



April 24, 2017

Brett Rude and Camille St. Onge
Department of Ecology, State of Washington
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Lacey, WA 98503
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Re: Using Volkswagen Settlement Funds to fund propane-fueled school buses

Dear Mr. Rude and Ms. St. Onge,

The U.S. Department of Justice's settlements with Volkswagen will result in Washington receiving approximately \$112.7 million in funding that must be used to implement projects that reduce smog-forming nitrogen oxide ("NOx") emissions. The settlements represent a tremendous opportunity to accelerate the clean-up of older, dirtier diesel school buses in Washington, especially in communities that have been disproportionately burdened by these vehicles.

As the Vice President of Sales & Marketing of ROUSH CleanTech,¹ I write to recommend that the Washington Department of Ecology, as part of its potential role as Beneficiary, implement programs that increase the use of propane school buses because they offer a cost-effective strategy to reduce NOx emissions and improve public health. ROUSH CleanTech would like to support your efforts, with the assistance of our partnership with a national network of Blue Bird dealerships, including Western Bus Sales and Bryson Sales & Service of Washington, that have helped deploy over 8,000 propane-fueled buses in more than 650 school districts nationwide.

Propane-fueled school buses exist today that are much cleaner than even the cleanest diesel school buses. In fact, ROUSH's model year 2017 propane school buses will be certified at 0.05 grams NOx per brake horsepower-hour (g/bhp-hr), which is 75 percent cleaner than today's cleanest diesel buses. What's more, our new propane buses will be 99 percent cleaner than the oldest, pre-2007 buses still operating in many school districts.²

These cleaner buses significantly reduce children's exposure to emissions that are associated with pre-2007 diesel buses, including increased asthma emergencies, bronchitis, and school absenteeism, especially among asthmatic children.³ Propane school buses also effectively eliminate diesel particulate matter emissions that are associated with cancer and thousands of premature deaths nationwide every year. These vehicles are also a safe transportation solution because propane is non-toxic, non-carcinogenic and non-corrosive, and because their vehicle fuel tanks are 20 times more puncture-resistant than gasoline or diesel tanks.⁴

¹ ROUSH CleanTech is an industry leader of alternative fuel vehicle technology focused on developing innovative and reliable propane fuel systems for fleets across North America.

² For model year 2010 and newer diesel engines, EPA established a NOx emission standard of 0.2 g NOx / bhp-hr. For model year 1998 to 2003 diesel engines, EPA established a NOx emission standard of 4.0 g NOx / bhp-hr. Please refer to EPA's [summary table](#) of diesel engine exhaust emission standards for further detail.

³ Adar, S. et al. "Adopting Clean Fuels and Technologies on School Buses. Pollution and Health Impacts in Children." *ATS Journals*, Volume 191, Issue 12. <http://www.atsjournals.org/doi/abs/10.1164/rccm.201410-1924OC#.WA-HiNURJhE>, June 15, 2015.

⁴ "Propane Autogas – Safe and Reliable." Blue Bird. <https://www.blue-bird.com/blue-bird/Propane-is-safe.aspx>.



Propane school buses can be a smart investment for Washington as well as they can yield tremendous benefits, including fuel cost reductions of 60 percent per gallon and operations and maintenance savings of \$0.37 per mile, as compared to diesel.⁵ Propane school buses can thus support Washington's efforts to achieve cost-effective NOx emissions reductions.

To ensure the most cost-effective, replicable, and widespread deployment of clean school buses, we recommend that Washington set aside a portion of its Volkswagen Settlement Funds to create a dedicated, annual school-bus specific funding program. It is worth noting that similar programs have proven extremely effective in California, Missouri, Ohio, Texas, and West Virginia. Indeed, several states (e.g., Minnesota, Nevada, and Utah) have already drafted legislation to create similar programs with their own share of Volkswagen Settlement Funds.

ROUSH CleanTech would like to work with you and your team to optimize the use of Washington's Volkswagen Settlement Funds. Towards that end, we request a phone or in-person meeting with the most appropriate member of your staff to discuss propane's opportunities further.

Thank you for considering our request. We look forward to continued dialogue with you and your team, and to a future collaboration that will help the Washington meet its air quality goals.

Sincerely,

A handwritten signature in black ink that reads "Todd Mouw".

Todd Mouw
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⁵ "Propane Testimonials." Blue Bird. <http://www.blue-bird.com/blue-bird/propane-testimonials.aspx>.