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AGRICULTURE AND NATURAL RESOURCES COMMITTEE

Witness Form

Today's Date: <u>09/23/2019</u>

Name: Dr. Narasi Sridhar _____ Address: 5777 Frantz Road, Dublin, OH 43017 Telephone: (614) 761-6920 Organization Representing: <u>NACE International</u> Testifying on Bill Number: H.B. No. 189 Testimony: Verbal Written X Both Testifying As: <u>X</u> Proponent ____Opponent Interested Party Are you a Registered Lobbyist? _____Yes <u>X</u> No Special Requests: <u>Requesting slight modification to the Bill's language.</u>

Written testimony is a public record and may be posted on the Ohio Senate's website

September 23, 2019 Statement of Dr. Narasi Sridhar, FNACE Regarding House Bill – Sub. H.B. No. 189

My name is Narasi Sridhar. I reside at 4171 Hertford Lane, Dublin, Ohio 43017. I am a Vice President at DNVGL, located at 5777 Frantz Road, Dublin, Ohio 43017, and a Research Professor in the Materials Science & Engineering Department at The Ohio State University. I hold a Ph.D. in Metallurgical Engineering and have been practicing as a metallurgical engineer for 40 years. My technical expertise involves materials performance, corrosion prevention, and risk management. I thank the Agricultural and Natural Resources Committee and the sub-committee on H.B. No. 189 for giving me an opportunity to speak regarding this important bill.

I have been actively involved in NACE International throughout my career, participating in research and standards development in myriad industries where corrosion is an issue. I have been involved in the safety and risk management of nuclear, oil and gas, and chemical process industries, and the Department of Defense. Preventing the loss of life and property and maintaining the health and safety of our citizens is a multi-pronged activity that does not stop with inspection alone. Certainly, lack of periodic inspections has resulted in catastrophic failures. Qualified inspectors and enforced inspections are essential to ensure the safety of equipment. However, inspection may not unearth hidden or nascent failures. Small cracks and corrosion in hidden surfaces have escaped inspections and caused catastrophic accidents or near-catastrophic incidents. The corrosion of reactor pressure vessel in the Davis Besse Nuclear power plant here in Ohio, the stress corrosion cracking of natural gas and oil pipelines in several parts of the country, and the catastrophic failure of U.S. Air Force cargo aircraft are a few of the many examples of hidden or nascent corrosion of equipment that have caused serious safety concerns. To avoid critical failures, inspection must be buttressed by a holistic assessment of the system that considers the lifetime history of the equipment and design features that may lead to corrosion or cracking.

In this regard, I firmly believe that the procedures and practices developed by members and codified in the standards and guidance documents of NACE International must be referenced in H.B. No. 189. These standards and guidance documents incorporate the experience gained across many industries and ensure that the best insights of experts are considered in maintaining the safety of the rides. I strongly encourage the sub-committee to consider inclusion by reference of NACE International in the proposed Bill.

Respectfully,

N. Snidhas

Narasi Sridhar, Ph.D.