FINDING OF EMERGENCY

FOR

PROPOSED BUILDING STANDARDS

OF THE

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

REGARDING THE 2007 AND 2010 CALIFORNIA EXISTING BUILDING CODE (CEBC)

CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 10, APPENDIX CHAPTER A3

(SEISMIC STRENGTHENING)

HCD EF 02/10

Government Code Section 11346.1 requires that any finding of emergency shall include a written statement which contains the information required by paragraphs (2) to (6), inclusive, of subsection (a) of Section 11346.5 and a description of the specific facts demonstrating the need for immediate action.

The adoption of these building standards or order of repeal is necessary for the immediate preservation of the public peace, health and safety, or general welfare, as follows:

California is in a seismically active region. Seismic activity occurs in California on a daily basis. Some of the more frequent seismic activity is so small as to be unfelt. Others are significantly larger, such as the 5.9 magnitude earthquake that occurred in Humboldt County on February 4, 2010, and the 7.2 magnitude earthquake on April 4, 2010, which caused Imperial County to be declared in a state of emergency by Governor Schwarzenegger. California includes many active faults, including the well-known San Andreas Fault, which has produced earthquakes that have caused significant damage to properties and loss of life. Other new faults continue to be discovered. Also, California is located along the Pacific Rim region of earthquake activity that includes such countries as Chile, which recently experienced an 8.8 magnitude earthquake in February 2010.

The potential for future earthquake activity has been addressed in the Uniform California Earthquake Rupture Forecast (CERF) by the U. S. Geological Survey (2007). This report notes that "…scientists have determined that the chance of having one or more magnitude 6.7 or larger earthquakes in the California area over the next 30 years is greater than 99%. Such quakes can be deadly, as shown by the 1989 magnitude 6.9 Loma Prieta and the 1994 magnitude 6.7 Northridge earthquakes. The likelihood of at least one even more powerful quake of magnitude 7.5 or greater in the next 30 years is 46% — such a quake is most likely to occur in the southern half of the state. Building codes, earthquake insurance, and emergency planning will be affected by these new results, which highlight the urgency to prepare now for the powerful quakes that are inevitable in California's future."

The Department of Housing and Community Development (HCD), pursuant to Health and Safety Code Section 17922, has historically adopted model building codes that provide the latest seismic construction requirements for residential structures in areas more prone to seismic activity (identified by Seismic Design Categories.) However, these building codes apply to new construction and do not address retrofit or building modification to prevent comprehensive structural failures in existing structures. The recent evidence of structural failure from a 7.0 magnitude earthquake and the resulting injuries and death is still being documented for Haiti (Note: Haiti did not build or retrofit structures according to the latest model building codes.) Therefore, it is important that California adopt the most current model code provisions addressing existing residential structures that would provide greater seismic protection to the public.

The California Seismic Safety Commission's "California Earthquake Loss Reduction Plan 2007 – 2011" identifies an objective of upgrading vulnerable buildings and other structures as part of the formula for loss reduction from earthquakes. Currently, the California Code of Regulations, Title 24, Part 10, California Existing Building Code, only adopts provisions for seismic strengthening of unreinforced masonry bearing wall buildings. Another vulnerable component of existing older homes is the presence of cripple walls or short walls that rest on foundations and support floors and exterior walls. These walls frequently do not include additional bracing and are prone to shifting during an earthquake. This can result in severe damage to the home and increased potential of injury or death to the occupants. Evidence of cripple wall failures have been documented in many California earthquakes, such as during the 1989 Loma Prieta earthquake.

The weakness of cripple walls during earthquakes is well known and provisions to mitigate failures have been addressed by local agencies and the federal government. In fact, the Federal Emergency Management Agency issues homebuilder/homeowner guides for protecting property from earthquakes, which includes discussion of bracing cripple walls. Local agencies also have adopted various degrees of public outreach and/or enforceable regulations regarding cripple wall protection.

HCD adopts limited provisions of the 2009 International Existing Building Code. HCD proposes the adoption of Appendix Chapter A3 to provide prescriptive standards to address seismic strengthening of cripple wall and sill plate anchorage in light wood-frame residential buildings. This portion of the code was not adopted by California for the 2010 Building Standards Code. In light of recent seismic events and the lack of statewide standards addressing the retrofit of cripple walls in existing conventionally constructed residential buildings, HCD has reviewed the 2009 model code provisions and reviewed newly proposed amendments to the 2009 model code for inclusion in the 2012 model code. HCD has drafted California amendments incorporating requirements that will be effective in the 2012 model code to provide the most current application of regulations for this state. Adoption of the provisions in Appendix Chapter A3 will provide consistent building standards on a statewide basis that address retrofit of cripple walls, provide a lower cost option for local agency adoption and implementation, and present a uniform set of requirements when programs are reviewed or audited for federal, state or local funding opportunities. Similar to other building standards, local agencies have the ability to require more stringent or alternate requirements as established in statute.

An added value that also should be mentioned is the economic stimulus, which becomes available to Californians. It is highly anticipated that with adoption of these retrofit standards, financial incentives will become available to encourage homeowners to perform retrofits, thus preserving existing housing stock and providing needed jobs to a slumping housing construction sector. Incentive programs typically provide a set dollar amount or a match to funds expended by a homeowner. Depending on the availability of funds and the percentage or match provided by an incentive program, it is not uncommon for an incentive program to generate five times the amount of the incentive in economic stimulus. Currently, the California Earthquake Authority has approximately 20 million dollars available for residential seismic retrofitting. Although the cost of these retrofits vary by structure, with simple cripple wall strengthening and foundation anchoring costs typically ranging from $2,500 to $5,000 to complete, it is reasonable to believe that this availability of funds could generate $100 million dollars in work available to trained contractors in the home building construction industry, which has lost 130,000 jobs during the past year.

These regulations are being proposed on an emergency basis due to the increased earthquake activity, availability of recent model code standards for adoption, and need for a consistent statewide standard for retrofit of qualifying cripple walls. Due to the timing of recent 2010 building code submittals to the California Building Standards Commission, proposing this rulemaking during a regular rulemaking cycle would delay the effective date of the regulations for up to 18 months. In view of the urgency to protect the public by providing statewide building standards for the retrofit of cripple walls, HCD proposes the adoption of these building standards as an emergency.