15S34 Chronology

<u>July 2015</u>: Ford's Early Concern Investigation group identified customer reports pertaining to fuel odor or leaks on 2010 model year Fusion vehicles. Engineering was requested to review field data, and the issue was opened in Ford's Critical Concern Review Group.

<u>August-September 2015</u>: To better understand the nature of the reports, Ford's engineering group worked with Ford's Customer Service Division (FCSD) and Ford dealerships to identify vehicles with similar complaints that were brought in for repair. This effort involved the retrieval of components from complaint vehicles for engineering inspection and analysis, including fuel tanks and other fuel system components (e.g., canister purge valves). Inspection of one of the initial fuel tanks obtained from the field noted a small crack on the upper surface. An engineering investigation workplan was created and Ford's Central Laboratory was requested to provide an analysis of the tank and the nature of the crack.

<u>October 2015</u>: Ford's Central Laboratory analysis indicated that the manufacture and material of the tank were within specifications. Central Labs analysis indicated that the crack in the fuel tank was a result of cyclic loading fatigue. Ford engineering continued to collect more suspect tanks from Ford dealerships for review. Review of complaint tanks found cracks that were consistent in nature and location with the tank analyzed by Ford's Central Laboratory.

Ford initiated a vehicle survey of 49 Ford employee vehicles. One vehicle exhibited a small crack in the same area as the field returned parts. In addition, analyses of canister purge valve warranty and field returned CPV parts were initiated. Review of canister purge valve warranty data found valve replacement for certain vehicle production periods was higher than expected. Inspection of canister purge valves obtained from the field found that they were malfunctioning due to seal deterioration that could affect valve performance. Engineering assessment found abnormal cyclic vacuum loading of the fuel tank could be caused by a malfunctioning canister purge valve. Over time this could fatigue the upper surface of the fuel tank.

NHTSA contacted Ford to discuss VOQs that they had received pertaining to 2010 model year Fusion fuel tank leaks. Ford reviewed with the Agency the engineering analysis and testing that had been conducted to that point, as well as the additional investigative work that was underway. During those discussions, the Agency recommended that Ford consider a recall for 2010 model year vehicles, based on the VOQ information.

On November 12, 2015, Ford's Field Review Committee reviewed the concern and approved a field action.