



ABSTRACT REFERENCE NUMBER: 202

Earthquake waste management, is it possible in Mexico?

Hernandez-Padilla, F. Angles, M. Rojas-Nava, MA., Rodriguez A.G.

ABSTRACT

Purpose – The aim of this study is to analyze the possibility of earthquake waste management, considering technical aspects and the current legal framework after 2017 Mexico City earthquake.

Design/methodology/approach – Data collection about the types of wastes and quantities was carried out in field, government reports and calculations. Furthermore, was developed a study to analyze the capacity installed to earthquake waste management – case study Mexico City 2017 event –, by means of interviews conducted in field due to the lack of public and congruent institutional information. Finally, was conducted an analysis of current legal framework and public policy of disaster waste management.

Findings – Earthquake rubble totaled 344,211.3 tons and estimated weight of households items per collapsed dwelling amounts 424.16 kg; from this data, recyclable processing companies have more than 100% reception capacity. However, some recyclables as rubble were disposed in sanitary landfills controlled and uncontrolled, because there is not a public policy to use a recycled materials percentage in construction industry framed in guidelines for the efficient use of resources. Meanwhile, others valuable recyclables as metals from white goods, were handled by demolition companies without registered procedures nor work logs.

Originality – This manuscript deals with the management of earthquake waste in Mexico, based on the data of the 2017 earthquake, the study explains possible problems and political challenges about the earthquake waste management with the limited conditions of a developing country.

Keywords – Mexico City earthquake, disaster waste management, disasters and legislation, legal framework of waste

Organized by:

