Unofficial Copy R6

By: Delegates Shank, V. Clagett, Cane, Cluster, Elmore, Frush, Glassman, Hogan, Jennings, McConkey, Owings, Parker, Sophocleus, Sossi, Stull, Weir, and Weldon Introduced and read first time: February 2, 2004

Assigned to: Environmental Matters

A BILL ENTITLED

1 AN ACT concerning

2

Vehicle Laws - Trailers and Semitrailers - Surge Brakes

- 3 FOR the purpose of exempting certain vehicles from certain brake requirements;
- 4 authorizing a certain trailer or semitrailer to be equipped with surge brakes if
- 5 the trailer or semitrailer meets certain requirements relating to weight, design,
- 6 and use; requiring the Secretary of Transportation to adopt certain regulations
- 7 to be effective by a certain date; defining a certain term; providing for the
- 8 effective dates of this Act; and generally relating to the use of surge brakes on
- 9 certain trailers and semitrailers under certain circumstances.

10 BY repealing and reenacting, without amendments,

- 11 Article Transportation
- 12 Section 11-158 and 11-169
- 13 Annotated Code of Maryland
- 14 (2002 Replacement Volume and 2003 Supplement)

15 BY repealing and reenacting, with amendments,

- 16 Article Transportation
- 17 Section 22-301
- 18 Annotated Code of Maryland
- 19 (2002 Replacement Volume and 2003 Supplement)

20 SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF

- 21 MARYLAND, That the Laws of Maryland read as follows:
- 22

Article - Transportation

23 11-158.

- 24 (a) "Semitrailer" means, except as provided in subsection (b) of this section, a 25 vehicle that:
- 26 (1) Has no motive power;

1 (2) Is designed to carry people or property and to be towed by a motor 2 vehicle; and

3 (3) Is constructed so that some of its weight and load rests on or is 4 carried by another vehicle.

5 (b) "Semitrailer" does not include a pole trailer.

6 11-169.

7 (a) "Trailer" means, except as provided in subsection (b) of this section, a 8 vehicle that:

9 (1) Has no motive power;

10 (2) Is designed to carry people or property and to be towed by a motor 11 vehicle: and

12 (3) Is constructed so that no part of its weight rests on the towing 13 vehicle.

14 (b) "Trailer" does not include a pole trailer.

15 22-301.

(a) "Driveaway or towaway operation" means any operation in which any
motor vehicle, trailer, or semitrailer, singly or in combination, new or used, is the
commodity being transported, when one set or more of wheels of the vehicle are on the
roadway during the transportation, whether or not the vehicle furnishes the motive
power.

(b) Every motor vehicle, trailer, semitrailer, and pole trailer, and any
combination of these vehicles, while operating on a highway in this State, shall be
equipped with brakes in compliance with the requirements of this title. All the
vehicles and combinations of vehicles shall be equipped with service brakes complying
with the performance requirements of § 22-302 of this subtitle and, EXCEPT AS
PROVIDED IN SUBSECTION (L) OF THIS SECTION, adequate to control the movement of
and to stop and hold the vehicle under all conditions of loading, and on any grade
incident to its operation.

(c) (1) All the vehicles and combinations of vehicles, except motorcycles,
shall be equipped with parking brakes adequate to hold the vehicle on any grade on
which it is operated, under all conditions of loading, on a surface free from snow, ice,
or loose material.

33 (2) The parking brakes shall be capable of being applied in conformance 34 with the foregoing requirements by the driver's muscular effort or by spring action or 35 by equivalent means. Their operation may be assisted by the service brakes or other 36 source of power, provided that failure of the service brake actuation system or other

power assisting mechanism will not prevent the parking brakes from being applied in
 conformance with the foregoing requirements.

3 (3) The parking brakes shall be so designed that when once applied they 4 shall remain applied with the required effectiveness despite exhaustion of any source 5 of energy or leakage of any kind.

6 (4) The same brake drums, brake shoes and lining assemblies, brake 7 shoe anchors and mechanical brake shoe actuation mechanism normally associated 8 with the wheel brake assemblies may be used for both the service brakes and the 9 parking brakes. If the means of applying the parking brakes and the service brakes 10 are connected in any way, they shall be so constructed that failure of any one part 11 does not leave the vehicle without operative brakes.

12 (d) Every vehicle shall be equipped with brakes acting on all wheels, except:

13 (1) Trailers, semitrailers, or pole trailers of a registered gross weight not 14 exceeding 3,000 pounds, provided that:

(i) The total weight on and including the wheels of the trailer or
trailers does not exceed 40 percent of the gross weight of the towing vehicle when
connected to the trailer or trailers; and

18 (ii) The combination of vehicles, consisting of the towing vehicle
19 and its total towed load, is capable of complying with the performance requirements
20 of § 22-302 of this subtitle;

21 (2) Trailers, semitrailers, or pole trailers of a registered gross weight 22 exceeding 3,000 pounds and not exceeding 10,000 pounds that:

23 (i) Have 2 or more axles;

24 (ii) Are equipped with brakes acting on all wheels of at least 1 axle; 25 and

26 (iii) As part of a combination of vehicles, consisting of the towing 27 vehicle and the total load, is capable of complying with the performance requirements 28 of § 22-302 of this subtitle;

29 (3) Any vehicle being towed in driveaway or towaway operations,
30 provided that the combination of vehicles is capable of complying with the
31 performance requirements of § 22-302 of this subtitle;

32 (4) Trucks, truck tractors, and special mobile equipment manufactured
33 before July 24, 1980 with three or more axles need not have brakes on the front
34 wheels. However, the trucks and truck tractors must be capable of complying with the

35 performance requirements of § 22-302 of this subtitle;

36 (5) The wheel of a sidecar attached to a motorcycle or to a motor-driven 37 cycle, or the front wheel of a motor-driven cycle need not be equipped with brakes,

1 provided that the motorcycle or motor-driven cycle is capable of complying with the 2 performance requirements of § 22-302 of this subtitle; and

3 (6) Any vehicle equipped with at least 2 steerable axles need not have 4 brakes on the wheels of 1 of the axles. However, the vehicle must be capable of 5 complying with the performance requirements of § 22-302 of this subtitle.

6 (e) (1) Every trailer, semitrailer, and pole trailer equipped with air or 7 vacuum actuated brakes, and every trailer, semitrailer, and pole trailer with a 8 registered gross weight in excess of 10,000 pounds, manufactured or assembled after 9 June 1, 1970, shall be equipped with brakes acting on all wheels and of a character to 10 be applied automatically and promptly, and remain applied for at least 15 minutes on 11 breakaway from the towing vehicle.

12 (2) Every trailer, semitrailer, and pole trailer with a registered gross 13 weight of more than 3,000 pounds and not more than 10,000 pounds, manufactured or 14 assembled after June 1, 1970, shall be equipped with brakes acting on all wheels of at 15 least 1 axle and of a character to be applied automatically and promptly, and remain 16 applied for at least 15 minutes on breakaway from the towing vehicle.

(f) Every motor vehicle manufactured or assembled after June 1, 1970, and
used to tow a trailer, semitrailer, or pole trailer equipped with brakes, shall be
equipped with means for providing that, in case of breakaway of the towed vehicle,
the towing vehicle will be capable of being stopped by the use of its service brakes.

(g) Air brake systems installed on trailers manufactured or assembled after
June 1, 1970, shall be so designed that the supply reservoir used to provide air for the
brakes is safeguarded against backflow of air from the reservoir through the supply
line.

(h) (1) Air Brakes. After June 1, 1971, every towing vehicle, when used to
tow another vehicle equipped with air controlled brakes, in other than driveaway or
towaway operations, shall be equipped with two means for emergency application of
the trailer brakes. One of these means shall apply the brakes automatically in the
event of a reduction of the towing vehicle air supply to a fixed pressure, which shall be
not lower than 20 pounds per square inch nor higher than 45 pounds per square inch.
The other means shall be a manually controlled device for applying and releasing the
brakes, readily operable by a person seated in the driving seat, and its emergency
position or method of operation shall be clearly indicated. In no instance may the
manual arrangement be arranged to permit its use to prevent operation of the
automatic means. The automatic and the manual means required by this section may
be, but are not required to be, separate.

37 (2) Vacuum Brakes. After June 1, 1970, every towing vehicle used to tow 38 other vehicles equipped with vacuum brakes, in operations other than driveaway or 39 towaway operations, shall have, in addition to the single control device required by 40 subsection (i) of this section, a second control device that can be used to operate the 41 brakes on towed vehicles in emergencies. The second control shall be independent of 42 brake air, hydraulic, and other pressure, and independent of other controls, unless the

1 braking system is so arranged that failure of the pressure on which the second control

2 depends will cause the towed vehicle brakes to be applied automatically. The second

3 control is not required to provide modulated braking.

4 (i) [After] EXCEPT AS PROVIDED IN SUBSECTION (L) OF THIS SECTION,

5 AFTER June 1, 1971, every motor vehicle, trailer, semitrailer, and pole trailer, and 6 every combination of these vehicles, except motorcycles, equipped with brakes shall 7 have the braking system so arranged that one control device can be used to operate all 8 service brakes. This requirement does not prohibit vehicles from being equipped with 9 an additional control device to be used to operate brakes on the towed vehicles. This 10 regulation does not apply to driveaway or towaway operations unless the brakes on 11 the individual vehicles are designed to be operated by a single control on the towing 12 vehicle, nor does it apply to the operation of electric trailer brakes.

13 (j) (1) Air Brakes. Every bus, truck, or truck tractor with air operated 14 brakes shall be equipped with at least one reservoir sufficient to insure that, when 15 fully charged to the maximum pressure as regulated by the air compressor governor 16 cut-out setting, a full service brake application may be made without lowering the 17 reservoir pressure by more than 20 percent. Each reservoir shall be provided with 18 means for readily draining accumulated oil or water

18 means for readily draining accumulated oil or water.

19 (2) Vacuum Brakes. After June 1, 1971, every truck with three or more 20 axles equipped with vacuum assistor type brakes and every truck tractor and truck 21 used for towing a vehicle equipped with vacuum brakes shall be equipped with a 22 reserve capacity or a vacuum reservoir sufficient to insure that, with the reserve 23 capacity or reservoir fully charged and with the engine stopped, a full service brake 24 application may be made without depleting the vacuum supply by more than 40

25 percent.

(3) Reservoir Safeguarded. All motor vehicles, trailers, semitrailers, and
pole trailers, when equipped with air or vacuum reservoirs or reserve capacity as
required by this section, shall have reservoirs or reserve capacity so safeguarded by a
check valve or equivalent device that, in the event of failure or leakage in its
connection to the source of compressed air or vacuum, the stored air or vacuum is not
depleted by the leak or failure.

(k) (1) Air Brakes. Every bus, truck, or truck tractor using compressed air
for the operation of its own brakes or the brakes on any towed vehicle, shall be
provided with a warning signal, other than a pressure gauge, readily audible or
visible to the driver, which will operate at any time that the air reservoir pressure of
the vehicle is below 50 percent of the air compressor governor cut-out pressure. In
addition, the vehicle shall be equipped with a pressure gauge visible to the driver,
which indicates in pounds per square inch the pressure available for braking.

39 (2) Vacuum Brakes. After June 1, 1971, every truck tractor and truck 40 used for towing a vehicle equipped with vacuum operated brakes and every truck with 41 three or more axles using vacuum in the operation of its brakes, except those in 42 driveaway or towaway operations, shall be equipped with a warning signal, other 43 than a gauge indicating vacuum, readily audible or visible to the driver, which will

1 operate at any time the vacuum in the vehicle's supply reservoir or reserve capacity is 2 less than 8 inches of mercury.

3 (3)Combination of Warning Devices. When a vehicle required to be

4 equipped with a warning device is equipped with both air and vacuum power for the

5 operation of its own brakes or the brakes on a towed vehicle, the warning devices may

6 be, but are not required to be, combined into a single device that serves both purposes.

7 A gauge or gauges indicating pressure or vacuum is not an adequate means of

8 satisfying this requirement.

(L) IN THIS SUBSECTION, "SURGE BRAKES" MEANS A BRAKING SYSTEM 9 (1)10 DESIGNED TO ACTIVATE THE BRAKES OF A VEHICLE BEING TOWED AS A RESULT OF 11 THE FORWARD PRESSURE OF THE VEHICLE AGAINST THE TOWING VEHICLE DURING 12 DECELERATION.

13 (2)A TRAILER OR SEMITRAILER MAY BE EQUIPPED WITH SURGE 14 BRAKES IF:

15 THE TRAILER OR SEMITRAILER HAS A MANUFACTURER'S **(I)** 16 GROSS VEHICLE WEIGHT RATING, OR REGISTERED WEIGHT, WHICHEVER IS LESS, OF 17 10,000 POUNDS OR LESS:

THE COMBINED GROSS VEHICLE WEIGHT RATING, COMBINED 18 (II) 19 REGISTERED WEIGHT, AND THE GROSS COMBINATION WEIGHT OF THE TRAILER OR 20 SEMITRAILER AND THE TOWING VEHICLE IS 26,000 POUNDS OR LESS;

THE VEHICLE OR COMBINATION OF VEHICLES IS NOT 21 (III) 22 DESIGNED OR USED TO TRANSPORT 16 OR MORE PASSENGERS INCLUDING THE 23 DRIVER OF THE TOWING VEHICLE;

24 (IV) THE ACTUAL GROSS WEIGHT OF THE TRAILER OR SEMITRAILER 25 AND LOAD DOES NOT EXCEED THE MANUFACTURER'S GROSS VEHICLE WEIGHT 26 RATING OR REGISTERED WEIGHT, WHICHEVER IS LESS:

27 THE ACTUAL GROSS WEIGHT OF THE TOWING VEHICLE AND (V) 28 LOAD DOES NOT EXCEED THE MANUFACTURER'S GROSS VEHICLE WEIGHT RATING 29 OR REGISTERED WEIGHT, WHICHEVER IS LESS;

THE TRAILER OR SEMITRAILER BRAKES ARE DESIGNED AND 30 (VI) 31 CONNECTED IN SUCH A MANNER THAT IN CASE OF ACCIDENTAL BREAKAWAY OF 32 THE TOWED VEHICLE, THE BRAKES WILL APPLY AUTOMATICALLY;

THE VEHICLE OR COMBINATION OF VEHICLES IS NOT USED TO 33 (VII) 34 TRANSPORT HAZARDOUS MATERIALS OF A TYPE AND QUANTITY THAT REQUIRES 35 PLACARDING;

(VIII) THE VEHICLE OR COMBINATION OF VEHICLES IS NOT USED TO 36 37 TRANSPORT LIQUIDS OR GASES CONTAINED IN PACKAGING THAT EXCEEDS A 38 CAPACITY OF 119 GALLONS;

(IX) THE TRAILER OR SEMITRAILER HAS A GROSS WEIGHT RATING,
 REGISTERED WEIGHT, OR GROSS WEIGHT, WHICHEVER IS GREATER, THAT IS NOT
 MORE THAN ONE AND ONE-HALF TIMES THE GROSS WEIGHT RATING OR
 REGISTERED WEIGHT, WHICHEVER IS LESS, OF THE TOWING VEHICLE; AND

5 (X) FOR VEHICLES USED FOR COMMERCIAL PURPOSES, THE 6 TRAILER OR SEMITRAILER IS USED ONLY IN INTRASTATE COMMERCE.

SECTION 2. AND BE IT FURTHER ENACTED, That the Secretary of
Transportation shall adopt regulations, to be effective beginning October 1, 2004,
authorizing the use of surge brakes on trailers and semitrailers as authorized in this
Act.

11 SECTION 3. AND BE IT FURTHER ENACTED, That Section 1 of this Act shall 12 take effect October 1, 2004.

SECTION 4. AND BE IT FURTHER ENACTED, That, except as provided inSection 3 of this Act, this Act shall take effect June 1, 2004.