



U.S. Department  
of Transportation

National Highway  
Traffic Safety  
Administration

1200 New Jersey Avenue, SE  
Washington, DC 20590

JUN 29 2012

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Thomas Lane  
Caterpillar, Inc.  
Engine Product Safety & Compliance Manager  
100 NE Adams Street  
Peoria, IL 61629-7150

NVS-pk214  
EA11-008

Dear Mr. Lane:

This letter is to inform you that the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) is requesting information from you related to an Engineering Analysis (EA11-008) on certain Pierce Contender fire trucks equipped with Caterpillar C9 engines. ODI opened this investigation based on allegations of engine (rpm) surging or fluctuation in the subject vehicles. In fire trucks, this surging or fluctuation of the engine causes changes in water pressure in a fire hose that is being used to extinguish a fire.

On or around August 18, 2010, Caterpillar issued a letter to Caterpillar product owners detailing a product improvement program (PIP) for installing new engine software on certain C9 engines. This bulletin indicated that this condition in conjunction with other factors or circumstances could "result in a risk of personal injury or death." This request seeks information related to the PIP and the C9 engine.

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

- **Subject vehicles:** 2006-2008 Pierce Contender Emergency Vehicles
- **Subject Engines:** All Caterpillar C9 engines, including engine software
- **Engine Manufacturer:** Caterpillar, Inc. (Caterpillar), all of its past and present officers and employees, whether assigned to its principal offices or any of its field or other locations, including all of its 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 Caterpillar (including all business units and persons previously referred to), who are or, in or after 2005, were involved in any way with any of the following related to the alleged defect in the subject engines or engine software:

- 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.
- **Pierce:** Pierce Manufacturing, Inc., and its parent, Oshkosh Corporation, all of its 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 Pierce (including all business units and persons previously referred to).
  - **Alleged defect:** Engine (rpm) surging or fluctuation while in the pumping mode (PTO).
  - **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 Caterpillar, 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 the manufacturer 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 Caterpillar has previously provided a document to ODI, Caterpillar 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 Caterpillar's response to each request, identify the source of the information and indicate the last date the information was gathered.

1. State how many subject engines Caterpillar manufactured for sale between 2006-2008 that were sold or distributed to a subsequent manufacturer for installation in a fire truck. For each subject engine provide the following:
  - a. The subject engine serial number;
  - b. The name and address of the vehicle manufacturer or distributor to which the subject engine was sold or distributed;
  - c. The date the subject engine was sold or distributed;
  - d. The date Caterpillar's warranty coverage started; and
  - e. The part or identification number of the original software installed for controlling engine speed (RPM) while in pumping mode.

Provide the table in MS Access or a compatible format, entitled "PRODUCTION DATA." A pre-formatted table that provides further details regarding this submission will be emailed to you.

2. State the number and provide copies of each of the following, received by Caterpillar, which relate to, or may relate to, the alleged defect in the subject engine:
  - a. Consumer complaints;
  - b. Field reports;
  - c. Reports involving a crash, injury, or fatality;
  - d. Property damage claims;
  - e. Third-party arbitration proceedings where Caterpillar is or was a party to the arbitration; and
  - f. Lawsuits, both pending and closed, in which Caterpillar 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 unit 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). For "e" and "f," provide a summary of the event.

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. Engine serial number;
  - b. Type of vehicle;
  - c. The part or identification number of the engine software for controlling engine speed installed at the time of the complaint, report, claim, notice or matter, if known.
  - d. Name of the manufacturer of the vehicle;
  - e. Vehicle's owner or fleet name (and fleet contact person), address, and telephone number;
  - f. Vehicle's make, model and model year;
  - g. Vehicle's mileage at time of incident, if known;
  - h. Incident date;
  - i. Report date;
  - i. Concern stated by customer;
  - j. Caterpillar's assessment of the incident.

Provide this information in MS Access or a compatible format, entitled "REQUEST NUMBER TWO DATA." A pre-formatted table that provides further details regarding this submission will be emailed to you.

4. State, by make, model, and model year, a total count for all of the following categories of claims, collectively, that have been paid by Caterpillar to date that relate to, or may relate to, the alleged defect in the subject engines: 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. Caterpillar's claim number;
- b. The part or identification number of the engine software for controlling engine speed installed at the time of the claim, if known.
- c. Engine serial number;
- d. Manufacturer of the vehicle;
- e. Vehicle's owner or fleet name (and fleet contact person) and telephone number;
- f. Vehicle's make, model, and model year;
- g. Vehicle's build date;
- h. Warranty start date of the subject engine;
- i. Incident date;
- j. Report date;
- k. Vehicle's mileage at time of repair;
- l. Repairing facility's name, telephone number, and address;
- m. Labor operation number;
- n. Problem code;
- o. Replacement part number(s) and description(s), including software updates or changes;
- p. Concern stated by customer; and
- q. Comment, if any, by dealer/technician relating to claim and/or repair.

Provide this information in MS Access or a compatible format, entitled "WARRANTY DATA." A pre-formatted table that provides further details regarding this submission will be emailed to you.

5. On or about August 18, 2010, Caterpillar issued a letter to owners of the subject engines detailing a product improvement program (PIP) for installing new engine software on certain C9 engines. Provide detailed answers to the following in narrative form:
  - a. A complete chronology, listing all activities or events, including, but not limited to, incidents, which led Caterpillar to issue the letter;
  - b. A chronological listing of all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") related to the C9 engine software prior to the issuance of the PIP, even if the testing was being conducted for another purpose. Please provide a copy of all relevant information from each action listed;
  - c. A chronological listing of all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") conducted after the issuance of the PIP related to the C9 engine software, even if the testing was being conducted for another purpose. Please provide a copy of all relevant information from each action listed;
  - d. The specific changes made in the updated engine software, contrasting the changes to the original engine software;
  - e. How Caterpillar knew who the owners of the subject engines were;
  - f. How Caterpillar knew that the alleged defect only occurs in Pierce Fire Trucks, and
  - g. The reason(s) why Caterpillar believed that the alleged defect could "result in a risk of personal injury or death."

6. On or about August 18, 2010, Caterpillar issued a letter to owners of the subject engines detailing a product improvement program (PIP) for installing new engine software on certain C9 engines. Individually, for each subject engine, provide the following information related to this PIP:
  - a. The contact information (name, address, phone number, email address) of the subject engine owners to which Caterpillar sent the notice of the PIP, indicating whether the subject engine received the software update;
  - b. The serial number of the subject engine;
  - c. The part or identification number of the original engine software;
  - d. The part or identification number of the updated engine software;
  - e. The date on which the subject engine received the updated engine software;
  - f. The Part Number, the Group Number, the Warranty Claim Description Code, and the SIMS Description Code for each repair performed;
  - g. The name of the final-stage manufacturer in which the subject engine was installed;
  - h. The Vehicle Identification Number of the vehicle in which the subject engine was installed.
  - i. The number of repairs and/or replacements paid for by Caterpillar that resulted from the communication identified. List your response by repairing dealer (and include the dealer's name, address, and telephone number).
  - j. Whether Caterpillar conducted any follow-up actions to determine if the updated engine software remedied the engine surging or fluctuating, and if so, provide a description of the actions, including copies of any communications with the owners of the subject engines.
  
7. Identify any changes or updates made to the software on the subject components that was potentially related to the alleged defect, no matter the reason for the change / update.
  - a. Provide the serial number of the subject component;
  - b. Provide the number / revision of original and updated software
  - c. Provide the date the subject component received the change / updated software;
  - d. Identify the reason for the change / update to the software
  
8. Besides the August 18, 2010, PIP described above, provide copies of any service or technical bulletins, product improvement campaigns, announcements, or advisories, and all other communications concerning the alleged defect in the subject engines that Caterpillar has issued or is considering issuing to fleets, dealers, zone offices, or field offices for the period starting on January 1, 2006, to the present date. If Caterpillar has drafted any such communications, furnish a copy of the draft. For any such communication that has been issued, identify, by name, address, telephone number, and contact person, each entity to which it was sent, the date on which the communication was sent, and the specific equipment to which the communication pertained. For each such communication:
  - a. Provide a complete chronology, listing all activities or events, including, but not limited to, incidents, which led Caterpillar to issue the communication;
  - b. Provide a listing (in chronological order) of all testing through which the need for the

- communication was identified and/or assessed, even if the testing was being conducted for another purpose. Please provide a copy of all relevant information from each test listed; and
- c. State the number of repairs and/or replacements paid for by Caterpillar that resulted from the communication identified. List your response by repairing dealer (and include the dealer's name, address, and telephone number).
9. With regard to each and every communication or meeting (in person, by telephone or by other electronic means) between Caterpillar and Pierce related to the alleged defect, state or provide the following:
- a. The approximate date on which such communication took place or meeting was held;
  - b. The identity of the participants;
  - c. A copy of any written communication(s); and
  - d. A summary of each non-written communication or meeting.
10. Furnish Caterpillar's assessment of the alleged defect in the subject engines, including:
- a. The causal or contributory factor(s);
  - b. The reasons(s) for why the subject engines would surge or fluctuate in engine speed (rpm);
  - c. The way in which the updated engine software works;
  - d. The risk to motor engine safety that each failed high pressure oil line poses; and
  - e. What warnings, if any, the operator and other people both inside and outside the vehicle would have that the alleged defect had occurred?

This letter is being sent to Caterpillar 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. Caterpillar's failure to respond promptly and fully to this letter could subject Caterpillar 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.) Section 5(a) of the TREAD Act, codified at 49 U.S.C. § 30165(b), provides for civil penalties of up to \$6,000 per day, with a maximum of \$17,350,000 for a related series of violations, for failing or refusing to perform an act required under 49 U.S.C. § 30166. See 49 CFR 578.6 (as amended by 75 Fed. Reg. 79,978 (Dec. 21, 2010)). This includes failing to respond to ODI information requests.

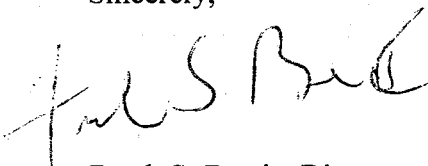
If Caterpillar cannot respond to any specific request or subpart(s) thereof, please state the reason why it is unable to do so. If on the basis of attorney-client, attorney work product, or other privilege, Caterpillar does not submit one or more requested documents or items of information in response to this information request, Caterpillar 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.

Caterpillar's response to this letter, in duplicate, together with a copy of any confidentiality request, must be submitted to this office by August 3, 2012. 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 EA11-008 in Caterpillar's response to this letter and in any confidentiality request submitted to the Office of Chief Counsel. If Caterpillar finds that it is unable to provide all of the information requested within the time allotted, Caterpillar must request an extension from me at (202) 366-6938 no later than five business days before the response due date. If Caterpillar 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 Caterpillar then has available, even if an extension has been granted.

If Caterpillar 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, Caterpillar 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-111), National Highway Traffic Safety Administration, Room W41-227, 1200 New Jersey Avenue, S.E., Washington, D.C. 20590. Caterpillar 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 word "CONFIDENTIAL BUSINESS INFORMATION" must appear at the top of each page containing information claimed to be confidential, and the information must be clearly identified in accordance with 5 U.S.C. § 512.6. Please send email notification to Peter Kivett (peter.kivett@dot.gov) and to ODI\_IRresponse@dot.gov when Caterpillar sends its response to this office and indicate whether there is confidential information as part of Caterpillar response.

If you have any technical questions concerning this matter, please call Peter Kivett of my staff at (202) 366-6178.

Sincerely,



Frank S. Borris, Director  
Office of Defects Investigation  
Enforcement