V O L V O

TO: The Honorable Brian Feldman, Chair

Members, Senate Education, Energy, & Environment Committee

The Honorable Malcolm Augustine

FROM: Richard A. Tabuteau

DATE: February 9, 2023

RE: FAVORABLE WITH AMENDMENT – Senate Bill 224 – Department of the

Environment - Zero-Emission Medium- and Heavy-Duty Vehicles - Regulations (Clean

Trucks Act of 2023)

The Volvo Group drives prosperity through transport and infrastructure solutions, offering trucks, buses, construction equipment, power solutions for marine and industrial applications, financing and services that increase our customers' uptime and productivity. Founded in 1927, the Volvo Group is committed to shaping the future landscape of sustainable transport and infrastructure solutions. The Volvo Group employs more than 100,000 people worldwide and serves customers in more than 190 markets. Volvo Group North America employs around 14,000 people in the United States and operates 11 manufacturing and remanufacturing facilities in seven states.

In Maryland, Volvo Group North America's Hagerstown Powertrain Production facility employs nearly 2,000 people including over 1,400 members of the UAW Locals 171 and 1247 and is the last major automotive manufacturer in the state. The plant develops, manufactures, and tests heavy-duty powertrains, transmissions and axles for its Mack and Volvo trucks as well as Prevost and Volvo buses at its 280-acre campus. Volvo Group also employs more than 60 people at one of its U.S. parts distribution facilities in Elkridge.

In 2020, the Volvo Group made a global commitment to having 100% of its product sales being fossil free by 2040, including a nearer term goal of 35% of product sales being zero-emission by 2030. The Hagerstown plant plays a key role in this transition through the manufacturing of all modular power boxes for the Volvo VNR electric and Mack LR electric Class 8 trucks. It has also taken action to reduce its own emissions through completion of two solar installations and committing to using 100% renewable sources to meet its energy needs, part of overall energy efficiency measures under the U.S. Energy Department's Better Buildings Better Plants Program.

Senate Bill 224 requires the Maryland Department of the Environment, by December 1, 2023, to adopt regulations establishing requirements for the sale of new zero-emission medium- and heavy-duty vehicles in the State. The regulations may update existing regulations and

incorporate by reference the California Air Resources Board's (CARB) vehicle standards, as revised and updated.

Volvo and Mack Trucks are the North American industry leaders in Zero-Emission (ZE) Class 8 trucks. We applaud Senator Augustine's commitment to the environment and share the same goal of accelerating medium- and heavy-duty zero-emission vehicles in the marketplace; however, we don't believe that Maryland's adoption of the Advanced Clean Truck regulation (ACT) can succeed without careful planning and creation of a supportive ecosystem for these vehicles.

Senate Bill 224 effectively mandates that Volvo Group and its competitors sell preestablished percentages of ZE Class 8 trucks each year without incorporating measures to address numerous structural impediments to achieving those sales. For example, this bill, as introduced, does not provide any financial support for power assessments of the electricity grid or installation of necessary charging infrastructure that must precede the utilization of these vehicles. Electric trucks are not big electric cars. They use completely different charging hardware, need more parking space, and have batteries that are about 5x larger, 5x heavier, 5x more powerful, and 5x more expensive than light-duty vehicles. Currently, it does not appear that the state's major utilities or the grid operators are remotely prepared to handle the anticipated electrical load that will be needed to support this sales mandate.

In addition, these early ZE Class 8 trucks are approximately 2-3 times more expensive than their diesel-powered equivalents. This, together with the cost of installing charging infrastructure and equipment, makes it virtually impossible for commercial fleets to absorb these higher up-front costs until the vehicle's total cost of ownership is similar to that of today's vehicles. We understand Governor Moore has an incentives package for ZE Class 8 truck purchases and charging infrastructure investments. We share the Administration's belief that incentives and other supportive policies must be adopted to ensure a successful transition to a ZE Class 8 truck future. Sustained funding for these purchase incentives is also necessary.

Sustained adoption of ZE Class 8 trucks requires a complex network of programs, policies, and regulations to facilitate cooperation across multiple key stakeholders, including energy providers – utilities and grid operators, charger manufacturers, state and local government officials, component suppliers, commercial fleets, dealerships, and many others. Senate Bill 224 only addresses one facet of this ecosystem and will fail unless additional measures are adopted to complement the ACT's sales mandate percentages.

Below are amendments that Volvo Group believes could make adoption of the Advanced Clean Truck regulation feasible in Maryland, beginning Page 2, Line 10:

- "(II) INCORPORATE BY REFERENCE THE CALIFORNIA AIR RESOURCES BOARD'S ADVANCE CLEAN TRUCKS REGULATION, AS REVISED AND UPDATED.
- (III) TAKE EFFECT STARTING IN MODEL YEAR 2027.

- (C) ON OR BEFORE DECEMBER 1, 2024, THE DEPARTMENT OF THE ENVIRONMENT, THE DEPARTMENT OF TRANSPORTATION, AND THE MARYLAND ENERGY ADMINISTRATION SHALL PREPARE AND SUBMIT TO THE LEGISLATURE A NEEDS ASSESSMENT AND DEPLOYMENT PLAN RELATING TO THE SUCCESSFUL IMPLEMENTATION OF THE ADVANCED CLEAN TRUCKS REGULATION IN MARYLAND, WHICH SHALL, AMONG OTHER THINGS:
 - (I) ASSESS AND PLAN FOR THE ADDITIONAL ELECTRICAL CAPACITY, TRANSMISSION AND DISTRIBUTION DEMANDS THAT WILL NEED TO BE MET TO IMPLEMENT THE ADVANCED CLEAN TRUCKS REGULATION, AND THE CAPABILITY OF THE STATE'S UTILITIES AND GRID TO MEET THOSE DEMANDS:
 - (II) ASSESS AND PLAN FOR THE NUMBER OF HEAVY-DUTY AND MEDIUM-DUTY ZEV RECHARGING AND HYDROGEN-REFUELING STATIONS THAT WILL BE REQUIRED IN THE STATE TO IMPLEMENT THE ADVANCED CLEAN TRUCKS REGULATION, AND THE COSTS, PERMITTING ISSUES, AND NECESSARY TIMELINES FOR INSTALLING THOSE STATIONS;
 - (III) ASSESS AND PLAN FOR THE ZEV PURCHASE INCENTIVES THAT WILL BE REQUIRED TO ENSURE THE SUCCESSFUL IMPLEMENTATION OF THE ADVANCED CLEAN TRUCKS REGULATION, AND THE POTENTIAL SOURCES OF THAT INCENTIVE FUNDING; AND
 - (IV) ASSESS AND PLAN FOR WHEN AND HOW QUICKLY STATE MEDIUM AND HEAVY DUTY VEHICLE FLEET OPERATIONS, INCLUDING STATE-CONTRACTED MEDIUM AND HEAVY DUTY VEHICLES, CAN BE CONVERTED TO ZERO-EMISSIONS.
- (D) THE DEPARTMENT OF THE ENVIRONMENT SHALL PROVIDE REGULATORY MECHANISMS TO ALLOW FOR THE DELAY OF THE IMPLEMENTATION OF THE ADVANCED CLEAN TRUCKS REGULATION BY ONE OR MORE MODEL YEARS IF **DEPARTMENT CONSULTATION** THE DETERMINES, IN WITH **DEPARTMENT** TRANSPORATION AND **MARYLAND OF** THE ADMINISTRATION. THAT THE IMPLEMENTATION CRITERIA IDENTIFIED THROUGH THE NEEDS ASSESSMENT AND DEPLOYMENT PLAN HAVE NOT BEEN MET."

Volvo Group urges the Senate Education, Energy, & Environment Committee to adopt the proffered amendments for Senate Bill 224.

For more information call:

Richard A. Tabuteau 347.886.2904