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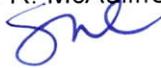
**INFORMATION Redacted PURSUANT TO THE FREEDOM OF
INFORMATION ACT (FOIA), 5 U.S.C . 552(B)(6)**

M E M O

April 19, 2012

TO: Ali Motamedamin

FROM: Susan R. McAuliffe



- For your information
- As you requested – copy of Mercedes April 13, 2012 filing in PE12-001 (redacted version).
- For your review and comment
- For your files
- Other

Please let us know if you need anything further.

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April 13, 2012

Via Federal Express

D. Scott Yon, Chief
Vehicle Integrity Division
Office of Defects Investigation
National Highway Traffic Safety Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

**Re: PE12-001 – Preliminary Evaluation to Investigate Allegations of Fuel
Leakage in MY 2003-2006 Mercedes-Benz E55 AMG Vehicles**

Dear Mr. Yon:

This letter is submitted on behalf of Mercedes-Benz USA, LLC (“Mercedes”) to the National Highway Traffic Safety Administration (“NHTSA” or “Agency”) in response to the Office of Defects Investigation’s request for information relating to Preliminary Evaluation (PE) 12-001 to investigate allegations of fuel leakage at or near the top of the fuel tank assembly in model year (MY) 2003-2006 Mercedes-Benz E55 AMG sedans and wagons.

I. Background

This investigation was opened in response to allegations of fuel system leakage on MY 2003-2006 E55 AMG vehicles involved in Emissions Recall Campaign No. 2008-20001. The NHTSA opening resume indicates that customers “allege fuel leakage in the area of the fuel module located on the top of the fuel tank and accessible by removing the rear seat cushion” and “allege the leakage results in liquid (raw) fuel pooling and/or spraying on other nearby vehicle components (e.g. an insulation barrier on the underside of the seat cushion).” In addition, “[s]everal reports suggest the leakage may be related to a March, 2008 emissions recall.” As set forth below, the design of the subject vehicles precludes the possibility of liquid fuel entering the

passenger compartment or making contact with the underside of the rear seat cushion as alleged. A review of the VOQ complaints indicates that only one VOQ complaint potentially has any relation to the 2008 emissions recall. Finally, Mercedes' warranty data also confirms that only 38 vehicles that have had the emissions recall remedy (which remedy was performed on over 93% of the population) have returned a second time for re-repair to the fuel filter module, although it is not confirmed that any of these claims relate to the elbow fitting that was the subject of the recall.

A. Subject Vehicle Design Elements

The Passenger Compartment Is Isolated from the Fuel Tank As depicted in the repair instructions contained in Attachment 6, Service Documents, for safety reasons, the fuel tank is located in front of the rear axle, outside of the passenger compartment and underneath the pressed steel floor pan and under the rear seat. The fuel filter and fuel pump modules are mounted on top of the fuel tank. See Attachment 6. These modules cannot be accessed from outside of the vehicle for repair. Instead, they are accessed through two round access ports in the steel floor pan. The access ports are secured by six bolts and gaskets, and create a tight seal when closed. When the access port is secured, it is not possible for liquid fuel to leak or "spray" up through the access ports and make contact with any part of the vehicle interior, including the rear seat, or sound insulation.¹

When the subject vehicles have maintenance or repair work involving the filter or pump modules, the access ports under the seat are opened and the modules are removed from the top of the fuel tank. The repair instructions include specific steps to reduce the potential for drops of liquid fuel to enter the passenger compartment and to minimize vapor exposure. For example, the fuel tank must be drained to no more than 75% capacity before attempting to remove the modules, or there is risk that fuel "could find its way into the interior." *Id.* Similarly, a rag must be "wrapped around the fuel hose to prevent fuel from leaking into vehicle's interior." *Id.* The repair instructions also specify that the sound deadening mat located under the seat should be placed aside to assure no exposure to fuel drips or odor during the repair process, since the fuel pump, filter, and connecting lines may still contain fuel upon being removed from the vehicle. *See id.*

¹ We note that some of the VOQs allege fuel "under the rear seat." Even if there is fuel under the rear seat, under the steel floor panel, there is no fuel inside the passenger compartment.

Filter and Pump Modules are Mounted in Containment Wells As depicted in Attachment 6, the fuel pump and filter modules are fastened through the top of the tank. Both units are mounted in containment wells or depressions in the contour on the top of the tank. These depressions insure that even in the unlikely event of small fuel leaks, any leakage will be contained on the top of the tank and evaporate. Even in the event of leakage that does not evaporate quickly or that exceeds the volume of the containment, which has never been observed by Mercedes in the subject vehicles, the fuel can never come in contact with any parts which are hot enough to cause ignition. Specifically, any fuel that flows off the tank would flow onto a heat shield that prevents any fuel from coming in contact with the exhaust system. Moreover, even without the heat shield, there are no components in this area hot enough to be a source of ignition.

Electronic Fuel Tank Leak Detection All the subject vehicles have tank leakage detection monitoring as required by the EPA and California Air Resources Board (ARB)'s On-board Diagnostic (OBD) regulations. See 40 C.F.R. §86.1806-05(b)(4); 13 Cal. Code of Regs. §1968.2(e)(4). All Mercedes vehicles in the U.S. meet the more stringent California ARB OBD monitoring requirements, regardless of what state they are sold in. The OBD monitoring requirements are designed to insure that vehicles self-detect vapor leaks to prevent so-called "evaporative emissions" from fuel tanks. The leak detection capability is focused on evaporative emissions, it is extremely sensitive, and capable of detecting a leak as small as 0.5 millimeters (0.020 inches cumulative diameter). The OBD leak detection system monitors for such leaks by de-pressurizing the fuel tank to 15-18 milibars (0.217 - 0.26 PSI) for approximately 30 seconds on every cold start. The field data collected for this investigation does not indicate a high rate of OBD MIL illuminations. Only one AMG VOQ complaint and 5 Non-AMG VOQs reference OBD MIL illumination, and less than 14.2% of the leakage/odor warranty claims reference a MIL. This indicates that the vast majority of odor complaints at issue relate to very small leaks below the OBD vapor detection threshold, but well within the very sensitive human detection threshold of 1-10 PPM.

In fact, Mercedes has documented a number of cases where fuel odor is present, but no point of leakage can be found, even when the system is pressurized for a leak detection test which pressurizes the entire system to 20-25 milibar. Such vapor emissions or leakage below detection thresholds would result in odor complaints or fuel weeping on the outside of the fitting and evaporating before measurable amounts accumulate in the containment well or anywhere on the tank.

B. 2008 AMG Emissions Recall

In February 2008, Mercedes initiated a voluntary emissions recall on MY 2003-2006 E55 and CLS55 AMG vehicles to inspect, modify or replace the fuel filter module. There were a total of 10,680 AMG vehicles built in MYs 2003-2006. Approximately 8,014 of these vehicles were equipped with a potentially defective fuel filter module. The subject fuel filter module was used on gasoline-fueled AMG vehicles with LEV II emissions-compliant plastic (High Density Polyethelene (HDPE)) saddle tanks. As with all MY 2003-2008 E Class vehicles, the subject AMG fuel filter module is mounted through the top of the tank, on the left (driver's) side, and contains an integrated fuel pressure regulator as well as the fuel level sensor for the left-hand side of the tank. Inside the tank, the filter module is attached to the fuel pumps with fuel lines and electrical connections. A separate fuel *pump* module is located on the right hand (passenger) side of the car, and is also mounted through an opening in the top of the tank. The fuel filter module is connected to the engine via a fuel line that is external to the tank. The fuel line connects to the top of the fuel filter module via an elbow fitting. See Attachment 6.

In the AMG vehicles, the design of the elbow fitting on the top of the filter module, where the fuel line is connected on the outside of the filter, was different than for other E Class vehicles. In the AMG vehicles, the original elbow fitting contained an internal steel reinforcement sleeve that was 18 mm long. This sleeve was 2 mm shorter than the sleeve used in Non-AMG vehicles and 4.5 mm shorter than used in later filter module designs. The shorter sleeve did not intersect the corner where the elbow turns 90 degrees, and thus provided less structural support at the turn of the elbow. With the shorter reinforcement sleeve, micro-fissures could develop as the result of a combination of factors, including: physical stress on the elbow, high ambient temperatures, and the chemical composition of fuel used. These small fissures, in the pressurized portion on the fuel system, had the potential to allow vapor to leak from the tank causing vehicles to fail stringent EPA and California evaporative emissions standards.

The recall remedy involved the inspection, modification or replacement of the fuel filter units. Units that showed signs of fissures or vapor leakage at the elbow upon inspection were replaced with a newer filter module design which featured a longer steel support sleeve inside the elbow fitting. Complete replacement of the fuel filter required removal and reinstallation of both the fuel filter module, and the connected fuel pump module on the opposite side of the tank.

For units that did not show any fissures or vapor leakage upon inspection, a longer steel support sleeve was inserted into the elbow fitting without having to remove the

filter module or fuel pump module. The recall repair instructions are included at Attachment 6. The longer steel support sleeve provided additional reinforcement, similar to the Non-AMG part designs, by spanning the corner of the elbow where it was subject to stress and failure. Today, 7,483 of the 8,014 potentially affected vehicles (93.4%) have been campaigned. Of the campaigned vehicles, 60% had the longer sleeve inserted, 33% had the entire sending unit replaced, and approximately 7% were found to already have had the newer generation sending unit design upon inspection and required no repair, due to prior service or maintenance.

C. Analysis of AMG VOQ Complaints

NHTSA has received 20 VOQs on AMG vehicles. For ten of the eleven VOQs, where detailed information on the nature of service visits following the recall campaign is available, the vehicles required service on a different part of the fuel system than was the subject of the 2008 emissions recall. This demonstrates the continued effectiveness of the original emissions recall. In the one case, where the same fuel filter "top" was identified as the source of leaking or vapors following the recall repair, the cause of the leak was likely mechanical stress or damage that was caused by a service technician's implementation of the recall service measure itself. Accordingly, the VOQ records confirm that the original recall campaign was successful and no safety-related issue exists regarding the recall remedy. Each VOQ is discussed below.

Two of the AMG VOQs involve vehicles that did not have the recall repair when the complaint was made to NHTSA. Specifically, on ODI #1041689, the second owner called MBUSA to complain of a fuel leak on August, 26, 2011 (11 days after contacting NHTSA), and was advised that the vehicle had not yet been campaigned under the recall and was advised to take the vehicle to a dealer to have the recall performed. The recall repair was performed on this vehicle on September 12, 2011 and there have been no further complaints or repairs. ODI #10438976 involves a vehicle that was built with a fuel sender that already had the longer steel support sleeve, and was not subject to the recall. Because no repair records are available for this vehicle, the root cause cannot be determined; however, various potential root causes for leakage unrelated to the fuel filter elbow are discussed in section D below.

Eight of the AMG VOQs relate to issues that are unrelated to the fuel sender unit elbow that was the subject of the recall. Specifically, ODI #10419750 relates to fuel odor complaints associated with a saturated charcoal canister, and according to the VOQ was remedied with replacement of the charcoal canister three years after the fuel sender module recall had been performed. ODI #10419674, #10395218, and #10382329 relate to leaks or odor that were corrected by replacement of the fuel *pump*

module or seals several years after the fuel *filter* module received a longer support sleeve under the recall.

The complaint in ODI #10416845 was remedied by replacement of the gaskets or seals under the fuel sender unit, two years after it was campaigned in the emissions recall. According to the VOQs, ODI #10349997, #10352224 and #10361675 relate to the potentially faulty installation or failure of the seals. The replacement of the seals is unrelated to the emissions recall and is required every time the fuel filter is replaced. The seals under both the fuel filter module and fuel pump module are made of elastomer and can potentially be damaged during reinstallation of the modules, for example when replacing the fuel filter during periodic maintenance, or replacing a faulty pump. Though extremely rare, damage to the seals can result from over-torquing the mounting ring on the module, or if the seal is misaligned on the edge of the tank. In addition, the seals can leak if they are not sufficiently tightened upon reassembly. Finally, if the old seals are not replaced with new seals when re-installing a module as specified, there is potential for leaking around the old seal. ODI #10361675 also appears to be concerned about the lingering smell of fuel in the vehicle after the repairs where it "took over a month to get the smell out of the car." This description indicates fuel contamination of the passenger compartment during the repair procedure, contrary to the repair procedures. The fact that the fuel smell dissipated over time indicates the repair was successful, although possibly performed contrary to standard procedures.

In only one VOQ, #10364387, the repair history indicates that the top of the sender was "cracked" when the vehicle was brought in for service following the recall campaign. In this case, the process of conducting the recall repair may have caused some damage to the module, which subsequently resulted in a fuel leakage. As explained above, the recall remedy involved a number of disassembly and reassembly steps which could potentially result in issues after the repair if not done according to all instructions.²

² For example, for vehicles where the fuel sender module needed to be replaced, both the sender module and the fuel pump module needed to be disassembled, the seals replaced, and the connecting fuel lines, electrical connections and hose clamps removed and replaced. Similarly, where a longer support sleeve needed to be installed, the original sleeve needed to be removed by threading a machine screw into the old tube and pulling, and then the longer sleeve reinserted and pressed into position using channel lock pliers as depicted in the recall instructions in Attachment 6. If any one of these steps was not performed properly, if all fasteners and clamps were not properly torqued, if the technician failed to replace the old seals upon reassembly, or if excess torque was applied to the elbow fitting during removal or insertion of the sleeve, it is possible that a future leak could result from the service.

For the remaining 9 VOQs, it is not possible to determine precisely what the issue was after the recall repair because the recall campaign was the last visit to a dealership for service.³ Based on the available VOQ and warranty data, it appears most likely that the remaining 9 VOQs relate to either an issue with some component other than the connector fitting, for example: seals, clamps or lines; or alternatively, from the way the recall remedy repair was conducted. Any such failures would be immediately identified either by illumination of the OBD MIL or by the presence of fuel odors which are quickly identified. As explained above, no defect trend has been identified with respect to the original design or production of any other part of the fuel filter or fuel pump modules. Moreover, these small vapor or liquid leaks in a very limited number of vehicles do not present a significant risk to motor vehicle safety.

Based on the foregoing analysis of NHTSA VOQs, and Mercedes' review of warranty claims, there is no indication that the emissions recall conducted on AMG vehicles was not successful or that additional repairs are necessary on a significant number of repaired vehicles. Specifically, out of 7,483 vehicles repaired in the emission recall, there are only 38 total warranty claims for service on the fuel filter module of vehicles that have previously undergone the recall remedy on that module.⁴

D. Non-AMG Vehicles

NHTSA has also requested information on MY 2003-2008 E-Class (W211) vehicles, which were not a part of the AMG recall. There were over 250,000 non-AMG W211 vehicles produced with the same HDPE plastic fuel tank used by the subject AMG vehicles (the "Non-AMG vehicles"). However, the Non-AMG vehicles did not use the same fuel filter module that was the subject of the AMG recall. Specifically, the Non-AMG filter module always used a longer reinforcement sleeve than the 18 mm sleeve that was at issue in the AMG recall. In addition, the Non-AMG filter module operates at a significantly lower fuel pressure of 3.8 bar (55.1 psi) compared to the 5.1 bar (73.9 psi) system used in the AMG. These differences can be seen in Mercedes field data which does not indicate the existence of a fuel filter module elbow issue, or other related defect, on Non-AMG vehicles.

³ Two of these VOQs, ODI #10392711 and #1031785, allege that the insulation barrier under the rear seat was soaked with gasoline or that gasoline had leaked into the car. As described above, this could not be caused by a leaking fuel tank, and could only conceivably occur as the result of some action during vehicle service contrary to repair instructions or by non-Mercedes repair facilities when the access ports are removed.

⁴ While these repairs were to the fuel filter module, they were not made under the damage code for the emissions recall, which suggest a different failure mode than the one addressed by the recall.

Non-AMG VOQ Analysis NHTSA has provided 50 VOQs related to Non-AMG vehicles.⁵ A review of the VOQs indicates that very few, if any, relate to fuel odor caused by failure of the fuel sender module elbow. Specifically, four reference leaking seals, two relate to issues with the "tank," one references a leaking fuel pump, two relate to an issue with the fuel gauge, and six generally reference the fuel sender or filter module. Fuel filter modules are serviced for many reasons, including: the replacement of the fuel filter module as a part of regular periodic filter replacement, problems with engine performance associated with reduced fuel flow rates, clogged filters and reduced fuel pressure, use of poor quality fuel, faulty electrical signals to the OBD system or fuel level sensor, system damage caused by chronic over-topping, and road-hazard damage to fuel tanks and lines. The seals are replaced whenever a module is removed, and often the fuel pump and related hoses and connections are also moved or disassembled and reassembled during that service. Because the fuel filter and fuel pump modules are connected inside the tank by multiple hoses, the fuel pump module and seals are often replaced when the filter module is changed out. Because any such service or repairs must be performed by accessing the fuel tank from inside the vehicle, there is always a possibility of fuel odor complaints triggered by such service. Five of the VOQs do not contain enough information to identify a potential cause of the complaint.

Of the remaining 30 VOQs, each one indicates that the customer smells fuel odor only upon refueling or when the tank is full. Leaks associated with the fuel sending unit elbow would cause odor any time the vehicle is operating, regardless of the level of fuel in the tank, and regardless of whether the vehicle is being refueled, since fuel flows through the elbow to the engine any time the vehicle is operating. In contrast, complaints alleging odor only upon refueling or at full tank, suggest emissions or leakage from a different component, either: the vent line to the charcoal canister, the refueling limiter valve to the vent line, the filler neck, or the seals under the fuel filter module or fuel pump module.

Seal Leakage As discussed above, the seals under the modules must be replaced each time the fuel filter is replaced or whenever one of the modules is removed for service for any reason. Failure to replace the seals as directed can result in leakage because old seals have less elasticity than new seals. In some cases, the seals can be torn, misaligned or damaged due to over-torqueing of the module retention ring or improper positioning of the seal. Issues with the seals present a very limited potential for leakage because they are located on the top of the tank, and are not subjected to system pressurization associated with the fuel within the fuel filter module elbow or fuel

⁵ This represents 0.015% of the Non-AMG vehicle population. In contrast, the VOQs associated with the AMG vehicles represent 0.25% of the AMG vehicles.

line. In essence, fuel vapor or leakage from seals can only occur when the vehicle's fuel tank is full, or fuel sloshes up against the seal during acceleration or deceleration. Such leakage would occur only briefly, and would generally be contained by the module containment wells.

Leakage from the Refiller Neck The refiller neck is 28 mm in diameter and attaches to the bottom half of the fuel tank. Leakage from this connection is theoretically possible, and would be readily observed, but has not been observed in the field.

Leakage from Evaporative System Potential leakage from the evaporative and vent system components such as the vent line or refueling limiter valve can also occur if the owners chronically over-top their fuel tank. Owners are warned against this kind of misuse with warnings contained in the owner's manual, on the fuel door, and on most gas station dispensing pumps.

One adverse consequence of over-topping is damage to the refueling limiter valve, and connection to the vent hose. The refueling limiter valve is a float valve mounted in the top of the fuel tank, which closes when the tank reaches maximum designed capacity. The limiter valve closes off a vent line that is designed to allow air to escape the tank during refueling. When this float valve closes, the vent air flow is restricted, and as designed, the fuel backs up in the refiller neck and thereby triggers the automatic shut-off on the refueling nozzle connected to the fuel station pump.

In cases of chronic over-topping, when the refueling nozzle is re-squeezed multiple times following the first automatic shut-off, fuel can be forced past the limiter valve, which is designed to restrict airflow, but is not designed to create a complete seal. In addition, in extreme cases of over-topping, fuel that backs up in the top of the refiller neck can drain through the expansion tank mounted near the refueling door, back down the vent line.⁶ Over-topping exposes portions of the refueling limiter valve and vent upstream of the fuel tank to liquid fuel. Extended exposure to high volumes of liquid fuel with a high aliphatics and aromatics formulation (typical in some high ethanol blends), in combination with high ambient temperatures, can cause permeation of the valve neck where the vent tube connects to the fuel tank, or seepage between the valve neck and vent hose due to expansion and contraction of the valve which can loosen clamping tension in extreme cases. This portion of the vent system is not optimized for prolonged exposure to highly corrosive liquid fuel. Where permeation occurs, owners could experience vapor odor but the amount of fuel present is strictly limited by the inherent

⁶ In U.S. vehicles, the vent line and expansion tank are connected by a very small 6 mm aperture and the recirculation line. Therefore U.S. vehicles are less susceptible to damage from this route than vehicles designed to different evaporative emissions standards in other countries where the connecting path is larger.

design and location of the limiter valve and venting components. Each of the vent system components is located at the top of the tank or above the tank, and is only exposed to liquid fuel in very limited circumstances.

In most cases, the refueling odors reported in connection with limiter valve micro-cracks are caused by gasoline vapors that are pushed out of the fuel tank along with the air that is forced out of the tank as liquid fuel replaces the volume of air that was in the empty tank. When the tank is full, the refueling limiter valve closes to prevent significant quantities of liquid fuel from entering the vent line. Therefore in most cases, the refueling limiter valve will prevent liquid fuel from entering that part of the fuel system. In cases of extreme over-topping, where fuel has backed up the filler neck, and then drains back down to the tank via the vent line, it is possible for slightly higher quantities of fuel to remain above the limiter float valve, until the fuel level goes down far enough to open the valve. When the fuel nozzle is removed from the filler neck, the operating vents reopen, which allows any fuel forced in the expansion tank by over-topping to return to the fuel tank. In these extremely rare cases, it is possible, in theory, to have liquid fuel leak out of the limiter valve. Any liquid fuel that leaks from the limiter valve and does not evaporate immediately would be captured in the containment well for the limiter valve. If the capacity of this well is exceeded, the fuel will be directed by channels molded into the top of the tank over to the larger containment well for the fuel filter module.

Although the majority of VOQs (30) relate to the two root causes associated with full tanks and over-topping (seals and the refueling limiter valve), warranty claims associated with these two root causes are limited. In fact, the total warranty claims rate for all Non-AMG vehicles for all subject components, including the tank, seals, pump module, filter module, and hoses, due to all potential causes is 2.3%.

None of these issues relates to leaks from the fuel filter module elbow connector that was addressed in the AMG recall, and none represents a separate defect trend. Moreover, none of these issues can create a significant risk to motor vehicle safety because none causes a leak of significant quantity, or one in which fuel can reach a potential source of ignition.

E. No Potential for Ignition

Unlike fuel leaks inside the engine compartment, there are no sources of ignition above or below the tank so fire cannot occur as a result of leakage. Specifically, in the unlikely event that fuel exceeds the capacity of the containment wells and drains off the top of the tank, it would be directed by molded channels off the side of the tank or onto the heat shield. The heat shield between the drive shaft and the tank prevents any fuel from every reaching the muffler or exhaust system. But even if there were no heat

shield, the operating temperature of the muffler and exhaust pipes are too low to result in ignition. The combustion temperature of liquid gasoline is 1300° F and the temperature of the outside of the muffler is 750° F (worst case) and the temperature of the heat shield is less than 250° F.

RESPONSES TO REQUESTS NO. 1-11

- Request No. 1:** State, by model and model year, the number of subject vehicles Mercedes-Benz USA, LLC has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by Mercedes-Benz USA, LLC, state the following:
- a. Vehicle identification number (VIN);
 - b. Make;
 - c. Model;
 - d. Model Year;
 - e. Date of manufacture;
 - f. Date warranty coverage commenced;
 - g. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease);
 - h. Whether the vehicle was included in (subject to) Mercedes-Benz USA, LLC's Emissions Recall No. 2008-020001 (yes/no);
 - i. If the vehicle was involved in the emissions recall, whether or not the recall repair was completed (yes/no); and,
 - j. If the emissions recall was completed, the date of completion.

Provide this information in a Microsoft Access 2007 file, or a compatible format, entitled 'PRODUCTION DATA.'

RESPONSE TO REQUEST NO. 1:

Mercedes has manufactured 265,177 subject vehicles for sale or lease in the United States, including 8,014 vehicles subject to Emission Recall Campaign No. 2008-020001. The information requested in Request No. 1a-j is provided in Attachments 1A (E-Class) and 1B (CLS-Class), Production Data.

Request No. 2: State the number of each of the following, received by Mercedes-Benz USA, LLC, or of which Mercedes-Benz USA, LLC 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, fire, 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 Mercedes-Benz USA, LLC is or was a party to the arbitration; and
- f. Lawsuits, both pending and closed, in which Mercedes-Benz USA, LLC 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" and "d," provide a summary description of the alleged problem and causal and contributing factors and Mercedes-Benz USA, LLC'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.

RESPONSE TO REQUEST NO. 2:

- a. Mercedes has received 181 consumer complaints in its Customer Assistance Center which relate to, or may relate to, the alleged defect in the subject vehicles. The additional detail requested in response to Request No. 2 is incorporated in the response to Request No. 3.

- b. Mercedes has received 5 reports from field personnel which relate to, or may relate to, the alleged defect in the subject vehicles.
- c. Mercedes has received no reports alleging a crash, injury or fatality relating to the alleged defect in the subject vehicles.
- d. Mercedes has received no property damage claims relating to the alleged defect in the subject vehicles.
- e. Mercedes is aware of 4 arbitration proceedings in which it is or was a party which relate to, or may relate to, the alleged defect in the subject vehicles. The additional information requested for Request 2.e is provided in Attachment 2, Arbitration and Lawsuit Information.
- f. Mercedes is aware of 4 lawsuits in which it is or was a defendant which relate to, or may relate to, the alleged defect in the subject vehicles. The additional information requested for Request 2.f is provided in Attachment 2, Arbitration and Lawsuit Information.

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

- a. Mercedes-Benz USA, LLC'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 leakage of liquid fuel is alleged;
- j. Whether the smell of fuel vapors is alleged;
- k. Whether a crash is alleged;
- l. Whether a fire is alleged;
- m. Whether property damage is alleged;
- n. Number of alleged injuries, if any; and
- o. Number of alleged fatalities, if any.

Provide this information in a Microsoft Access 2007 file, or a compatible format, entitled 'REQUEST NUMBER TWO DATA'

RESPONSE TO REQUEST NO. 3:

The information requested in Request No. 3 is provided in Attachment 3, Request Number Two Data.

Request No. 4: Produce copies of all documents related to each item within the scope of Request No. 2. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method Mercedes-Benz USA, LLC used for organizing the documents.

RESPONSE TO REQUEST NO. 4:

The information requested in Request No. 4 is provided in Attachment 4, Request Number 2 Documents, to the extent that information is not already provided in Attachment 3, Request Number 2 Data. Specifically, Attachment 4 provides field report, lawsuit and arbitration documents separately; customer complaint documents are incorporated into Attachment 3.

Request No. 5: State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by Mercedes-Benz USA, LLC 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; claims for Emissions Recall Campaign No. 2008-02000; field, zone, or similar adjustments and reimbursements; any out of warranty dealer repairs; 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. Mercedes-Benz USA, LLC'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. Whether the claim is for Emissions Recall No. 2008-02000 repair (yes/no);
- k. Concern stated by customer;
- l. Comment, if any, by dealer/technician relating to claim and/or repair.

Provide this information in a Microsoft Access 2007 file, or a compatible format, entitled "WARRANTY DATA."

RESPONSE TO REQUEST NO. 5:

Mercedes has identified the following warranty claims that relate to, or may relate to, the alleged defect in the subject vehicles: (1) there were 1,367 claims on the AMG vehicles, which includes repairs conducted prior to the recall using parts that had not been optimized for the recall remedy, and (2) there were 5,967 claims on Non-AMG vehicles. These claims include claims related to the alleged defect and any of the subject components, including: seals, hoses, fuel filter modules, fuel pumps, and tanks. The additional information requested in Request No. 5 is provided in Attachment 5, Warranty Data, with the exception of the vehicle owner information request in Request 5.b. This information will be provided shortly.

Request No. 6: Describe in detail the search criteria used by Mercedes-Benz USA, LLC 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 Mercedes-Benz USA, LLC 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 Mercedes-Benz USA, LLC 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.

RESPONSE TO REQUEST NO. 6:

In order to identify the warranty claims reported in response to Request No. 5, Mercedes identified all warranty claims for subject vehicles that included the subject component part numbers, and the damage type 04 (leaking) or 65 (odor). In addition, dealer text was reviewed to confirm that claims related to the alleged defect.

The normal new vehicle warranty coverage period in the United States is four years/50,000 miles.

Request No. 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 Mercedes-Benz USA, LLC has issued to any dealers, regional or zone offices, field offices, fleet purchasers, or other entities. This includes, but is not limited to, documents related to Emissions Recall No. 2008-020001, 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 Mercedes-Benz USA, LLC is planning to issue within the next 120 days.

RESPONSE TO REQUEST NO. 7:

Mercedes has issued the following service documents that relate to, or may relate to, the alleged defect in the subject vehicles:

- Star Bulletin P-B-47.20/53 (September 2007) (procedure for replacing fuel pump and fuel filter modules)
- Recall Campaign Bulletin 2008020001 (March 2008) (check fuel filter module assembly and repair or replace if necessary)
- Repair Instruction AP47.20-P-0780TC (February 14, 2012) (replace fuel filter)
- Repair Instruction AR47.20-P-7000TA (April 3, 2006) (remove, install fuel pump and fuel tank sensor)

Copies of these documents are provided in Attachment 6, Service Documents.

Request No. 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, Mercedes-Benz USA, LLC. Ensure that this response includes testing or analysis conducted either by Mercedes-Benz USA, LLC or its suppliers, on any and all subject components returned to Mercedes-Benz USA, LLC or the supplier, from field service or other consumer use. 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.

RESPONSE TO REQUEST NO. 8:

Mercedes has conducted a detailed evaluation of the allegations presented in this PE, and the VOQs, which was summarized in our presentation on April 13, 2012.

Request No. 9:

Describe all modifications or changes made by, or on behalf of, Mercedes-Benz USA, LLC in the design, material composition, manufacture, quality control, supply, or installation of any of the subject components, including original equipment (production) and service parts, from the start of production to date, which relate to, or may relate to, the alleged defect in the subject vehicles, including those that relate to Emissions Recall No. 2008-020001. 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 Mercedes-Benz USA, LLC is aware of which may be incorporated into vehicle production within the next 120 days.

RESPONSE TO REQUEST NO. 9:

All modifications for subject components are described in Attachments 7A, AMG Part Modifications, 7B, Non-AMG Part Modifications, and 7C, Tank, Feed Line and Gasket Modifications.

Request No. 10: Separately, by component name, part number (both service and engineering/production), state the (i) model and model year of the vehicles in which each of the following may be installed either as original equipment or as a service part, and (ii) sales numbers by month/year from calendar year 2002 to the present:

- a. Subject components; and
- b. Any kits that have been released, or developed, by Mercedes-Benz USA, LLC for use in service repairs to the subject components/assemblies, and including those that relate to Emissions Recall No. 2008-020001.

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

RESPONSE TO REQUEST NO. 10:

The sales information requested in Request No. 10 is provided in Attachment 8, Part Sales Data. Of the subject components referenced in Attachment 8, the fuel filter module, fuel pump and hoses are unique to AMG and to Non-AMG models. In contrast, the fuel tank and gaskets are common to both the AMG and Non-AMG models.

Part supplier information is as follows:

Part	Supplier	Contact Person	Contact Information
Fuel Tank	Kautex Textron	Hartmut Wolf Senior Engineering Manager	Kautex Textron Gmbh & Co. Kg Kautexstr. 52 D-53229 Bonn Germany Phone: 49-22-8488-5590 Fax: +49 (228) 488-999-5590 Email: Hartmut.Wolf@kautex.textron.com www.kautex.com
Fuel Filter Module and Fuel Pump Unit	Continental	Manju Venkataramana	South/345/2 2400 Executive Hills Boulevard Auburn Hills, Michigan 48326 United States Phone:+1-248-209-4516 Fax: +1-248-764-7219 Cell: +1-757-438-0081 Email: Manju.Venkataramana@continental- corporation.com
Fuel Feed Line	Veritas AG	Martin Ehret Development	Stettiner Str. 1-9 63571 Gelnhausen Germany Tel.: 0049-06051-8211510

The gasket used in subject vehicles is also used in Mercedes C203 and C209 vehicles.

- Request No. 11:** Furnish Mercedes-Benz USA, LLC'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;
 - f. Any relationship to Emissions Recall No. 2008-020001 or its repair; and,
 - g. The reports included with this inquiry.

RESPONSE TO REQUEST NO. 11:

Mercedes' assessment of the alleged defect is set forth in section I above.

We look forward to answering any additional questions you may have regarding this matter.

Sincerely,



R. Latane Montague

Partner
latane.montague@hoganlovells.com
D 1-202-637-6567

PE12-001

HOGAN LOVELL FOR
MERCEDES

4-19-2012

Attachment 2

Arbitration and Lawsuit
Information

THIRD PARTY PROCEEDINGS

Parties	Caption	Court	Docket No.	Date Filed
[REDACTED]	[REDACTED] v. Mercedes-Benz USA, LLC	State of Florida, Office of the Attorney General, Florida New Motor Vehicle Arbitration Board	2007-0184/WPB	3/19/2007
[REDACTED]	[REDACTED] v. Mercedes-Benz USA, llc	State of Florida, Office of the Attorney General, Florida New Motor Vehicle Arbitration Board	2006-0800/WPB	12/5/2006
[REDACTED]	[REDACTED] v. Mercedes-Benz USA, LLC	State of Florida, Office of the Attorney General, Florida New Motor Vehicle Arbitration Board	2004-0461/WPB	6/3/2004
[REDACTED]	[REDACTED] v. Mercedes-Benz USA, LLC	Court of Common Pleas, Philadelphia County, Arbitration Division	CCP September Term, 2008 No. 001354	12/10/2008

LAWSUITS

Parties	Caption	Court	Docket No.	Date Filed
[REDACTED]	[REDACTED] v. Mercedes-Benz USA, LLC, et al.	Superior Court of the State of California for the County of Los Angeles	BC 357373	8/22/2006
[REDACTED]	[REDACTED] v. Mercedes-Benz USA, LLC, et al.	Superior Court of California, County of El Dorado	PC 20070238	4/16/2007
[REDACTED]	[REDACTED] v. Mercedes-Benz USA, LLC	Superior Court of the State of California, County of San Joaquin	39-2009-00215 919-6/23/2009 CU-BC-STK	
[REDACTED] G.	[REDACTED] v. House of Imports, Inc; Mercedes-Benz USA, LLC et al.	Superior Court of the State of California for the County of Orange	30-2008-00106256	3/5/2008

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4-19-2012

Attachment 7A, AMG Part
Modifications

Relevant changes for the AMG fuel pump module

Part Number	Drawing Geometry Status (ZGS)	Change Description	Date of Drawing Release (dd.mm.yyyy)
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Relevant changes for the AMG fuel filter module

Part Number	Drawing Geometry Status (ZGS)	Change Description	Date of Drawing Release (dd.mm.yyyy)
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Attachment 7B

Non-AMG Part Modifications

Relevant changes for the Fuel Pump Module for 8 cylinder engine

Part Number	Drawing Geometry Status (ZGS)	Date of Drawing Release	Change Description

PE12-001

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Attachment 7C, Tank, Feed
Line and Gasket Modifications

Fuel Tank Design Revisions

Part Number	Drawing Geometry Status (ZGS)	Date of Drawing Release (dd.mm.yyyy)	Change Description
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Fuel Feed Line Design Revisions

Part Number	Drawing Geometry Status (ZGS)	Date of Drawing Release (dd:mm:yyyy)	Change Description

O-Ring Gasket Design Revisions

Part Number	Drawing Geometry Status (ZGS)	Date of Drawing Release (dd.mm.yyyy)	Change Description
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