

James P. Vondale, Director Automotive Safety Office Environmental & Safety Engineering

December 2, 2004

Ms. Kathleen C. DeMeter, Director Office of Defects Investigation Safety Assurance National Highway Traffic Safety Administration 400 Seventh Street, S.W. Washington, D.C. 20590

Dear Ms. DeMeter:

Subject: PE04-070:NVS-213dsy

The Ford Motor Company (Ford) response to the agency's October 15, 2004 letter concerning reports of alleged engine stalling in 2003-2004 model year Ford Super Duty and Excursion vehicles is attached.

As the agency is aware engine stalling can occur in any vehicle for various reasons, including engine or engine control system malfunctions, operator error (for instance improper shifting of a manual transmission or running out of fuel) or other conditions, such as bad fuel.

Ford is continuing to investigate driveability and customer satisfaction issues with 6.0L diesel engines and will continue to implement service fixes as appropriate, and Ford's existing 5 year/100,000 mile warranty on the 6.0L diesel engine will allow dealers to continue to repair the subject vehicles under warranty.

Of the reports and claims that may relate to the agency's investigation, Ford has identified four accidents and one injury allegedly due to stalling related to a subject component. Ford has not verified that any of these incidents are, in fact, in any way actually related to engine stalling or what contribution to the accident a stall may have had, if a stall actually occurred. The alleged accident rate is only 0.10 per 10,000 vehicles, and the alleged injury rate is only 0.03 per 10,000 vehicles. Although our analysis found engine stalling complaint rates for the subject vehicles to be comparable to other agency safety defect investigations, the rate of stalling-related accidents is significantly lower than in investigations of other conditions that did not result in recalls, such as EA02-015, in which ODI did not find that an identified defect posed an unreasonable risk to safety (where the accident rate was 0.17 per 10,000 vehicles).

Ford believes that TSB 04-13-08, Field Service Action 03B05 and other production and service actions already taken provide appropriate communication to owners and remedy to address the causes of potential engine stalls as identified through Ford's exhaustive analysis. Based on the continued extremely low rate of safety related allegations, and the effectiveness of previously taken production and service actions, Ford does not believe that the incidents of engine stalling in the subject vehicles are indications of an unreasonable risk to motor vehicle safety. We have reviewed the agency's findings in several prior stalling related and other investigations, as well as the conclusions in an earlier agency study of the affects of stalling on safety, and believe that our analysis is consistent with positions in the earlier investigations and study. However, because there have been various approaches used by both the agency and manufacturers to resolve stalling related investigations, Ford encourages the agency to update its previous stalling study to reevaluate the conclusions of that study.

If you have any questions concerning this response, please feel free to contact me.

Sincerely,

James P. Vondale

TA. New

Attachment

# FORD MOTOR COMPANY (FORD) RESPONSE TO PE04-070

Ford's response to this Preliminary Evaluation (PE04-070) information request was prepared pursuant to a diligent search for the information requested. While we have employed our best efforts to provide responsive information, the breadth of the agency's request and the requirement that information be provided on an expedited basis make this a difficult task. We nevertheless have made every effort to provide thorough and accurate information, and we would be pleased to meet with agency personnel to discuss any aspect of this Preliminary Evaluation.

The scope of Ford's investigation conducted to locate responsive information focused on Ford employees most likely to be knowledgeable about the subject matter of this inquiry and on review of Ford files in which responsive information ordinarily would be expected to be found and to which Ford ordinarily would refer, as more fully described in this response. Ford notes that although electronic information was included within the scope of its search, Ford has not attempted to retrieve from computer storage electronic files that were overwritten or deleted. As the agency is aware, such files generally are unavailable to the computer user even if they still exist and are retrievable through expert means. To the extent that the agency's definition of Ford includes suppliers, contractors and affiliated enterprises for which Ford does not exercise day-to-day operational control, we note that information belonging to such entities ordinarily is not in Ford's possession, custody or control. Ford has construed this request as pertaining to vehicles manufactured for sale in the United States, its protectorates and territories.

In an October 12, 2004 e-mail, Mr. Scott Yon of the agency clarified the alleged defect as "engine quits and starter must be re-engaged." In addition, in an October 28, 2004 telephone conversation, Mr. Yon informed Ford personnel that the investigation concerns stalls related to engine components.

Answers to your specific questions are set forth below. As requested, after each numeric designation, we have set forth verbatim the request for information, followed by our response. Unless otherwise stated, Ford has undertaken to provide responsive documents dated up to and including October 15, 2004, the date of your inquiry. Ford has searched business units and/or affiliates within the following offices for responsive documents: Environmental and Safety Engineering, Ford Customer Service Division, Marketing and Sales Operations, Office of the General Counsel, Quality Office, and North American Truck Product Development.

#### Request 1

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

- a. Vehicle identification number (VIN);
- b. Date of manufacture;
- Date warranty coverage commenced;
- d. Vehicle transmission type (manual or auto); and
- e. 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 2000, or a compatible format, entitled "PRODUCTION DATA." See Enclosure 1, PE04-070 IR Attachments, for a pre-formatted table which provides further details regarding this submission.

#### <u>Answer</u>

Ford records indicate that the approximate total number of 2003 and 2004 model year F-Super Duty and Excursion vehicles equipped with 6.0L diesel engines sold in the United States (the 50 states and the District of Columbia) and its protectorates and territories (American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and Virgin Islands) is 384,070.

The number of subject vehicles sold in the United States by model and model year is shown below:

Model	2003 MY	2004 MY
F-Super Duty	140,798	224,213
Excursion	8,410	10,649

The requested data for each subject vehicle is provided electronically in Appendix A (file: 2004-12-02\_Appendix\_A) on the enclosed CD.

# Request 2

State the number of each of the following, received by Ford, or of which Ford is otherwise aware, which relate to, or may relate to, the alleged defect in the subject vehicles:

- a. Consumer complaints, including those from fleet operators;
- b. Field reports, including dealer field reports;
- c. Reports involving a crash, injury, or fatality, based on claims against the manufacturer involving a death or injury, notices received by the manufacturer alleging or proving that a death or injury was caused by a possible defect in a subject vehicle, property damage claims, consumer complaints, or field reports;
- d. Property damage claims;
- e. Third-party arbitration proceedings where Ford is or was a party to the arbitration; and
- f. Lawsuits, both pending and closed, in which Ford is or was a defendant or codefendant.

For subparts "a" through "d," 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 Ford'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.

#### Answer

For purposes of identifying reports of incidents potentially involving the alleged defect and any related documents, Ford has gathered "owner reports" and "field reports" maintained by Ford Customer Service Division (FCSD), Intensified Customer Concern Definition (ICCD) data maintained by Ford's Quality Office, fleet reports maintained in a Fleet Test Database, and claim and lawsuit information maintained by Ford's Office of the General Counsel (OGC).

Descriptions of the FCSD owner and field report systems, the ICCD and the Fleet Test Database systems, and the criteria used to search each of these are provided electronically in Appendix B (file: 2004-12-02\_Appendix\_B) on the enclosed CD.

The following categorizations were used in the review of reports located in each of these searches:

Category	Allegation
A B	Vehicle allegedly stalled due to a subject engine component Vehicle allegedly stalled but ambiguous if related to a subject engine component*
C	Vehicle allegedly stalled but due to a non-subject engine related component
Ď	Vehicle allegedly stalled but due to a non-subject non-engine related component (applies to warranty claims only)
E	Ambiguous allegation (unable to determine if engine quit running)*
	* We are providing electronic copies of these reports as "non-specific allegations" for your review because of the broad scope of the request. Based on our engineering judgment, the information in these reports is insufficient to support a determination that they pertain to the alleged defect.

Owner Reports: In an October 28, 2004 telephone conversation, Mr. Scott Yon, of the agency, requested that Ford provide owner reports for all alleged engine related stalls whether or not related to a subject engine component. The search and review of the Ford Master Owner Relations System (MORS) database records, as described in Appendix B, identified the following number of owner reports in accordance with the categories described above:

Category	Α	C
Reports	502	37

Copies of these owner reports and of ambiguous owner reports are provided in the MORS III portion of the electronic database contained in Appendix C (file: 2004-12-02\_Appendix\_C) on the enclosed CD. The categorization of each report is identified in the "Category" field. When we were able to identify MORS reports for the same vehicle that were dated within two calendar days of each other, the MORS report was marked as a duplicate. Copies of these marked reports are provided in Appendix C, but are not included in the report count above. In other cases certain vehicles may have more than one report associated with their VINs regarding a single incident, but the dates of these reports are more than two calendar days apart. These reports have been counted separately.

<u>Legal Contacts:</u> Ford is providing, in Appendix B, a description of Legal Contacts and the activity that is responsible for this information, Litigation Prevention. To the extent that owner reports alleging stalling related to an engine component indicate that they are Legal Contacts, Ford has gathered the related files from the Litigation Prevention section. Based on this search, nine files alleging stalling related to a subject engine component and four files alleging stalling related to a non-subject engine component were located and are provided in Appendices D1 and D2 on the enclosed CD.

ICCD Information: A search of the ICCD database as described in Appendix B located 52 reports that appear to relate to the alleged defect in the subject vehicles, and Ford is providing these reports in Appendix E1 (file: 2004-12-02\_Appendix\_E1) on the enclosed CD. Ford has also located other reports that are ambiguous as to whether they relate to the alleged defect in the subject vehicles and we are providing these reports in Appendix E2 (file: 2004-12-02\_Appendix\_E2) on the enclosed CD.

<u>Fleet Reports:</u> In addition to fleet reports that may be contained in the owner reports or field reports identified in this response, Ford conducted a search of its Fleet Test Database as described in Appendix B for reports that may relate to the alleged defect in the subject vehicles. No fleet reports were identified.

<u>Field Reports:</u> In an October 28, 2004, telephone conversation, Mr. Scott Yon of the agency requested that Ford provide field reports for all alleged engine related stalls whether or not related to a subject component. The search and review of the Ford Common Quality Indicator System (CQIS), as described in Appendix B, identified the following number of field reports in accordance with the categories described above:

#### COIS

Category	Α	C
Reports	2,831	222

Copies of these field reports and of ambiguous field reports are provided in the CQIS portion of the electronic database contained in Appendix C. The categorization of each report is identified in the "Category" field. When we were able to identify CQIS reports for the same vehicle that were dated within two calendar days of each other, or of a MORS report, the CQIS report was marked as a duplicate. Copies of these marked reports are provided in Appendix C, but are not included in the report count above. In other cases certain vehicles may have more than one report associated with their VINs regarding a single incident, but the dates of these reports are more than two calendar days apart. These reports have been counted separately.

<u>Unified Database:</u> The Unified Database (UDB) was created to facilitate parts availability by tracking part sales and is not intended as a problem reporting system. In an October 28, 2004, telephone conversation, Mr. Scott Yon, of the agency, informed Ford that a search of the UDB database was not required.

<u>VOQ Data</u>: This information request had an attachment that included 68 Vehicle Owner's Questionnaires (VOQs). Ford notes that the information provided in the VOQs is often insufficient to determine if stalling actually occurred or what components were alleged to have caused the stall. Ford made inquiries of its MORS database for customer contacts, and its CQIS database for field reports regarding the vehicles identified in the VOQs. Ford notes that in some instances, where the VOQ does not contain the VIN or the owner's last name and zip

code, it is not possible to query the databases for owner and field reports specifically corresponding to the VOQs. Ford was unable to identify the VIN for VOQs 10083780, 10080020, 10074959, 10005908, and 10004835 based on the information provided. Ford notes that the same consumer reported two of the VOQs (10005908 and 10004835) with no VIN identified. Ford also notes that VOQ 10015995 involves a vehicle that is not equipped with a 6.0L diesel engine, and VOQs 10083767 and 10067096 pertain to the same VIN. Any owner reports or field reports located concerning a vehicle identified in the VOQs and related to the alleged defect are included in the MORS and CQIS portions of the electronic database provided in Appendix C and have been identified by a "Y" in the "VOQ Dup" field.

<u>Crash/Injury Incident Claims:</u> For purposes of identifying alleged accidents or injuries potentially related to the alleged defect, Ford has reviewed responsive (i.e., not ambiguous) owner and field reports, lawsuits and claims, and warranty claims.

Accident Allegations:
Ford located four owner (MORS) reports [VINS: 1FMSU45 1FTNW21F 1FT
warranty claim duplicative of an owner (MORS) report [VIN: 1FTNW21P
alleging that an accident occurred due to stalling related to a subject component. Based
on the available information, these alleged accidents all appear to be either minor in
nature or there is insufficient information to assess the severity of the alleged incident.
In addition, Ford located five owner (MORS) reports [VINS: 1FMSU45P
1FTNW21P8 <del>9E9E9991,</del> 1FTWX32
1FTNW21P1 155 1575 ], that allege an accident due to stalling but are ambiguous
whether or not any are related to a subject component. Further, Ford located one owner
(MORS) report and one field (CQIS) report that are duplicative of VOQ 10047765 [VIN:
1FTNX21F1555555], and one owner (MORS) report [VIN: 1FTWW33P415555556]
alleging an accident due to an engine related component that is not on the agency's subject component list. Ford has also located a MORS report [VIN:
1FTNX20P0 that is ambiguous if a stalling incident occurred or if an accident
actually occurred and the subsequent legal contact does not provide any indication of an
accident, a copy of which is provided in Appendix D2 for your review.
Injury Allegations:
Ford located one owner (MORS) report IVIN: 1FTNW21F

Ford also located one owner (MORS) report and one duplicative lawsuit concerning the same vehicle [VIN: 1FTNW21P and alleging an injury. It is ambiguous as to whether this incident relates to a subject component. It was originally alleged that the driver injured his shoulder trying to steer the vehicle on the road, and that the vehicle eventually came to rest in a ditch. It was later alleged that the customer hurt his shoulder while pushing the vehicle after it had stalled. Regardless of which is the actual cause of the alleged injury, the injury is not the result of a "crash." Furthermore, this vehicle was reported to have a six inch lift kit and 37 inch tires installed which likely affected the handling characteristics of the vehicle. Ford has not verified that any of these three incidents is in any way actually related to engine stalling or what factors may have contributed to a stall if one occurred.

Only one VOQ [VIN: 1FTNX21P23 alleges an accident and injury. The engine component that is alleged to have caused the stall would not be expected to cause an engine to stall and is not included on the agency's list of subject components. In addition the alleged injuries were reportedly minor and did not require medical treatment.

The owner and field reports and warranty claims are included in the MORS, CQIS, and Analytical Warranty System (AWS) portions of the electronic database provided in Appendix C. Lawsuit and claim information is provided as described below.

<u>Claims, Lawsuits, and Arbitrations</u>: For purposes of identifying incidents potentially related to the alleged defect, Ford has gathered claim and lawsuit information maintained by Ford's OGC. Ford's OGC is responsible for handling product liability lawsuits, claims, and consumer breach of warranty lawsuits and arbitrations against the Company.

Based on a reasonable and diligent search, Ford located 58 lawsuits and one arbitration that appear to relate to the alleged defect in the subject vehicles. Ford has also located other lawsuits or consumer breach of warranty lawsuits, each of which is ambiguous as to whether it meets the alleged defect criteria. We have included these lawsuits and claims as "non-specific allegations" for your review because of the broad scope of the request. Based on our engineering judgment, the information in these lawsuits and claims is insufficient to support a determination that they pertain to the alleged defect. We are providing the requested detailed information, where available, concerning the responsive and ambiguous lawsuits and claims in our Log of Lawsuits and Claims, as Appendix F1 (file:2004-12-02\_Appendix\_F1) on the enclosed CD. To the extent available, copies of complaints, first notices, or MORS reports relating to matters shown on the Log are provided in Appendix F2. With regard to these lawsuits and claims, Ford has not undertaken to contact outside law firms to obtain additional documentation. Ford notes that it was unable to locate 22 lawsuit files and, therefore, is unable to determine if the cases are related to the alleged defect.

## Request 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. Ford'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), 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. Report or claim date;
- i. Whether a crash is alleged;
- j. Whether property damage is alleged;
- k. Number of alleged injuries, if any; and
- Number of alleged fatalities, if any.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "COMPLAINT DATA." See Enclosure 1, PE04-070 IR Attachments, for a pre-formatted table which provides further details regarding this submission.

## Answer

The requested information, to the extent available, is provided in Appendices C, D, E1, E2, and F1 as discussed in response to Request 2.

## Request 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 any method Ford used to further organize the documents.

#### **Answer**

Copies of reports and claims identified in our response to Request 2 are provided electronically, as identified below.

Category	Method of Organization
Owner Reports	Appendix C
Legal Contacts	Appendix D
ICCD Information	Appendices E1 and E2
Fleet Reports	None
Field Reports	Appendix C
Unified Database	Not Applicable
Non-privileged Lawsuit and	Appendices F1 and F2
Claim information	

## Request 5

State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by Ford 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. Ford's claim number;
- b. Vehicle owner or fleet name (and fleet contact person) 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;
- h. Problem code:
- i. Replacement part number(s) and description(s);
- j. Concern stated by customer; and
- k. Comment, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "WARRANTY DATA." See Enclosure 1, PE04-070 IR Attachments, for a pre-formatted table which provides further details regarding this submission.

#### Answer

Based upon directions provided in an October 28, 2004, telephone conversation with Mr. Scott Yon of the agency, Ford is providing warranty claims for all alleged stalls regardless of subject component. In responding to this information request, Ford electronically searched its Analytical Warranty System (AWS) for all claims meeting the criteria described in Appendix B. The resulting claims were then reviewed individually for allegations that may relate to the alleged defect. This search and review of the Ford AWS database records identified the following number of warranty claims in accordance with the categories described above:

Category	Α	С	D
Reports	13,427	525	166

Electronic copies of these claims and of ambiguous claims are provided in the AWS portion of the electronic database contained in Appendix C. The categorization of each report is identified in the "Category" field. When we were able to identify AWS claims for the same vehicle that were dated within two calendar days of each other, or of a MORS or CQIS report, the AWS claim was marked as a duplicate. Copies of these marked claims are provided in Appendix C, but are not included in the count above. In other cases certain vehicles may have more than one claim associated with their VINs regarding a single incident, but the dates of these claims are more than two calendar days apart. These claims have been counted separately.

The requested customer concern codes and the warranty condition codes are provided in Appendix B.

Requests for "goodwill, field, or zone adjustments" received by Ford to date that relate to the alleged defect in the subject vehicles that were not honored, if any, would be indicated in the MORS reports identified above in response to Request 2. Requests for goodwill that were honored, if any, are contained in the warranty data provided.

#### Request 6

Describe in detail the search criteria used by Ford to identify the claims identified 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 Ford 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 Ford 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.

#### Answer

The criteria used for searching Ford's Analytical Warranty System (AWS) are described in Appendix B.

The standard new vehicle warranty coverage for 2003-2004 model year Ford F-Super Duty and Excursion vehicles is 3 years or 36,000 miles, whichever occurs first. For vehicles equipped with the 6.0L diesel engine, certain engine components are covered for 5 years or 100,000 miles, whichever occurs first. After the end of the 3 year/36,000 mile coverage period, a \$100 deductible applies for each repair visit during the diesel engine coverage period. The list of specific vehicle systems covered is provided in the 2003 and 2004 model year Warranty Guides that are provided in Appendices G1 and G2 (file: 2004-12-02\_Appendix\_G1 and 2004-12-02\_Appendix\_G2) on the enclosed CD.

A list of Extended Service Plans (ESP) is provided in Appendix H (file: 2004-04-29\_Appendix\_H) on the enclosed CD along with time-in service and mileage coverage by plan. This appendix also includes the count of subject vehicles that are covered by each Extended Service Plan.

## Request 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 Ford 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 Ford is planning to issue within the next 120 days.

#### <u>Answer</u>

For purposes of identifying communications to dealers, zone office, or field offices pertaining, at least in part, to the alleged defect in the subject vehicles, Ford has reviewed the following FCSD databases and files: The On-Line Automotive Service Information System (OASIS) containing Technical Service Bulletins (TSBs) and Special Service Messages (SSMs); Internal Service Messages (ISMs) contained in the CQIS; and Field Review Committee (FRC) files. We assume this request does not seek information related to electronic communications between Ford and its dealers regarding the order, delivery, or payment for replacement parts, so we have not included these kinds of information in our answer.

A description of Ford's OASIS messages, Internal Service Messages, and the Field Review Committee files and the search criteria used are provided in Appendix B.

OASIS Messages: Ford has identified 29 SSMs and 8 TSBs that appear to relate to driveability and may relate to reports of stalling in the subject vehicles and is providing copies in Appendix I1 (file: 2004-12-02\_Appendix\_I1) on the enclosed CD. Ford has also identified one draft SSM

and one draft TSB that may relate to the alleged defect in the subject vehicles and is providing copies in Appendix I2 (file: 2004-12-02\_Appendix\_I2).

<u>Internal Service Messages</u>: Ford has identified three ISMs that appear to relate to the alleged defect in the subject vehicles and is providing copies in Appendix I3 (file: 2004-12-02\_Appendix\_I3).

<u>Field Review Committee</u>: Ford has identified two field service action communications that appear to relate to driveability and may relate to reports of stalling in the subject vehicles and is providing copies in Appendix 14 (file: 2004-12-02\_Appendix\_14).

## Request 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, Ford. 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.

# <u>Answer</u>

In an October 20, 2004, telephone conversation, Mr. Scott Yon of the agency informed Ford personnel that the scope of the "actions" is limited to final reports of six-sigma projects, six panel reports, Critical Concern Review Group (CCRG) agenda items, 8D reports, 14D reports, and Field Review Committee (FRC) agenda items. Ford is also providing the latest draft of any related document that was not final as of October 15, 2004.

These documents contain commercially sensitive business information and/or trade secrets and will be submitted electronically under separate cover to the agency's Office of Chief Counsel in Appendix J with a request for confidential treatment.

#### Request 9

Describe all modifications or changes made by, or on behalf of, Ford 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 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 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 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 Ford is aware of which may be incorporated into vehicle production within the next 120 days.

#### **Answer**

In an October 28, 2004, telephone conversation, Mr. Scott Yon of the agency informed Ford that the requested modifications or changes were required only for the fuel injectors (base part number 9E527), powertrain control module (PCM) (base part number 12A650), PCM software calibrations, injection control pressure (ICP) sensor (base part number 9F838), exhaust gas recirculation valve (base part number 9F452), fuel injection control module (base part number 12B599), fuel injection control module wire harness (base part number 12B637), exhaust back pressure sensor (base part number 9J460), PCM wire harness (base part number 12A581), and camshaft position sensor (base part number 12K073). These parts represent the vast majority of the causal part numbers identified in AWS claims for stalling. A table of the requested changes for the above parts is provided electronically as Appendix K (file: 2004-12-02\_Appendix\_K) on the enclosed CD.

#### Request 10

When introducing new feature content into a product line, vehicle manufacturers typically produce technical documents/information (training manuals, CD's, Online courses, etc) for the purpose of training and familiarizing service technicians or other technical personnel with the operation, service and maintenance of new feature and systems. The 6.0 liter diesel engine was introduced at MY 2003 subject vehicle production; provide copies of any such information Ford produced related to the subject components (6.0 L engine and engine management system). If no such documents/information exists, then alternatively provide copies of all technical and service manuals pertinent to the subject components.

#### <u>Answer</u>

On November 3, 2004, at the request of Mr. Scott Yon of the agency, Ford provided the agency with a copy of the 2003 6.0L Diesel Engine New Model Technician Training Manual, dated November 18, 2002. On November 14, 2004, Mr. Yon informed Ford that this manual was sufficient to answer this request. Accordingly, no further information is being provided in this response.

#### Request 11

Furnish Ford'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 included with this inquiry.

# <u>Answer</u>

As the agency is aware engine stalling can occur in any vehicle for various reasons, including engine or engine control system malfunctions, operator error (for instance improper shifting of a manual transmission or running out of fuel) or other conditions, such as bad fuel.

Ford's investigation of the reported stalling incidents in the subject vehicles, thus far, has identified various potential causes for the reported incidents, including those listed above, and others, such as ICP sensor malfunction, wire harness chafing, and PCM calibrations. Following is a brief description of these specific items and actions taken or in progress:

- The ICP sensor had an O-ring that could shift out of position across the sensing element causing an offset in the ICP pressure measurement. Field Service Action 03B05 was issued in April 2003, which provided for a new ICP sensor with an improved material O-ring as a result of reports of poor driveability.
- As a result of manufacturing variability, the fuel injector wire harness was susceptible to wire chafing against an intake manifold bolt, which could ultimately shut off the fuel injectors. Interim and subsequently permanent corrective actions have been taken in both service and production to remedy this condition. Additional possible wire harness chafing issues are being investigated.
- Some subject vehicles built between September 29, 2003 and April 28, 2004 may exhibit driveability concerns after deceleration down a long grade with the cruise control engaged. TSB 04-13-8 was published on June 28, 2004 making dealers aware of the availability of updated calibrations for the PCM, fuel injection control module, and transmission control module.

In addition to these actions, Ford is continuing to investigate driveability and customer satisfaction issues with 6.0L diesel engines and will continue to implement service fixes as appropriate, and Ford's existing 5 year/100,000 mile warranty on the 6.0L diesel engine will allow dealers to continue to repair the subject vehicles under warranty.

While the number of reports potentially relevant to the alleged defect appears high, the number of potential safety-related reports is extremely low. Of the 16,760 reports and claims that appear to relate to the agency's investigation, Ford has identified four accidents and one injury allegedly due to stalling related to a subject component. Ford has not verified that any of these

incidents are, in fact, in any way actually related to engine stalling or what contribution to the accident a stall may have had, if a stall actually occurred. The alleged accident rate is only 0.10 per 10,000 vehicles, and the alleged injury rate is only 0.03 per 10,000 vehicles. Although our analysis found engine stalling complaint rates for the subject vehicles to be comparable to other agency safety defect investigations, the rate of stalling-related accidents is significantly lower than in investigations of other conditions that did not result in recalls, such as EA02-015, in which ODI did not find that an identified defect posed an unreasonable risk to safety. (where the accident rate was 0.17 per 10,000 vehicles). The reports identified by Ford in this response and the VOQ's provided by the agency include a total of 11 accident allegations and three injury allegations related to stalling, regardless of the engine component (including components not on the agency's list of subject components). Even if all 11 accidents and all three injury incidents are counted, the alleged accident rate is still only 0.29 per 10,000 vehicles, and the alleged injury rate is still only 0.08 per 10,000 vehicles.

Ford believes that TSB 04-13-08, Field Service Action 03B05 and other production and service actions already taken provide appropriate communication to owners and remedy to address the causes of potential engine stalls identified through Ford's exhaustive analysis. Based on the continued extremely low rate of safety related allegations, and the effectiveness of previously taken production and service actions, Ford does not believe that the incidents of engine stalling in the subject vehicles are indicative of an unreasonable risk to motor vehicle safety. We have reviewed the agency's findings in several prior stalling related and other investigations, as well as the conclusions in an earlier agency study of the affects of stalling on safety, and believe that our analysis is consistent with the positions in the earlier investigations and study. However, because there have been various approaches used by both the agency and manufacturers to resolve stalling related investigations, Ford encourages the agency to update its previous stalling study to reevaluate the conclusions of that study.