent biodiesel-blended fuel (B5) in all applications when the fuel is available at retail or for delivery to on-site storage tanks at a price no more than one percent higher than #2 ultra-low sulfur diesel. (ii) Use biodiesel-blended fuels containing more than five percent biodiesel in all applications unless otherwise restricted by warranty or air quality regulation when the fuel is available for delivery to on-site	Incorporated renewable diesel into procurement requirements for biofuels; clarified minimum expectations regarding biodiesel-blend fuels.

	regulation when the fuel is available for delivery to on-site storage tanks at a price no more than one percent higher than #2 ultra-low sulfur diesel, including the cost of any additives necessary to ensure reliable storage and performance.	storage tanks at a price no more than one percent higher than #2 ultra-low sulfur diesel, including the cost of any additives necessary to ensure reliable storage and performance. (iii) Use renewable diesel, or the highest available blend of renewable diesel and #2 ultra-low sulfur diesel, when the fuel is available at retail or for delivery to on-site storage tanks at a price no more than one percent higher than #2 ultra-low sulfur diesel.	
WAC 194-29-070(2)	(b) Ethanol. It is considered practicable for local governments with vehicles capable of using high-blend ethanol fuel (E85) to make good faith efforts to identify sources and purchase E85 when the price is at least twenty percent less than regular gasoline. (c) Renewable Natural Gas. It is considered practicable for local governments with natural gas-fueled vehicles to purchase renewable natural gas, or blends of renewable and conventional natural gas, when the fuel is available at a price equal to or less than conventional natural gas.	(b) Ethanol. It is considered practicable for local governments with vehicles capable of using high-level blends of ethanol and gasoline (flex-fuel) to make good faith efforts to identify sources and use flex-fuel when the fuel is available at retail or for delivery to on-site storage tanks at a price that is at least twenty percent less than regular gasoline. (c) Renewable Natural Gas. It is considered practicable for local governments with natural gas-fueled vehicles to use renewable natural gas, or the highest available blend of renewable and conventional natural gas, when the fuel is available at retail or for delivery to on-site storage tanks at a price equal to or less than conventional natural gas.	Clarified definition of flex-fuel and criteria for determining fuel prices, and expectations regarding procurement of renewable and conventional natural gas blended fuel.
WAC 194-29-070(2)		(d) Renewable Propane. It is considered practicable for local governments with propane-fueled vehicles to use renewable propane, or the highest available blend of renewable and conventional propane, when the fuel is available at retail or for delivery to on-site storage tanks at a price equal to or less than conventional propane.	Added guidance regarding procurement of renewable propane.