



STATE MINING AND GEOLOGY BOARD

EXECUTIVE OFFICER'S REPORT



ARNOLD
SCHWARZENEGGER
GOVERNOR

For Meeting Date: February 14, 2008

Agenda Item No. 6: Approval of Draft Revised California Geological Survey Special Publication No. 117.

INTRODUCTION: Prompted by damaging earthquakes experienced throughout the state, the Seismic Hazards Mapping Act (Act) was enacted on April 1, 1991. The purpose of the Act was to protect public safety from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and other hazards caused by earthquakes. The Act also closely resembles program and action elements of the Alquist-Priolo Earthquake Fault Zoning Act, which only addresses only surface fault-rupture hazards. In 2003, The State Mining and Geology Board (SMGB) Geohazards Committee recognized the importance of grading codes and standards as an integral and vital element of local building codes in California for many decades. With the elimination of grading standards from the latest versions of the International Building Code (IBC) and the National Fire Protection Association Code (NFPA) adopted for California, the California Geological Survey (CGS) was preparing to revise its Special Publication 117, "*Guidelines for Evaluating and Mitigating Seismic Hazards in California*", and to include a section on mitigation by grading.

BACKGROUND: A Grading Standards Technical Advisory Committee (TAC) was established in 2004. The TAC's first meeting was held in San Jose on April 8, 2004, and by July 2006 its work was concluded. Since such time, CGS has prepared a final draft "*Revised CGS Special Publication 117*". The final draft includes, 1) new ground motion procedures which are consistent with current code, 2) elimination of the "*Chinese Criteria*" for liquefaction in recognition of observed failure of sediments containing a significant amount of fines in recent foreign earthquakes, and 3) new improved models for estimating seismically-induced landslide displacements. In addition, many new references have been added in order to improve the "standard-of-practice". All changes from the earlier version of this draft document that are under consideration by the SMGB are shown.

CONSIDERATIONS BEFORE THE SMGB: The SMGB is considering accepting the changes as shown on the draft CGS Revised Special Publication 117 titled "*Guidelines for Evaluating and Mitigating Seismic Hazards in California*".

EXECUTIVE OFFICER RECOMMENDATION: It is the recommendation of the Executive Officer that the SMGB accept the changes are shown on the draft CGS Revised Special Publication 117 titled "*Guidelines for Evaluating and Mitigating Seismic Hazards in California*", and request that CGS finalize this document for publication.



Executive Officer's Report

To accept the proposed changes and request CGS to finalized the document:

Mr. Chairman, in light of the information before the SMGB today, I move that the Board accept the changes made to the draft CGS Special Publication 117, "Guidelines for Evaluating and Mitigating Seismic Hazards in California", and request that CGS finalize this draft document for publication.

Respectfully submitted:

Stephen M. Testa
Executive Officer

