2021MY Sorento & 2021-2022MY K5 Fuel Leak Chronology Basis of Safety Defect Determination 573.6(c)(6)

March 31, 2021	Kia Georgia (Kia GA) informs Kia North America (Kia NA) that the fuel pipe connecting the high pressure fuel pump may have been insufficiently torqued in 2.5L Turbocharged engines produced at the Hyundai Motors Manufacturing Alabama (HMMA) engine plant from March 25, 2021 through March 30, 2021. Kia GA confirms that the Kia vehicles equipped with these engines produced at HMMA during this period and installed in vehicles manufactured at Kia GA had been contained at the Kia GA plant.
May 6, 2021	NHTSA's Office of Defects Investigation (ODI) asks Kia NA if any Kia vehicles are affected with the same issue as identified in Hyundai's 21V308 recall. Kia NA confirms no Kia vehicles are affected by the same recall condition.
May 13, 2021	Kia America, Inc. (KUS) receives Technical Assistance Center Case Report of fuel smell in a 2021MY Sorento (Vehicle #1). Dealer technician identifies fuel leaking at fuel pipe and fuel pump connection and re-tightens the fitting. Issue resolved.
June 8-11, 2021	KUS receives another Technical Assistance Center Case Report of fuel smell in a 2021MY Sorento (Vehicle #2). Dealer technician identifies fuel leaking at fuel pipe and fuel pump connection. Kia GA, HMMA and Kia NA conduct joint inspection of Vehicle #2 and identify fuel pipe at high pressure fuel pump connection is out of torque specification. HMMA collects parts for further evaluation.
June 16, 2021	KUS receives additional Technical Assistance Center Case Report of fuel smell in a 2021MY Sorento (Vehicle #3). Dealer technician identifies fuel leaking at the fuel pipe and fuel pump connection. During Kia NA's detailed review of field data for any additional fuel leaks involving the fuel pipe in the 2021 Sorento, a Technical Assistance Center Case Report is identified for check engine light ON concern. Dealer technician notices fuel smell upon inspection and identifies fuel leak from high side of fuel rail. (Vehicle #4).
June 18, 2021	HMMA, Kia GA and Kia NA conduct joint inspection of Vehicle #3 and find fuel pipe and fuel pump connection out of torque specification. Parts are sent to HMMA for further evaluation. Kia NA continues to monitor and work with Kia GA and HMMA to further evaluate issue.

June 28-July 1, 2021	HMMA receives shipped parts from Vehicle #3 and installs returned fuel pipe on new engine and identifies fuel continues to leak even when properly torqued. HMMA further identifies pipe does not meet concentricity specifications. HMMA, Kia Corporation (Kia HQ) and fuel pipe supplier work jointly to identify problematic fuel pipe lot. Supplier traces concentricity issue to some parts produced on 1/11/2021 and confirms issue caused by instability of pipe diameter forming machine pin. HMMA also confirms the possibility that the fuel pipe which connects to the high pressure fuel pump installed in 2.5L Turbocharged engines produced before March 30, 2021 may have been installed with insufficient torque during assembly. HMMA, fuel pipe supplier and Kia GA check part, engine and vehicle production records to confirm proper scope of vehicles affected are identified.
July 1, 2021	Kia NA decides to conduct a recall to ensure all vehicles that may be potentially affected by the insufficient torque and/or concentricity conditions. Four (4) reports of fuel smell/leak involving the 2021MY Sorento equipped with 2.5L Turbocharged engines. No reports of fuel smell/leak for the 2021-2022MY K5 equipped with 2.5L Turbocharged engines. No fatalities, injuries, crashes or fires.