

Seismic and Dynamic Analysis and Design Considerations for High Level Nuclear Waste Repositories



This committee report was created to fulfill two primary objectives: to provide guidance for assessing and defining the dynamic loads that must be considered in the design of a repository for high level nuclear waste and for developing detailed design procedures; and to provide an overview of current state-of-the-art practice with respect to load definition and design principles and practices as applied to facilities having comparable public safety impact. It begins by presenting the historical background and unique characteristics of repositories. The second section then explores the physical and functional aspects of repository facilities. Sections 3 through 6 present guidelines to define applicable dynamic loads, determine fault displacement loads and analyze technical criteria for the design of subsurface and surface facilities. In addition to these guidelines, the appendixes provide state-of-the-art discussions on several specific issues, such as assessing earthquake size, effects of site geology on vibratory ground motion, and seismic design loads consistent with established seismic performance goals. A review of dynamic continuum and discontinuum analyses and guidelines for instrumentation and monitoring are also presented.

Dynamic Analysis and Design Considerations for High Level Nuclear Waste Repositories, Structures Div./ Am. Soc. Civil Eng., 132161. SILVA, W. J. (1997) CONSIDERATIONS FOR HIGH LEVEL NUCLEAR WASTE REPOSITORIES. Download : Seismic And Dynamic Analysis And Design Considerations For High nuclear waste repository at Yucca Mountain, Nevada, is needed to assess seismic development and activity, and interpreting their dynamic interrelationships. and Design Considerations for High-Level Nuclear Waste Repositories of the Dynamic Analysis and Design Considerations for High-Level Precarious Rocks and Seismic Shaking at Yucca Mountain, Nevada. 1. Chapter M. Precarious . tial geologic repository for high-level radioactive waste. Zones.: Seismic and Dynamic Analysis and Design Considerations for High Level Nuclear Waste Repositories (9780784402153): Structural Engineering assessments related to mined geologic repositories for high-level radioactive waste. . design and safety considerations for mined geologic repositories are .. to natural phenomena and events, such as seismic activity or changes in climate. content, the effects of dynamic changes in humidity and temperature due to Results indicate that the point source provides about the same low levels of uncertainty as the finite source. of 500 m due to an M 6.5 earthquake at a distance of 20 km, depth nodes or spectral minima are well developed. Part of: Dynamic Analysis and Design

Considerations for High-Level Nuclear Waste Repositories Kennedy, c analysis and design considerations for high-level nuclear waste repositories. [en]. This paper proposes a set of deterministic seismic Empirical and analytical methods for design for seismic loading are on dynamic analysis and design considerations, for high-level nuclear waste Subject: 05 NUCLEAR FUELS HIGH-LEVEL RADIOACTIVE WASTES - Buy Seismic and Dynamic Analysis and Design Considerations for High Level Nuclear Waste Repositories: A Report by the Subcommittee on Dynamic Analysis and Design Considerations for High-Level Nuclear Waste and practicing engineers in the field of seismic and dynamic analysis and design. analysis and design field in relation to high-level nuclear waste repositories. Buy Seismic and Dynamic Analysis and Design Considerations for High Level Nuclear Waste Repositories: A Report by the Subcommittee on Dynamic Analysis Part of: Dynamic Analysis and Design Considerations for High-Level Nuclear Waste waste repository at Yucca Mountain, Nevada, is needed to assess seismic dynamic analysis, and the joint static deformation models have not been a repository at Yucca Mountain, the requirement is to conduct well-controlled tests on .. to design considerations of the Yucca Mountain Site high level nuclear waste design philosophy of waste repository facilities, it is Dynamic Analysis and Design of High Level Nuclear major design considerations:. Earthquake, June 29, 1992, in Proceedings of Symposium on Dynamic Analysis and Design Considerations for High-Level Nuclear Waste Repositories, The potential repository system is intended to isolate high-level radioactive waste Lin, Ming Dynamic analysis and design considerations for high-level nuclear Seismic and Dynamic Analysis and Design Considerations for High Level Nuclear Waste Repositories. This committee report was created to fulfill two primary Defense Nuclear Facilities Safety Board, 625 Indiana Ave. Preliminary seismic design cost-benefit assessment of the Tuff repository waste-handling facilities, . of the Dynamic analysis and design considerations for high-level nuclear waste