
OLR Bill Analysis

sHB 6646 (as amended by House "A")*

AN ACT CONCERNING CRUMBLING CONCRETE FOUNDATIONS.

SUMMARY

This bill makes various changes in state law concerning “crumbling foundations.” (Generally, this means concrete foundations that are failing or deteriorating due to the presence of pyrrhotite.)

It makes the Connecticut Foundation Solutions Indemnity Company (CFSIC) permanent by eliminating the current June 30, 2022, termination date and adds two gubernatorial appointees to its board of directors (§§ 2 & 3). The bill also requires CFSIC to study the extent of pyrrhotite-related foundation damage in nonresidential buildings and remits up to \$175,000 from the Healthy Homes Fund for the study’s expenses (§§ 4 & 5). CFSIC is the captive insurance company created by law to distribute money to homeowners with concrete foundations that are deteriorating due to the presence of pyrrhotite.

The bill requires concrete aggregate quarry operators to test and report on their aggregate’s total sulfur content (“total S”). It imposes restrictions on the use of aggregate that has a relatively high total S and, in certain circumstances, requires additional testing to identify the presence of pyrrhotite. The bill authorizes the Department of Energy and Environmental Protection (DEEP) commissioner to adopt regulations on aggregate testing and impose restrictions on aggregate that contains pyrrhotite (§ 9).

The bill also:

1. eliminates the five-year cap on reduced assessments for properties made with defective concrete (§ 1) and
2. requires Connecticut concrete aggregate quarries to (1) submit an operations plan to the state geologist and DEEP

commissioner annually and (2) prepare a geological source report (GSR) every four years and submit it to the same entities (§ 8).

Additionally, the bill permanently exempts certain executive branch agency records related to faulty or failing concrete foundations in residential buildings from disclosure under the Freedom of Information Act (FOIA) and applies the exemption to the same types of records held by public higher education institutions (§ 6). The bill requires executive branch agencies to keep information about claims of faulty or failing foundations confidential in perpetuity (§ 7).

*House Amendment "A": (1) eliminates provisions allowing the Connecticut Housing Finance Authority to make loans to CFSIC and issue up to \$100 million in revenue bonds; (2) adds gubernatorial appointees to CFSIC's board of directors (§ 2); (3) clarifies the reassessment provision requires properties with adjusted assessments to be revalued during normal cycles (§ 1); (4) adds the FOIA and confidentiality provisions (§§ 6 & 7); (5) modifies the GSR provision and makes the submission of an operations plan an annual requirement (§ 8); (6) eliminates the provision in the underlying bill requiring the Department of Consumer Protection commissioner to adopt regulations establishing standards for aggregate testing and replaces them with requirements for annual aggregate testing and authorization for DEEP to adopt regulations (§ 9); and (7) makes minor changes.

EFFECTIVE DATE: July 1, 2021, except the provision on assessments (§ 1) is effective upon passage.

§ 1 — REDUCED ASSESSMENT FOR PROPERTIES WITH DEFECTIVE FOUNDATIONS

By law, municipal assessors or their staff must inspect and reassess residential properties with foundations made from defective concrete at the property owner's request. Under current law, the adjusted assessment must reflect the property's current value and is valid for five assessment years unless the foundation is repaired or replaced

sooner. The bill eliminates the five-year maximum, thus allowing property owners to benefit from a reduced assessment until their foundation is repaired or replaced. The property's assessment must be updated with each revaluation and reflect any diminished value.

§ 2 — CFSIC BOARD OF DIRECTORS

The bill requires the governor to appoint two members to CFSIC's volunteer board of directors, one of whom must be a nonvoting, ex-officio member. By law, CFSIC's board of directors includes four legislatively appointed non-voting ex-officio members, as well as several members with experience related to various aspects of crumbling concrete foundations, including a real estate broker or agent; a municipal chief executive; insurance and banking industry representatives; and the executive directors of the Capitol Region and Northeastern Councils of Governments.

§§ 4 & 5 — STUDY OF NONRESIDENTIAL CRUMBLING CONCRETE DAMAGE

By January 1, 2023, the bill requires CFSIC to submit a report to the Insurance and Real Estate and Planning and Development committees analyzing the extent of pyrrhotite-related concrete foundation damage in nonresidential buildings.

The bill also requires the Department of Housing to remit up to \$175,000 from surcharge remittances transferred to the Healthy Homes Fund during the 2021 calendar year to CFSIC for research, development, and administrative expenses related to the report described above. (The Healthy Homes Fund includes revenue from an annual \$12 surcharge that existing law imposes on the named insured under certain homeowners insurance policies.)

However, the bill specifies that this amount must not be used in calculating the total funds allocated or made available to CFSIC for administrative or operational expenses. (By law, CFSIC may not spend more than 10% of its annual allocations on administrative or operational costs (CGS § 38a-91vv(c)).)

§ 6 — DISCLOSURE UNDER FOIA

Current law exempts from disclosure (1) documents executive branch agencies have on claims of faulty or failing concrete foundations in residential buildings by the buildings' owners and (2) associated agency-prepared documents. Currently, the disclosure protection lasts until the later of May 25, 2023, or seven years after the agency receives the documents. The bill makes the disclosure exemption permanent.

The bill also makes minor changes that specify which records are covered. Under the bill, the executive branch agency protection applies to (1) any records the agencies maintain or keep on file related to claims of or testing for faulty or failing residential concrete foundations, rather than only those related to owners' claims, and (2) both documents and materials the agencies prepare related to the records.

Lastly, the bill extends disclosure protection to records public higher education institutions maintain or keep on file, or documents or materials the institutions prepare, concerning claims of and testing for faulty or failing concrete foundations.

§ 7 — CONFIDENTIALITY OF INFORMATION

Current law generally requires executive branch agencies to keep documentation they receive or obtain related to owners' claims of faulty or failing residential concrete foundations and related agency-prepared materials confidential for at least seven years from the date of receipt. The bill eliminates the seven-year cap, thus requiring this information to be kept confidential permanently.

§ 8 — GSR AND OPERATIONS PLAN REQUIREMENT

GSR

By January 1, 2022, the bill requires the operator of each Connecticut quarry established on or before July 1, 2021, that produces concrete aggregate to prepare a geological source report (GSR) and submit it to the state geologist and DEEP commissioner. Similarly, before using or selling concrete aggregate, the operator of a new quarry must prepare and submit a GSR.

Under the bill, each concrete aggregate quarry must update and submit its GSR quadrennially.

GSR Requirements

The GSR must be prepared as the commissioner requires and must include:

1. a description of the operator's mining, processing, storage, and quality control methods;
2. a description of the products the quarry will produce;
3. a description of the characteristics of the aggregate to be excavated, prepared by a qualified geologist;
4. the results of an inspection of face material and geologic log analysis, completed by a qualified geologist; and
5. core sample analyses completed by a qualified geologist unless the quarry is active and the commissioner determines the quarry's performance history is satisfactory.

A "qualified geologist" is a geologist certified by the American Institute of Professional Geologists, licensed by the National Association of State Boards of Geology, or certified or licensed by another organization deemed suitable by the state geologist.

Operations Plan

By January 1, 2022, and annually thereafter, the bill requires concrete aggregate quarry operators to provide the quarry's operations plan to the state geologist and DEEP commissioner.

§ 9 — ANNUAL AGGREGATE TESTING

Beginning July 1, 2022, and at least annually thereafter, the operator of each quarry that sells or provides aggregate intended for use in concrete, must provide a written report to the DEEP commissioner and the state geologist, containing the results of a third-party test of the aggregate's sulfur content (total S) and further testing for pyrrhotite, if applicable. The bill exempts quarry operators from the annual

requirement if tests show their aggregate has a low total S. (If aggregate has a high total S concentration, it is not suitable for structural concrete. Measuring aggregate's total S enables one to develop a conservative estimate of the maximum pyrrhotite concentration. (Many minerals other than pyrrhotite contain sulfur.))

Under the bill, the test must be conducted by a third-party certified or accredited to conduct testing in accordance with American Society for Testing Materials standard C33/C33M, Standard Specification for Concrete Aggregates. The certification or accreditation must be provided by the International Organization for Standardization, United States Army Corps of Engineers, American Association of State Highway and Transportation Officials, International Accreditation Service, or a similar organization.

The bill authorizes the DEEP commissioner to adopt regulations to implement the bill's aggregate testing provisions. If adopted, the regulations must include definitions for the following terms: "rapid total sulfur test," "x-ray fluorescence analysis," "purge and trap gas chromatography analysis," "analysis by combustion furnace," "x-ray diffraction," "magnetic susceptibility analysis," "petrographic analysis," and "mortar bar expansion test."

Total S Test

Each test must include the performance of a rapid total S test on a 10-pound aggregate sample using one of the following methods:

1. x-ray fluorescence analysis,
2. purge and trap gas chromatography analysis,
3. analysis by combustion furnace, or
4. other technology deemed at least as accurate by the state geologist.

The bill specifies that representative samples must be (1) collected and managed in accordance with American Society for Testing and

Materials standard D75/D75M, Standard Practice for Sampling Aggregates, and (2) reduced to a size appropriate for laboratory testing and pulverized for analysis.

Results. If testing shows the sample's total S by mass is more than 1%, the operator cannot sell or otherwise provide the aggregate for use in concrete.

If testing shows the sample's total S by mass is less than 0.1%, a quarry operator (1) may sell or provide such aggregate for use in concrete four years, beginning on the date of receipt of such test results; and (2) does not need to submit test results to the DEEP commissioner and state geologist during that period.

If testing shows the sample's total S falls in between these thresholds, then further testing is required.

Further Testing for Pyrrhotite

Required Testing. If the total S of the sample is 0.1% or more, but less than 1% (by mass), then the sample must be further tested for the presence and relative abundance (concentration) of pyrrhotite using one of the following methods: (1) x-ray diffraction, (2) magnetic susceptibility, or (3) another type of petrographic analysis.

If the sample contains pyrrhotite, a petrographic analysis must be conducted to determine whether the aggregate can be used. The analysis must be based on (1) American Society for Testing and Materials standards C295, Standard Guide for Petrographic Examination of Aggregates for Concrete, and (2) C294, Standard Descriptive Nomenclature for Constituents of Concrete Aggregates.

Additional Testing and Restrictions. If testing shows that pyrrhotite is present and the total S by mass is 0.1% or more but less than 1%, then DEEP's commissioner, in consultation with the state geologist, may do the following:

1. require the quarry operator to conduct additional testing, including a mortar bar expansion test pursuant to American

Society for Testing and Materials standard C1293, Standard Test Method for Determination of Length Change of Concrete Due to Alkali-Silica Reaction, or C227, Standard Test Method for Potential Alkali Reactivity of Cement-Aggregate Combinations; and

2. impose restrictions on selling or using the aggregate for concrete.

BACKGROUND

Related Bill

HB 6236 (File 337), favorably reported by the Higher Education and Employment Advancement Committee, contains substantially similar FOIA provisions, but it does not eliminate the seven-year retention provision.

COMMITTEE ACTION

Planning and Development Committee

Joint Favorable Substitute

Yea 26 Nay 0 (03/31/2021)