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November 11, 2014

Mr. Gregory G. Nadeau
Acting Administrator
Federal Highway Administration
1200 New Jersey Ave., SE
Washington, D.C. 20590

Dear Administrator Nadeau:

The Texas A&M Transportation Institute (TTI) has recently been made aware of a letter written to you on October 22, 2014, by Dr. Dean Sicking, a former TTI employee, which contains a number of malicious and false allegations. While the tone and self-serving nature of his letter undermine its credibility, the seriousness of the allegations requires that we respond.

Our Institute's primary research mission is to save lives. We take that mission seriously. TTI's reputation for honesty, integrity and objectivity is earned anew with each test we conduct. The roadside safety products developed at TTI over the past 50 years are a testament to our commitment and have been a significant factor in helping make the nation's highways safer for us all.

Dr. Sicking offers no factual evidence to back his accusations of misconduct, fraud and deceit on the part of TTI researchers. When considering his allegations, it is important to consider his apparent motive: he stands to profit personally from any increase in sales of his competing product as a result of his attacks on the ET-Plus. Further, he has a personal agenda against TTI and Trinity.

It is worth noting that Dr. Sicking did not begin these attacks on the ET-Plus System or on the integrity of TTI during the years he profited from the sale of that system through money distributed to him by Texas A&M. Dr. Sicking also was a defendant in a patent infringement case jointly filed by The Texas A&M University System and Trinity Industries in the late 1990s, wherein Dr. Sicking was specifically alleged to have infringed the intellectual property that he helped develop while at TTI. Dr. Sicking is also an owner of a company that competes with Trinity. It is our understanding that Dr. Sicking's conflicts and motives were not fully disclosed to the FHWA, AASHTO, NCHRP, state DOTs, and others.

Dr. Sicking touts his involvement with the National Cooperative Highway Research Program (NCHRP) Report 350. The project that resulted in NCHRP Report 350 was led by TTI. Dr. Hayes Ross, who is now retired from TTI, was the principal investigator and lead author of this report. TTI researchers fully understand the intent of this document and the prescribed product development and testing process.

In his letter, Dr. Sicking makes several unsubstantiated and untrue allegations about TTI, its researchers and the ET-Plus System. The ET-Plus System was designed and tested as a tangent system. The successful impact performance of the ET-Plus System with 4-inch guide channels attached to the extruder head is thoroughly documented in the 2005 test report and supporting materials on file with the FHWA. TTI has confirmed to the FHWA that the reduction in the width of the guide channels from 5 inches to 4 inches was inadvertently omitted from the written documentation initially submitted to FHWA. Even so, the change was evident in the photographs and video that were submitted as part of the initial documentation following the 2005 test, as has been confirmed by the FHWA. Both Trinity and TTI

confirmed that the ET-Plus System with the 4-inch guide channels attached was successfully crash tested to NCHRP Report 350 criteria in May 2005. The FHWA confirmed that the device met NCHRP Report 350. The documentation error was simply human error and was thoroughly explained to FHWA in 2012. The FHWA acknowledged that the testing successfully met all NCHRP Report 350 evaluation criteria. Dr. Sicking's unfounded allegations do not change those facts.

Finally, Dr. Sicking grossly misrepresented TTI's testing of an experimental flared extruder terminal system and incorrectly portrays it as a failure of the tangent ET-Plus System. As FHWA is aware, some states expressed interest in using flared energy absorbing terminals, which are installed at an angle to the roadway rather than parallel to it. This flared configuration is significantly different from and uses distinct components from those used in the commercialized tangent ET-Plus System. TTI expressly contacted FHWA about the development of an experimental flared extruder terminal system and conferred with FHWA staff about the required test matrix. TTI tested and evaluated several new system design alternatives for a flared installation application, but none of those concepts met NCHRP Report 350. The research and development project was discontinued, and the experimental system was never deployed in the field. Each experimental flared configuration evaluated was distinctly and materially different from the existing tangent ET-Plus System, as will be further explained in a separate response to the FHWA concerning the experimental flared configuration tests. In addition, each of the flared configuration tests was different from each other.

The TTI researchers involved with the experimental flared terminal testing include Dr. Hayes Ross, Dr. Gene Buth, Dr. Dean Alberson, Mr. Lance Bullard, and Dr. Roger Bligh. All of these highly regarded researchers viewed the testing of the experimental flared terminal as a separate, experimental research and development effort that was not related to the performance of the existing, tangent ET-Plus System. Contrary to Dr. Sicking's claims, TTI has never requested FHWA eligibility for an energy absorbing flared system and has never recommended use or installation of such a system.

It was the mutual understanding of the TTI researchers from decades of experience in crash testing, product development, and interaction with FHWA, that FHWA desires to review testing for fully developed products intended to be implemented on the national highway system. TTI strongly rejects Dr. Sicking's accusation that these five researchers intended to deceive the FHWA. In fact, TTI is aware that Dr. Sicking has testified that he considers his own experimental research and development projects to be confidential and proprietary and not subject to public dissemination.

Further, Dr. Sicking seems to be erroneously implying that the ET-Plus System must be required to perform in both tangent and flared terminal layouts with the same system configuration. This is simply incorrect. The FHWA does not require that a tangent system also function as a flared system. These are two different and distinct categories and applications. Additionally, Dr. Sicking is attempting to create a new test to be applied *only* to the ET-Plus System that does not exist under NCHRP Report 350 and has never been applied to any other tangent end terminal product on the national highway system, including Dr. Sicking's SKT end terminal.

The ET-Plus System has met the same requirements as other similar terminal systems currently in the marketplace and on our roads. The FHWA has continuously accepted the ET-Plus System for use. Given recent developments, we understand that FHWA desires additional testing of the ET-Plus System. TTI is willing to assist in this endeavor to confirm that the ET-Plus System continues to meet NCHRP Report 350. But it is unfair and inequitable to subject the ET-Plus System to testing not applied to other end terminal products and not contained within NCHRP Report 350. We encourage the FHWA to (1) request all research and development tests and information for other end terminal systems on the roadways, and (2) subject all other end terminals to the same standard of testing as that being performed on the ET-Plus

System. All end terminals on the market and installed on our roadways should be evaluated under and meet the same objective, scientific criteria.

In summary:

- There are numerous inaccuracies in Dr. Sicking's letter, and his apparent lack of objectivity must be considered;
- There has been no fraud, deception or misrepresentation on the part of TTI or its researchers;
- The ET-Plus System was designed, tested and has been commercialized exclusively as a tangent system, and allegations that the ET-Plus System was ever proposed to be, or sold as, a flared system are untrue; and
- TTI has produced to the FHWA extensive documentation regarding the testing of the ET-Plus System, and stands ready to cooperate with the FHWA.

TTI values its long-standing professional relationship with FHWA. We look forward to working with you in the future and remain available at all times to further discuss this matter with you.

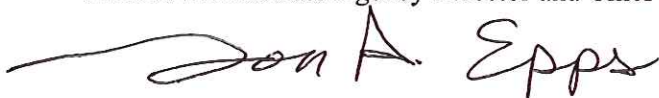
Very truly yours,



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