2/28/07

INERGY AUTOMOTIVE SYSTEMS 2710 Bellingham Suite 400 , Troy, Mi. 48083 T. (248) 743-5700 F. (248) 526-1469 www.inergyautomotive.com



February 21, 2007

Mr. Jeffery L. Quandt
Vehicle Control Division
Office of Defects Investigation
National Highway Traffic Safety Administration
U.S. Department of Transportation
400 Seventh Street, S.W.
Washington, DC 20590

Reference: NVS-213swmc:EA06-010

Dear Mr. Quandt,

This package contains Inergy Automotive Systems USA, LLC response to the referenced inquiry dated December 13, 2006 regarding information concerning the fuel tank assembly for the 2004 – 2006 model year Chrysler Pacifica (CS) vehicles and peer vehicles requested.

Included in this package you will find:

- 2 -Copies of the completed response containing the pertinent information collected in regards to Inquiry (EA06-010)
- Copy of letter to Mr. Anthony Cooke, requesting confidential treatment of documents
- 2-CD ROM discs containing documents we consider public record

If you have any questions or comments please contact me at (248)743-5833.

Sincerely

Byron Freshwater

## <u>CERTIFIED MAIL</u> <u>RETURN RECEIPT REQUESTED</u>

Mr. Byron Freshwater Inergy Automotive Systems USA, LLC NVS-213swmc 2710 Bellingham Road EA06-010 Suite 400 Troy, MI 48083.

## Dear Mr. Freshwater:

The Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) is responsible for investigating allegations of safety related defects in motor vehicles and motor vehicle equipment to enforce the recall requirements of the Motor Vehicle Safety Act. ODI is conducting an Engineering Analysis (EA06-010) to investigate allegations that unshielded fuel tanks may puncture from contact with road debris in 2004 through 2006 Chrysler Pacifica vehicles manufactured by DaimlerChrysler Corporation (DCC) and equipped with fuel tanks supplied by Inergy. This letter requests certain information to assist us in our investigations.

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

- <u>Subject vehicles</u>: all 2004 through 2006 Chrysler Pacifica vehicles manufactured for sale or lease in the United States.
- <u>Peer Vehicles:</u> all 2004 through 2006 DCC LX vehicles (Chrysler 300 and 300C, Dodge Magnum and Charger, LX).
- <u>Subject component</u>: all HDPE fuel tanks manufactured for use on the subject and peer vehicles.
- Inergy: Inergy Automotive Systems USA, LLC, Inergy Automotive Systems (worldwide), 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 Inergy (including all business units and persons previously referred to), who are or, in or after January 1, 2000, were involved in any way with any of the following related to the alleged defect in the subject vehicles:
  - 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.
- <u>Alleged defect</u>: Fuel tank leakage resulting from puncture or other damage caused by road debris.
- <u>Document</u>: "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 Inergy, 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 nonidentical 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 Inergy 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 Inergy has previously provided a document to ODI, Inergy 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 Inergy's response to each request, identify the source of the information and indicate the last date the information was gathered.

- 1. 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 and peer vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Inergy. 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.

1a	1b	1c	1d	1e	<b>1f</b>
Action, Title, Identifier	Start Date	End Date	Objective	Responsibility	Result Summary
			No Leak after pendulum strikes		
Pendulum Impact LX	7/17/2003	7/17/2003	predefined area of tank @ -40C	Inergy	Pass-No Leaks or cracks observed per test report for WO 4120
			Monitor tank deflection post fuel		DVPR states pass/fail criteria is +/-5.0mm. 5 tanks tested, greatest
			exposure for 3 weeks at elevated		deflection of a single point measurement was 5.2 mm per test report fo
Bottom Deflection LX	8/4/2002	9/18/2002	temperature (40 C)	Inergy	WO 3699
Dimensional Annual		-			
Validation Reports-Wall			Ensure tanks meet wall thickness	ı.	
Thickness-LX	5/9/2004	5/10/2006	requirements as stated on print	Inergy	All wall thicknesses to print
			Simulate Fill & Hydrostatic		
			loading, Determine %		3 designs were evaluated (Baseline, X-rib, Parallel rib). Parallel rib
			Improvement of various designs-	1	design showed 15% improvement (-9.4 mm vs11.1 mm of baseline
Deflection Simulation-CS	5/31/2001	5/31/2001	Tank Rigidity	Inergy	design) per simulation report dated 5/31/01.
			Monitor tank deflection post fuel		DVPR states pass/fail criteria is +/-5.0mm. Report for WO 3323
			exposure for 3 weeks at elevated		showed maximum deflectionof 3.0 on primary side and 11.6 on auxiliary
Bottom Deflection CS	10/9/2001	10/31/2001	temperature (40 C)	Inergy	side. Test reported on Jan 2002.
Dimensional Annual					
Validation Reports-Wall			Ensure tanks meet wall thickness		
Thickness-CS	5/15/2004	5/20/2006	requirements as stated on print	Inerav	All wall thicknesses to print

**Enclosures:** 

Test Report for Work Order Number 4120

(Inergy Confidential)

(Bates page #'s EA06-010-000001 to EA06-010-000004)

**Test Report for Work Order Number 3699** 

(Inergy Confidential)

(Bates page #'s EA06-010-000005 to EA06-010-0000010)

Dimensional Annual Validation Reports LX

(Inergy Confidential)

(Bates page #'s EA06-010-0000011 to EA06-010-0000034)

Bottom Deflection Analysis of CS (8608MAG and variations) (Inergy Confidential)

(Bates page #'s EA06-010-0000035 to EA06-010-0000037)

Test Report for Work Order Number 3323

(Inergy Confidential)

(Bates page #'s EA06-010-0000038 to EA06-010-0000052)

**Dimensional Annual Validation Reports CS** 

(Inergy Confidential)

(Bates page #'s EA06-010-0000053 to EA06-010-0000058)

- 2. Provide a summary listing of and copies of all documents relating to all subject and peer vehicle fuel tanks with damage from road debris that were returned to Inergy, or that Inergy participated in the examination of, for analysis. Include the following information in the list:
  - a. Vehicle identification number;
  - b. Summary of owner comments;
  - c. Summary of dealer comments;
  - d. Summary of DCC comments;
  - e. Location of damage;
  - f. Approximate size of hole; and
  - g. Summary of Inergy observations/assessments.

## See matrix response (DCC Confidential) (Bates page # EA06-010-0000126)

Please ensure that the following materials are included in the copies of documents provided; color reproductions of any photographs, copies of any diagrams and notes from examinations/inspections. Provide a similar list for all tanks that Inergy did not inspect/examine but collected other information about (e.g., assessments of damage from photographs, reports of damage using data collection sheets or other forms/instructions).

Inergy no longer has access to DCC's proprietary Starline System and is unable to obtain any additional information in regards to field damaged tanks.

- 3. Describe and provide copies of all documents relating to all communications between Inergy and DCC concerning any one or more of the following regarding subject and/or peer vehicles:
- a. Fuel tank positioning/packaging;

Packaging Envelope-List of environment files sent to Inergy from DCC E-mail/correspondence between DCC & Inergy (One from kas12, June 12, 2002) (Inergy Confidential) (Bates page # EA06-010-0000059)

b. Fuel tank ground clearance;

See Above-Packaging Envelope-List of environment files sent to Inergy from DCC E-mail/correspondence between DCC & Inergy (Two for CS to Brian Lamparski & Brian Douglas are Inergy Confidential)

(Bates page #'s EA06-010-0000060 to EA06-010-0000063)

c. Fuel tank shielding;

· · ·

**CS-Thermal Shield Print** 

(DCC Confidential)

JPEG Tank/Shield bottom view

LX-Thermal Shield Prints (V8 & V6)

(DCC Confidential)

JPEG Tank/Shield bottom view

LX-Thermo Shield Print

(DCC Confidential)

JPEG Tank/Shield bottom view

(Bates page # EA06-010-0000064 to EA06-010-0000071)

d. Fuel tank damage from road debris;

See Excel matrices in question #2 under the comment section See E-mail/correspondence in question #5

e. Potential design countermeasures to reduce the potential for fuel tank damage by road debris.

Two CS-Autoweb E-mail notices for transferred CAD data

E-mail/correspondences between DCC & Inergy (7 of 8 are confidential to brl1 plus accompanying JPEG's)

(Inergy Confidential) (Bates page #'s EA06-010-0000072 to EA06-010-0000086)

4. Provide copies of all engineering standards and specifications regarding the subject and peer vehicle fuel tanks. Describe and provide copies of all documents relating to the puncture resistance of the fuel tank in the subject and peer vehicles.

DCC's MSDB-472

(DCC Confidential)

(Bates page # EA06-010-0000087 to EA06-010-0000094)

DCC's PF-8950 (DCC Confidential)

(Bates page # EA06-010-0000095 to EA06-010-00000102)

**ECE R34 (Impact Resistance Test)** 

CS drawing sections showing wall thickness callouts (DCC Confidential)

(Bates page # EA06-010-00000103)

CS Inspection Reference Guideline for wall thickness verification

(Inergy Confidential) (Bates page # EA06-010-00000104 to EA06-010-00000106)

LX drawing section showing wall thickness callouts (DCC Confidential)

(Bates page # EA06-010-00000107)

LX Inspection Reference Guideline for wall thickness verification

(Inergy Confidential) (Bates page # EA06-010-00000108 to EA06-010-00000110)

DaimlerChrysler Corporation LX 04.5 Pre-Source Package List of Applicable Standards & ER&D Activities dated 3/28/01

(DCC & Inergy Confidential) (Bates page # EA06-010-00000111 to EA06-010-00000116)

5. Regarding the subject and peer vehicles, describe and provide copies of all documents relating to Inergy's involvement in the fuel tank parts restriction programs by DCC from January 2003 to date.

Various E-mail correspondence enclosed (1 of 9 are Inergy Confidential) (Bates page # EA06-010-00000117)

- 6. Provide a list of all other saddle bag style fuel tank assemblies manufactured by Inergy since January 1, 2000 for vehicles sold for use in the United States. Include the following information in the list:
- a. Manufacturer name;
- b. Vehicle usage by model and model year;
- c. Fuel tank designation by code name or part number;
- d. Beginning and ending dates of supply;
- e. Composition of tank material (e.g., HDPE plastic);
- f. Tank ground clearance;
- g. Tank volume;
- h. Tank wall thickness;
- i. Whether the tank is shielded, and if so, to what extent and what type of shield;
- j. If Inergy provided any suggestions or recommendations as to whether the tanks should be shielded;
- k. State whether Inergy has ever requested a part restriction on any of the tanks, and if so, for what reason the parts restriction was requested.

Enclosed matrix: (Inergy Confidential) (Bates page # EA06-010-00000118 to EA06-010-00000121)

- 7. Describe and provide copies of all other documents in Inergy's possession, including all design guides, engineering standards, recommended practices and similar documents, that relate in any way to the following for fuel tanks in general:
- a. Fuel tank minimum ground clearance;
- b. Fuel tank location/packaging;
- c. Fuel tanks shielding criteria
- d. Fuel tank puncture resistance (including any analyses comparing puncture resistances of various tank materials or by wall thickness for HDPE tanks); and

e. Any other countermeasures for fuel tank damage by road debris.

Enclosure: Excerpts from Design Guidelines Solvay Internal Document. Dated November 2, 1998 (Intergy Confidential) (Bates page # EA06-010-00000122 to EA06-010-00000125)

This letter is being sent to Inergy 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. Inergy's failure to respond promptly and fully to this letter could subject Inergy 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 recent 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 \$5,000 per day, with a maximum of \$16,050,000 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 69 Fed. Reg. 57864 (Sept. 28, 2004). This includes failing to respond to ODI information requests.

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

Inergy's response to this letter, in duplicate, together with a copy of any confidentiality request, must be submitted to this office by February 9, 2007. Please refer to EA06-010 in Inergy's response to this letter. If Inergy finds that it is unable to provide all of the information requested within the time allotted, Inergy must request an extension from Jeff Quandt of my staff at (202) 366-5207 no later than five business days before the response due date. If Inergy 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 Inergy then has available, even if an extension has been granted. If Inergy 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. INERGY 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 (69 Fed. Reg. 21409 et seq; April 21, 2004), to the Office of Chief Counsel (NCC-113), National Highway Traffic Safety Administration, Room 5219, 400 Seventh Street, S.W., Washington, D.C. 20590. Inergy 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.

If you have any technical questions concerning this matter, please call Stephen McHenry of my staff at (202) 366-4883.

Sincerely, Kathleen C. DeMeter, Director Office of Defects Investigation

## Enforcement

NHTSA:NVS:ODI

NVS-213SMCHENRY:vrj:64883:12/07/06:revision:12/12/06

cc

NVS-200 Chron

NVS-213 Chron

Document:/121:U:/IREA06-010Inergy