U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

MAR 28 2012

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ray Hinton
John Deere Engine Works
3801 West Ridgeway Avenue
Waterloo, Iowa 50704-5100

NVS-214pk
PE12-006

Dear Mr. Hinton:

This letter is to inform you that the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) has opened a Preliminary Evaluation (PE12-006) on transit busses using 8.1 Liter Compressed Natural Gas (CNG) engines manufactured by John Deere. This investigation is being opened based on a Product Improvement Program (PIP) (10RG264) submitted by John Deere in January 2011. This PIP is exclusive to John Deere's 8.1L CNG engine's concerning failed turbochargers on transit buses. John Deere has indicated that thermal events could occur as part of this failure, and in the event of a failure, the entire turbocharger was to be replaced as part of the repair.

ODI's review of the matter indicates that the severity of this failure can lead to a fire associated with the subject equipment. Due to the severity of a thermal event, ODI requests further information concerning this alleged defect.

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

- **Subject equipment:** All 8.1 Liter Compressed Natural Gas (CNG) engines manufactured by John Deere.

- **Subject component:** The turbo and turbo cooling unit; including high pressure lines and fittings used on the subject equipment.

- **Manufacturer:** John Deere, Inc. (John Deere), 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 John Deere (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:

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.

- **Alleged defect:** Turbo failures including broken turbine shafts, external oil leaks, broken fins or turbine wheels, or evidence of wheel to housing contact as described in PIP 10RG264 or engine compartment fires.

- **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 John Deere, 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 John Deere has previously provided a document to ODI, John Deere 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 John Deere'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 manufacture year, how many 8.1 liter compressed natural gas (CNG) engines (supplied for use on transit busses) John Deere has manufactured for sale or lease in the United States. For each engine provide the following:

   a. Engine Serial Number;
   b. Date of manufacture;
   c. Date warranty coverage commenced;
   d. The bus manufacturer the engine was sold to; and
   e. The part number of the subject component installed on the engine as original equipment.

   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 John Deere, which relate to, or may relate to, the alleged defect in the subject equipment:

   a. Consumer / fleet complaints;
   b. Field reports;
   c. Reports involving a crash, injury, or fatality;
   d. Reports involving a fire;
   e. Property damage claims;

f. Third-party arbitration proceedings where John Deere is or was a party to the arbitration; and

g. Lawsuits, both pending and closed, in which John Deere is or was a defendant or codefendant.

For subparts "a" through "g," 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 "f" and "g," 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. VIN (If known by John Deere);
b. Vehicle's owner or fleet name (and fleet contact person), address, and telephone number;
c. Vehicle's make, model and model year;
d. Vehicle's mileage at time of incident, if known;
e. Failed part number;
f. Incident date;
g. Report date;
h. Concern stated by customer;
i. Whether a fire was reported;
j. Date warranty coverage commenced; and
k. John Deere'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 John Deere to date that relate to, or may relate to, the alleged defect in the subject components: 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. John Deere's claim number;

b. Engine serial number;
c. VIN;
d. Vehicle's owner or fleet name (and fleet contact person) and telephone number;
e. Vehicle's make, model, and model year;
f. Vehicle's build date;

g. Warranty start date;
h. Incident date;
i. Report date;
j. Vehicle's mileage at time of repair;
k. Repairing facility's name, telephone number, and address;
l. Labor operation number;
m. Problem code;
n. Replacement part number(s) and description(s);
o. Concern stated by customer; and
p. 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. 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 equipment that John Deere has issued or is considering issuing to fleets, dealers, zone offices, or field offices. If John Deere 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 John Deere 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 John Deere that resulted from the communication identified. List your response by repairing dealer (and include the dealer's name, address, and telephone number).

6. Provide a detailed chronology of all events leading up to PIP 10RG264 starting from the time John Deere first became aware of this issue to present. Describe how John Deere first became aware of the potential problem and state the date on which John Deere first became aware of the possibility of the alleged defect. Include all information including dates of both internal and external meetings, meetings with fleets, manufacturers, or any others involved in this issue and discuss the resolution, planned action, and/or the manner in which John Deere addressed this issue. Also separately, provide a copy of any/all document(s) and presentation materials that were used during the meeting(s) whether John Deere generated the document(s) or the document(s) were generated by others.

7. Describe all modifications or changes made by, or on behalf of, John Deere in the design, material composition, manufacture, quality control, supply, or installation of the subject

components, from the start of production to date, which relate to, or may relate to, the alleged defect in the subject equipment. For each such modification or change, provide the following information:

a. The date on which the change was incorporated into production;
b. A detailed description of the change;
c. The reason(s) for the change;
d. The part numbers (service and engineering) of the original component;
e. The part number (service and engineering) of the modified component;
f. Whether the original unmodified component was withdrawn from production, inventory(s) 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.

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 equipment that have been conducted, are being conducted, are planned, or are being planned by, or for, John Deere. 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.

9. Were the subject components (or substantially similar turbo units) installed on engines other than the subject equipment? If so, provide the engine models and manufacturing years these engines were produced.

10. Describe why PIP 10RG264 only applied to urban transit busses in California. Provide John Deere's reasons for not including vehicles equipped with the same engine that were in use outside of California in the PIP.

11. Furnish John Deere's assessment of the alleged defect in the subject equipment, including:
    a. The causal or contributory factor(s);
    b. The failure mechanism(s);
    c. The failure mode(s);
    d. The risk to motor engine safety that each turbo failure mode 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 John Deere 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. John Deere's failure to respond promptly and fully to this letter could subject John Deere 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.) Please note that maximum civil penalties under 49 U.S.C. § 30165 have increased as a result of the enactment of the Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act, Public Law No. 106-414 (signed November 1, 2000). 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 $16,375,000 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 71 Fed. Reg. 28279 (May 16, 2006)). This includes failing to respond to ODI information requests.

If John Deere 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, John Deere does not submit one or more requested documents or items of information in response to this information request, John Deere 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.

John Deere's response to this letter, in duplicate, together with a copy of any confidentiality request, must be submitted to this office by **04 May 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 PE12-006 in John Deere's response to this letter and in any confidentiality request submitted to the Office of Chief Counsel. If John Deere finds that it is unable to provide all of the information requested within the time allotted, John Deere must request an extension from Bruce York at (202) 366-6938 no later than five business days before the response due date. If John Deere 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 John Deere then has available, even if an extension has been granted.

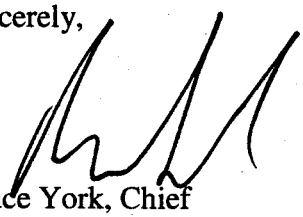
If John Deere claims that any of the information or documents provided in response to this information request constitute confidential commercial material within the meaning of 5 U.S.C. § 552(b)(4), or are protected from disclosure pursuant to 18 U.S.C. § 1905, John Deere must submit supporting information 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. John Deere 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. 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 (49 CFR 512.6(c)). See Federal Register, volume 72, page 59434 (October 19, 2007).

Please send email notification to Peter Kivett (peter.kivett@dot.gov) and to ODI_IRresponse@dot.gov when John Deere sends its response to this office and indicate whether there is confidential information as part of John Deere response.

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

Sincerely,



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