U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

1200 New Jersey Avenue SE.
Washington, DC 20590

April 20, 2020

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Timothy Lafon
Vice President, Regulatory Affairs
Volvo Trucks North America
7900 National Service Road, P.O. Box 26115
Greensboro, NC 27409-6115

NEF-106kb
PE20-003

Dear Mr. Lafon:

As you are already aware, the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) has opened a Preliminary Evaluation (PE20-003) to investigate allegations of vehicle roll away in certain model year (MY) 2008 - 2020 Mack trucks and incomplete vehicles manufactured by Volvo Trucks North America (Volvo). The purpose of this letter is to request certain information.

This office has received 3 reports of vehicle roll away on certain Mack MRU refuse trucks equipped with certain Bendix PP-1 push-pull pneumatic park brake control valves configured with a threaded fitting in the exhaust port and an exhaust pipe to vent exhaust air outside the truck cab. Per ODI's previous communications with you, Volvo is aware of these subject incidents and has been in communication with the subject fleet operator about it.

The subject Bendix PP-1 valves may experience an accelerated wear out condition in certain severe-duty applications with high-frequency use of the parking brakes, such as residential waste and recycling pickup services. When the knob is pulled out to apply the parking brakes, supply side air may continuously leak past the worn valve and escape through the exhaust port. This wear out condition may not be readily detected by the driver because the sound is muffled by the exhaust pipe configuration. An exhaust flow restriction, such as an insufficient diameter exhaust port, threaded fitting or exhaust pipe, may allow back-pressure to develop and pressurize the delivery port. This may inadvertently send a signal to the park control port of the SR-7 spring brake modulating control valve to release the parking brakes, possibly resulting in a vehicle roll away.

Unless otherwise stated in the text, the following definitions apply to these information requests:

- **Subject vehicle(s):** Any and all MY 2008 - 2020 Mack trucks and incomplete vehicles manufactured for sale or lease in the United States, including, but not limited to, the District of Columbia, and current U.S. territories and possessions, that were originally equipped with the subject component(s).

- **Subject component(s):** Any and all Bendix PP-1 push-pull pneumatic park brake control valves manufactured for use as original equipment or service replacement on the subject vehicles, and associated exhaust port fittings and exhaust pipes.

- **Alleged defect:** Any and all alleged instances of unintended vehicle movement from a stopped or parked position, for any and/or unknown cause.

- **Volvo:** Mack Trucks Inc., Volvo Trucks North America, Volvo Group, Aktiebolaget Volvo, AB Volvo, all of their past and present officers and employees, whether assigned to their principal offices or any of their field or other locations, including all of their divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee of a consultant) by or under the control of Volvo (including all business units and persons previously referred to), who are or, in or after January 1, 2007, were involved in any way with any of the following related to the alleged defect in the subject vehicles and/or subject components:
  a. Design, engineering, analysis, modification or production (e.g. quality control);
  b. Testing, assessment or evaluation;
  c. Consideration, or recognition of potential or actual defects, reporting, record-keeping and information management, (e.g., complaints, field reports, warranty information, part sales), analysis, claims, or lawsuits; or
  d. Communication to, from or intended for zone representatives, fleets, dealers, or other field locations, including but not limited to people who have the capacity to obtain information from dealers.

- **Document:** "Document(s)" is used in the broadest sense of the word and shall mean all original written, printed, typed, recorded, or graphic matter whatsoever, however produced or reproduced, of every kind, nature, and description, and all non-identical copies of both sides thereof, including, but not limited to, papers, letters, memoranda, correspondence, communications, electronic mail (e-mail) messages (existing in hard copy and/or in electronic storage), faxes, mailgrams, telegrams, cables, telex messages, notes, annotations, working papers, drafts, minutes, records, audio and video recordings, data, databases, other information bases, summaries, charts, tables, graphics, other visual displays, photographs, statements, interviews, opinions, reports, newspaper articles, studies, analyses, evaluations, interpretations, contracts, agreements, jottings, agendas, bulletins, notices, announcements, instructions, blueprints, drawings, as-builts, changes, manuals, publications, work schedules, journals, statistical data, desk, portable and computer calendars, appointment books, diaries, travel reports, lists, tabulations,

computer printouts, data processing program libraries, data processing inputs and outputs, microfilms, microfiches, statements for services, resolutions, financial statements, governmental records, business records, personnel records, work orders, pleadings, discovery in any form, affidavits, motions, responses to discovery, all transcripts, administrative filings and all mechanical, magnetic, photographic and electronic records or recordings of any kind, including any storage media associated with computers, including, but not limited to, information on hard drives, floppy disks, backup tapes, and zip drives, electronic communications, including but not limited to, the Internet and shall include any drafts or revisions pertaining to any of the foregoing, all other things similar to any of the foregoing, however denominated by Volvo, any other data compilations from which information can be obtained, translated if necessary, into a usable form and any other documents. For purposes of this request, any document which contains any note, comment, addition, deletion, insertion, annotation, or otherwise comprises a non-identical copy of another document shall be treated as a separate document subject to production. In all cases where original and any non-identical copies are not available, "document(s)" also means any identical copies of the original and all non-identical copies thereof. Any document, record, graph, chart, film or photograph originally produced in color must be provided in color. Furnish all documents whether verified by Volvo or not. If a document is not in the English language, provide both the original document and an English translation of the document.

- **Other Terms:** To the extent that they are used in these information requests, the terms "claim," "consumer complaint," "dealer field report," "field report," "fire," "fleet," "good will," "make," "model," "model year," "notice," "property damage," "property damage claim," "rollover," "type," "warranty," "warranty adjustment," and "warranty claim," whether used in singular or in plural form, have the same meaning as found in 49 CFR 579.4.

In order for my staff to evaluate the alleged defect, certain information is required. Pursuant to 49 U.S.C. § 30166, please provide numbered responses to the following information requests. Insofar as Volvo has previously provided a document to ODI, Volvo may produce it again or identify the document, the document submission to ODI in which it was included and the precise location in that submission where the document is located. When documents are produced, the documents shall be produced in an identified, organized manner that corresponds with the organization of this information request letter (including all individual requests and subparts). When documents are produced and the documents would not, standing alone, be self-explanatory, the production of documents shall be supplemented and accompanied by explanation.

Please repeat the applicable request verbatim above each response. After Volvo's response to each request, identify the source of the information and indicate the last date the information was gathered.

1. State, by model and model year, the number of subject vehicles Volvo has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by Volvo, state the following:

   a. Vehicle identification number (VIN);
   b. Make;
   c. Model;
   d. Model Year;
   e. Date of manufacture;
   f. Subject component part number(s) and design version(s) installed as original equipment;
   g. Date warranty coverage commenced; and
   h. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).

   Provide the table in Microsoft Access 2010, or a compatible format, entitled "PRODUCTION DATA." A pre-formatted data collection file, which provides further details regarding this submission, will be provided to you.

2. State the number of each of the following, received by Volvo, or of which Volvo is otherwise aware, which relate to, or may relate to, the alleged defect in the subject vehicles and/or the subject components:

   a. Consumer complaints, including those from fleet operators;
   b. Field reports, including dealer field reports;
   c. Reports involving a crash, injury or fatality;
   d. Property damage claims;
   e. Third-party arbitration proceedings where Volvo is or was a party to the arbitration; and
   f. Lawsuits, both pending and closed, in which Volvo is or was a defendant or codefendant.

   For subparts "a" through "f," state the total number of each item (e.g., consumer complaints, field reports, etc.) separately. Multiple incidents involving the same vehicle are to be counted separately. Multiple reports of the same incident are also to be counted separately (i.e., a consumer complaint and a field report involving the same incident in which a crash occurred are to be counted as a crash report, a field report and a consumer complaint).

   In addition, for items "c" through "f," provide a summary description of the alleged problem and causal and contributing factors and Volvo's assessment of the problem, with a summary of the significant underlying facts and evidence. For items "e" and "f," identify the parties to the action, as well as the caption, court, docket number, and date on which the complaint or other document initiating the action was filed.

3. Separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No. 2, state the following information:

a. Volvo's file number or other identifier used;
b. The category of the item, as identified in Request No. 2 (i.e., consumer complaint, field report, etc.);
c. Vehicle owner or fleet name (and fleet contact person), street address, email address and telephone number;
d. Vehicle's VIN;
e. Vehicle's make, model and model year;
f. Vehicle's mileage at time of incident;
g. Incident date;
h. Incident location;
i. Report or claim date;
j. Whether a crash is alleged;
k. Whether property damage is alleged;
l. Number of alleged injuries, if any;
m. Number of alleged fatalities, if any;
n. Subject component part number(s) and design version(s) installed at time of incident, and whether the subject components were original equipment or service replacement;
o. Vehicle mileage at the time the subject component was last replaced or serviced prior to the subject incident;
p. Date the subject component was last replaced or serviced prior to the subject incident;
q. Alleged and/or known root cause; and
r. Whether Volvo examined the subject vehicle and/or subject component(s), and if yes, provide a summary of Volvo's assessment.

Provide this information in Microsoft Access 2010, or a compatible format, entitled "REQUEST NUMBER TWO DATA." A pre-formatted data collection file, which provides further details regarding this submission, will be provided to you.

4. Produce copies of all documents related to each item within the scope of Request No. 2. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method Volvo used for organizing the documents. Describe in detail the search methods and search criteria used by Volvo to identify the items in response to Request No. 2.

5. State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by Volvo to date that relate to, or may relate to, the alleged defect in the subject vehicles: warranty claims; extended warranty claims; claims for good will services that were provided; field, zone, or similar adjustments and reimbursements; and warranty claims or repairs made in accordance with a procedure specified in a technical service bulletin or customer satisfaction campaign.

   Separately, for each such claim, state the following information:

   a. Volvo's claim number;

b. Vehicle owner or fleet name (and fleet contact person), street address, email address and telephone number;
c. VIN;
d. Repair date;
e. Vehicle mileage at time of repair;
f. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
g. Labor operation number(s);
h. Problem code(s);
i. Replacement part number(s) and description(s);
j. Concern stated by customer;
k. Cause as stated on the repair order;
l. Correction as stated on the repair order;
m. Vehicle mileage when the subject component was last replaced or serviced prior to the claim;
n. Date the subject component was last replaced or serviced prior to the claim; and
o. Additional comments, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2010, or a compatible format, entitled "WARRANTY DATA." A pre-formatted data collection file, which provides further details regarding this submission, will be provided to you.

6. Describe in detail the search methods and search criteria used by Volvo to identify the claims in response to Request No. 5, including the labor operations, problem codes, part numbers and any other pertinent parameters used.

   Provide a list of all labor operations, labor operation descriptions, problem codes and problem code descriptions applicable to the alleged defect in the subject vehicles.

   State, by make and model year, the terms of the new vehicle warranty coverage offered by Volvo on the subject vehicles (i.e., the number of months and mileage for which coverage is provided and the vehicle systems that are covered). Describe any extended warranty coverage option(s) that Volvo offered for the subject vehicles and state by option, model, and model year, the number of vehicles that are covered under each such extended warranty.

7. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that Volvo has issued to any dealers, regional or zone offices, field offices, fleet purchasers, or other entities. This includes, but is not limited to, bulletins, advisories, informational documents, training documents, or other documents or communications, with the exception of standard shop manuals. Also, include the latest draft copy of any communication that Volvo is planning to issue within the next 120 days.

8. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to, the alleged defect in the subject vehicles that have been conducted, are being

conducted, are planned, or are being planned by, or for, Volvo. For each such action, provide the following information:

a. Action title or identifier;
b. The actual or planned start date;
c. The actual or expected end date;
d. Brief summary of the subject and objective of the action;
e. Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and
f. A brief summary of the findings and/or conclusions resulting from the action.

For each action identified, provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents chronologically by action.

9. Describe all modifications or changes made by, or on behalf of, Volvo in the design, material composition, manufacture, quality control, supply, or installation of the subject component, from the start of production to date, which relate to, or may relate to, the alleged defect in the subject vehicles. For each such modification or change, provide the following information:

    a. The date or approximate date on which the modification or change was incorporated into vehicle production;
    b. A detailed description of the modification or change;
    c. The reason(s) for the modification or change;
    d. The part number(s) (service and engineering) of the original component;
    e. The part number(s) (service and engineering) of the modified component;
    f. Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;
    g. When the modified component was made available as a service component; and
    h. Whether the modified component can be interchanged with earlier production components.

    Also, provide the above information for any modification or change that Volvo is aware of which may be incorporated into vehicle production within the next 120 days.

10. Produce one of each of the following:

    a. Exemplar sample of the design version of the subject components originally equipped on the 2017 Mack MRU subject incident vehicle; and
    b. Any kits that have been released, or developed, by Volvo for use in service repairs to the subject component/assembly which relate, or may relate, to the alleged defect in the subject vehicles.

11. State the number of each of the following that Volvo has sold that may be used in the subject vehicles by component name, part number (both service and engineering/production), model

and model year of the vehicle in which it is used and month/year of sale *(including the cut-off date for sales, if applicable)*:

a. Subject components; and
b. Any kits that have been released, or developed, by Volvo for use in service repairs to the subject component/assembly.

For each component part number, provide the supplier's name, address, and appropriate point of contact (name, title, and telephone number). Also, identify by make, model and model year, any other vehicles of which Volvo is aware that contain the identical component, whether installed in production or in service, and state the applicable dates of production or service usage.

12. Furnish Volvo's assessment of the alleged defect in the subject vehicle, including:

a. The causal or contributory factor(s);
b. The failure mechanism(s);
c. The failure mode(s);
d. The risk to motor vehicle safety that it poses;
e. What warnings, if any, the operator and the other persons both inside and outside the vehicle would have that the alleged defect was occurring or subject component was malfunctioning; and
f. The reports referenced in the 2nd paragraph of this inquiry.

Legal Authority for This Request

This letter is being sent to Volvo pursuant to 49 U.S.C. § 30166, which authorizes NHTSA to conduct any investigation that may be necessary to enforce Chapter 301 of Title 49 and to request reports and the production of things. It constitutes a new request for information.

Civil Penalties

Volvo's failure to respond promptly and fully to this letter could subject Volvo to civil penalties pursuant to 49 U.S.C. § 30165 or lead to an action for injunctive relief pursuant to 49 U.S.C. § 30163. (Other remedies and sanctions are available as well.) The Vehicle Safety Act, as amended, 49 U.S.C. § 30165(a)(3), provides for civil penalties of up to $21,780 per violation per day, with a maximum of $108,895,910 for a related series of daily violations, for failing or refusing to perform an act required under 49 U.S.C. § 30166. *See* 49 CFR 578.6 (as amended by Fixing America's Surface Transportation Act (the "FAST Act"), Pub. L. 114-94, § 24110(a)(2), 129 Stat. 1312 (Dec. 4, 2015)). This includes failing to respond completely, accurately, and in a timely manner to ODI information requests.

If Volvo cannot respond to any specific request or subpart(s) thereof, please state the reason why it is unable to do so. If on the basis of attorney-client, attorney work product, or other privilege,

Volvo does not submit one or more requested documents or items of information in response to this information request, Volvo must provide a privilege log identifying each document or item withheld, and stating the date, subject or title, the name and position of the person(s) from, and the person(s) to whom it was sent, and the name and position of any other recipient (to include all carbon copies or blind carbon copies), the nature of that information or material, and the basis for the claim of privilege and why that privilege applies.

Confidential Business Information

All business confidential information must be submitted directly to the Office of Chief Counsel as described in the following paragraph and should not be sent to this office. In addition, do not submit any business confidential information in the body of the letter submitted to this office. Please refer to PE20-003 in Volvo's response to this letter and in any confidentiality request submitted to the Office of Chief Counsel.

If Volvo claims that any of the information or documents provided in response to this information request constitute confidential commercial material within the meaning of 5 U.S.C. § 552(b)(4), or are protected from disclosure pursuant to 18 U.S.C. § 1905, Volvo must submit supporting information together with the materials that are the subject of the confidentiality request, in accordance with 49 CFR Part 512, as amended, to the Office of Chief Counsel (NCC-100), National Highway Traffic Safety Administration, Room W41-326, 1200 New Jersey Avenue, S.E., Washington, D.C. 20590. Volvo is required to **submit two copies of the documents containing allegedly confidential information (except only one copy of blueprints) and one copy of the documents from which information claimed to be confidential has been deleted.** Please remember that the phrase "ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION" or "CONTAINS CONFIDENTIAL BUSINESS INFORMATION" (as appropriate) must appear at the top of each page containing information claimed to be confidential, and the information must be clearly identified in accordance with 49 CFR 512.6. If you submit a request for confidentiality for all or part of your response to this IR, that is in an electronic format (e.g., CD-ROM), your request and associated submission must conform to the new requirements in NHTSA's Confidential Business Information Rule regarding submissions in electronic formats. *See* 49 CFR 512.6(c) (as amended by 72 Fed. Reg. 59434 (October 19, 2007)).

If you have any questions regarding submission of a request for confidential treatment, contact Daniel Rabinovitz, Trial Attorney, Office of Chief Counsel at daniel.rabinovitz@dot.gov or (202) 366-8534.

Due Date

Volvo's response to this letter, in duplicate, together with a copy of any confidentiality request, must be submitted to this office by **Monday, June 1, 2020**. Volvo's response must include all non-confidential attachments and a redacted version of all documents that contain confidential information. If Volvo finds that it is unable to provide all of the information requested within the time allotted, Volvo must request an extension from me at (202) 366-6938 no later than five

business days before the response due date. If Volvo is unable to provide all of the information requested by the original deadline, it must submit a partial response by the original deadline with whatever information Volvo then has available, even if an extension has been granted.

Please send email notification to Mr. Kyle Bowker at kyle.bowker@dot.gov and to ODI_IRresponse@dot.gov when Volvo sends its response to this office and indicate whether there is confidential information as part of Volvo's response.

If you have any technical questions concerning this matter, please call Mr. Kyle Bowker of my staff at (202) 366-9597.

Sincerely,

Bruce York, Chief
Medium and Heavy Duty Vehicles Division
Office of Defects Investigation