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Senator Rebecca L. Rausch Chair, Joint Committee on Environment and Natural Resources 24 Beacon St., Room 218 Boston, MA 02133

Representative Daniel Cahill Chair, Joint Committee on Environment and Natural Resources 24 Beacon St., Room 527A Boston, MA 02133

Subject: Support for S.495, An Act relative to crumbling concrete foundations

Dear Chair Rausch, Chair Cahill, and Members of the Committee:

The LSP Association (LSPA) is the non-profit association for Licensed Site Professionals (LSPs) and related practitioners. LSPs are the scientists, geologists, engineers, and public health specialists licensed by the Commonwealth to work on behalf of property owners, operators, and other involved parties to oversee the assessment and cleanup of oil and hazardous materials released to the environment. Through education and information, we work to help our nearly 800 members achieve and maintain high standards of practice in overseeing the assessment and remediation of hazardous waste disposal sites. Our members work with their institutional, non-profit, government, and private clients to remediate contaminated sites, often in economically distressed areas, so these properties can be placed back into active and productive use.

While the deterioration of concrete is not a hazardous waste issue, many LSPs are professional geologists and understand the issues related to the presence of the mineral pyrrhotite in quarried rock. Pyrrhotite becomes an issue in concrete manufacturing if pyrrhotite-bearing stone is crushed up and used as filler for the concrete. Over time it can cause serious structural problems. Early in the bill drafting process, Senator Gobi outreached to the LSPA for suggestions and the expertise of our members who are professional geologists.

This bill, S.495 *An Act relative to crumbling concrete foundations*, focuses on prevention and relief. For prevention, it proposes an approach whereby qualified professionals (licensed home inspectors, AIPG certified geologists, accredited labs) are tasked with helping to keep deleterious sulfide minerals (e.g. pyrrhotite and pyrite) out of concrete aggregates. For relief, it provides a process for residential property owners with concrete foundations to follow when flawed concrete has failed. For most households, their home is their most valuable asset; its loss of value and use comes with significant emotional and financial costs.



In 2020, the US Geological Survey (USGS) released its first-ever map of where the mineral pyrrhotite may occur in the contiguous United States. This research was mandated by Congress in the FY2019 appropriations bill for the USGS. As noted in a USGS publication, the value of identifying where pyrrhotite may occur can help identify where there may be a risk of pyrrhotite being included in crushed stone production. The new national map shows that pyrrhotite may be distributed widely in metamorphic rock along the Appalachian Mountains and in smaller pockets in the western United States.

This situation is not specific to Massachusetts; the state of Connecticut began investigating the situation about ten years ago. An article on the Federal Emergency Management Agency's (FEMA) website notes that "Collectively, the potential economic impact to the [sic] Connecticut's housing market could approach up to \$1 billion. This issue is also devastating to individual homeowners, whose home values decrease significantly if pyrrhotite is present. Potentially, tens of thousands of Connecticut residents may be affected...."

This bill is a practical and logical approach for preventing future problems and providing relief for Massachusetts homeowners who find themselves with crumbling concrete foundations through no fault of their own. Solid implementing regulations will be key factors in the success of the "Crumbling Concrete Assistance Fund" administered by the Commonwealth.

The LSPA urges the committee to support S.495.

Sincerely,

THE LSP ASSOCIATION, INC.

Charles P. Young, LSP, President

Wendy Rundle, Executive Director

Wendy Pll.