

14V-117

(6 pages) - Supplemental

March 31, 2014

Ms. Nancy Lewis
Associate Administrator for Enforcement
National Highway Traffic Safety Administration
Recall Management Division (NVS-215)
1200 New Jersey Avenue, SE – Room W45-306
Washington, DC 20590

Re: NHTSA Notification Campaign No. 14V-117

Dear Ms. Lewis:

This letter supersedes General Motors' letter of March 17, 2014, and is submitted pursuant to the requirements of 49 CFR 573.6 as it applies to a determination by General Motors of a noncompliance recall involving 2009-2014 model year Chevrolet Express and GMC Savana vehicles as described below. Specifically, the information submitted pursuant to 49 CFR 573.6(c)(7), 573.6(c)(8) and 573.6(c)(11) below supersedes information included in General Motors' letter of March 17, 2014.

573.6(c)(1): Chevrolet and GMC Brands of General Motors Company.

573.6(c)(2)(3)(4): This information is shown on on Attachment A.

<u>573.6(c)(5):</u> General Motors has decided that 2009-2014 model year Chevrolet Express and GMC Savana vehicles with a GVWR of 10,000 pounds and below equipped with front passenger air bags fail to conform to Federal Motor Vehicle Safety Standard (FMVSS) 201, Occupant Protection in Interior Impact. On these vehicles, during a frontal impact below the air bag deployment threshold, if an unrestrained front passenger head hits the instrument panel above where the passenger airbag is located, it may decelerate at a rate exceeding the requirements of FMVSS 201, resulting in a greater risk of injury.

<u>573.6(c)(7)</u>: As permitted by the provisions of 49 C.F.R. 573.6(b), and pursuant to the requirements of 49 C.F.R. 573.6(c)(7), General Motors now submits the attached chronology of principal events that were the basis for the determination of the noncompliance with a motor vehicle safety standard. <u>See</u> Attachment B.

573.6(c)(8): Dealers will modify the passenger instrument panel.

GM sent recall dealer bulletin for 14082 on March 26, 2014, and anticipates mailing the owner letters mid April 2014.

GM will provide the mail dates for dealer bulletin 14105 and the owner letters.



Letter to Ms. Nancy Lewis N14082, N14105 573 Letter March 31, 2014 Page 2

Pursuant to 577.11(e), GM does not plan to provide notice about reimbursement to owners because this remedy was not previously known to or available from dealers or other service providers.

573.6(c)(10): GM will provide the dealer bulletins and owner letters under separate cover.

<u>573.6(c)(11)</u>: GM's assigned recall number is 14082 for heavy duty (GVWR of 8,600 to 10,000 pounds) 2009-2014 model year Chevrolet Express and GMC Savana vehicles and 14105 for light duty (GVWR of less than 8,600 pounds) 2009-2014 model year Chevrolet Express and GMC Savana vehicles. GM decided to assign a separate recall number because the repair for the heavy duty truck has already been released. The bulletin for the light duty trucks will be released at a later time. The scope of the overall vehicles and populations has not changed.

Sincerely,

M. Carmen Benavides, Director

M. Can Ble

**Product Investigations and Safety Regulations** 

14082 and 14105

## VEHICLES POTENTIALLY AFFECTED BY MAKE, MODEL, AND MODEL YEAR PLUS INCLUSIVE DATES OF MANUFACTURE

INCLUSIVE							
	MODEL	MODEL	NUMBER	MANUFACTURING DATES		DESCRIPTIVE INFO. TO	EST. NO.
<u>MAKE</u>	<u>SERIES</u>	<u>YEAR</u>	<u>INVOLVED</u>	(FROM)	<u>(TO)</u>	PROPERLY IDENT, VEH.	W/CONDITION
	_						
Chevrolet	G	2009	17,326	01/27/2009	06/10/2009	Express	*
Chevrolet	G	2010	43,430	05/05/2009	09/01/2010	Express	is.
Chevrolet	G	2011	46,628	06/15/2010	08/17/2011	Express	
Chevrolet	G	2012	57.031	05/31/2011	07/13/2012	Express	ti
Chevrolet	G	2013	51,378	05/14/2012	06/18/2013	Express	"
Chevrolet	G	2014	32,953	04/18/2013	03/07/2014	Express	и
GMC	G	2009	2,163	01/27/2009	06/10/2009	Savana	u
GMC	G	2010	8,375	05/05/2009	09/01/2010	Savana	u u
GMC	G	2011	9,119	06/15/2010	08/17/2011	Savana	11
GMC	G	2012	11,178	06/28/2011	07/13/2012	Savana	u
GMC	G	2013	10.864	06/06/2012	06/18/2013	Savana	"
GMC	G	2014	12,568	04/15/2013	03/06/2014	Savana	11
	GM Total:		303,013				

<sup>\*</sup> All involved vehicles will be corrected as necessary.

573.6(c)(2)(iv): Not applicable – this is a vehicle integration issue.

14082 and 14105

## Attachment B - 573.6(c)(7)

On or around January 30, 2014, GM supplier Inteva Products notified a GM engineer with responsibility for the instrument panel trim of the Chevrolet Express and GMC Savana vehicles that the resin used to mold the instrument panel on those vehicles, IP 1000 resin, would become unavailable in the coming months. Inteva requested approval to use XCY620S resin as a substitute material for the trim panel on these vehicles.

On February 21, 2014, GM received material stress strain curves for IP1000 and XCY620S resin from Inteva Products. Analysis of those curves would allow GM to evaluate the effect of the resin change on compliance with FMVSS 201 for Chevrolet Express and GMC Savana vehicles with GVWR of 10,000 pounds and below with front passenger air bags ("GMT 610").

On February 24, 2014, GM personnel reviewed the material stress strain curves and the last physical tests of the GMT 610 instrument panel trim area for FMVSS 201 compliance. The last physical tests had been conducted in November 2001 (for the 2003 model year GMT 610), although GM engineers continued to evaluate FMVSS 201 compliance on an annual basis. The decision was made to perform computer-aided engineering ("CAE") analysis to further evaluate any possible effect of the resin change on FMVSS 201 compliance.

Later that day, CAE analysis was performed. The results showed that the performance of the existing and proposed replacement resin was similar, but that neither material's stress strain curve was closely correlated with the results of physical testing of the passenger-side instrument panel conducted in 2001. The CAE results also showed potential FMVSS 201 non-compliance for both the existing and proposed resins.

GM engineers subsequently identified as the potential cause for the anomalous CAE results a change made during production in early 2009 to the passenger-side air bag housing, which replaced the original steel housing with molded plastic. The new plastic housing was stiffer than the steel housing and reduced the air gap between the air bag and the instrument panel. This change was analyzed in 2008 for compliance with FMVSS 208, but appeared not to have been analyzed for any potential impact on FMVSS 201 compliance.

On February 25, 2014, the issues regarding potential FMVSS 201 non-compliance and testing regarding the passenger-side instrument panel were discussed at the weekly Vehicle and Process Integration Review meeting, which included members of the validation, GMT 610 program, and subsystem teams.

On February 27, 2014, the Product Investigations team was informed of the potential non-compliance issue with the passenger-side instrument panel, and an Internal Investigation Engineer was assigned the following day.

Beginning on or around February 27, 2014, preparations were made for physical FMVSS 201 testing of the instrument panel.

On March 5, 2014, a meeting was held to brief the leadership team (including the Vice President of Global Vehicle Engineering and the Executive Director of Interior Engineering) on the status of the potential FMVSS 201 non-compliance issue. The decision was made that if physical tests indicated potential non-compliance, the matter would be immediately referred to the Field Performance Evaluation ("FPE") process.

On March 6, 2014, FMVSS 201 physical testing was conducted on the passenger-side instrument panel of the 2014 model year GMT 610 heavy-duty vehicle. The results indicated potential FMVSS 201 non-compliance.

On March 7, 2014, the director of Global Field Performance Evaluation was notified of the potential non-compliance issue with regard to the GMT 610 heavy-duty vehicle during a conference call that began at approximately 12:30 p.m. eastern time.

At approximately 1:15 p.m. Eastern time that afternoon, the GM Wentzville Assembly Center in Wentzville, Missouri (where all GMT 610 vehicles are produced) received instructions to stop shipment on GMT 610 heavy-duty vehicles. The plant then stopped shipment of all model year 2013 and 2014 GMT 610 light-duty and heavy-duty vehicles. The Wentzville plant suspended production of both light-duty and heavy-duty GMT 610 vehicles as of approximately 3:30 p.m. that day. The plant did not resume production until March 13, 2014 (for the light-duty GMT 610) and March 18, 2014 (for the heavy-duty GMT 610) after the production remedy for each vehicle had been validated.

On March 7, 2014, FMVSS 201 physical testing was conducted on the passenger-side instrument panel on the 2014 model year GMT 610 light-duty vehicle. The results indicated potential FMVSS 201 non-compliance.

On March 10, 2014, the potential FMVSS 201 non-compliance issue was presented to the Field Performance Evaluation Review Committee ("FPERC"), which recommended a non-compliance recall for 2008-2014 model year GMT 610 vehicles.

On March 11, 2014, the potential FMVSS 201 non-compliance issue was presented to the Executive Field Action Decision Committee ("EFADC") at its regularly-scheduled morning meeting. The determination was made at this meeting that 2008-2014 model year heavy-duty GMT 610 vehicles were not in compliance with FMVSS 201. The root cause was described as follows: "In 2008 model year, the passenger air bag container was changed from steel to plastic without analysis or testing to determine the effect on FMVSS 201 compliance." The EFADC agreed to allow additional review and analysis of the light-duty GMT 610, and to meet the next morning to discuss it.

Later that morning, the FMVSS 201 non-compliance issue for the GMT 610 was discussed at the regularly-scheduled Investigation Status Review meeting.

During the late afternoon/early evening of March 11, 2014, further physical tests were conducted on the passenger-side instrument panel of the GMT 610 light-duty vehicle. Those additional tests showed potential non-compliance with FMVSS 201.

On March 12, 2014, the EFADC held a telephone meeting to review the further testing conducted on the light-duty GMT 610, and the determination was made that light-duty GMT 610 vehicles were also not compliant with FMVSS 201. The Wentzville plant reported that it began installing the new airbag module on GMT 610 heavy-duty vehicles on January 27, 2009 (using new part number 25920672), and that it began installing the new airbag module on GMT 610 light-duty vehicles on February 5, 2009 (using new part number 25920671). These production dates confirmed that the new airbag module was not installed in any 2008 model year vehicles. The recall period thus was determined to begin in model year 2009, and not model year 2008.

On March 13, 2014, the FMVSS non-compliance issue was presented to the Field Performance Evaluation Team. On the same day, the Wentzville plant resumed production of light-duty GMT 610 vehicles using a remedy that had been validated for FMVSS 201 compliance based on physical tests conducted on March 10 and March 12. This fix consisted of lowering the placement of the passenger airbag by 6mm.

On March 14, 2014, GM informed NHTSA of the potential FMVSS 201 non-compliance issue.

On March 17, 2014, GM sent NHTSA a non-compliance notification letter in accordance with the requirements of 49 C.F.R. § 573.6.

On March 18, 2014, the Wentzville plant resumed the production of GMT 610 heavy-duty vehicles, using a remedy that had been validated for FMVSS 201 compliance based on physical tests conducted on March 17. The heavy-duty production remedy consisted of lowering the airbag placement by 6mm and adding an energy absorbing "brow" to the passenger-side instrument panel. Attachment of these brows to GMT 610 heavy-duty vehicles at the plant began on March 20, 2014.

14082 and 14105