

1. Record Nr.	UNINA9910462109303321
Titolo	Guidelines for seismic evaluation and design of petrochemical facilities [[electronic resource] /] / prepared by Task Committee on Seismic Evaluation and Design of the Petrochemical Committee of the Energy Division of the American Society of Civil Engineers
Pubbl/distr/stampa	Reston, VA, : American Society of Civil Engineers, c2011
ISBN	0-7844-7657-8
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (x, 363 p.) : ill
Disciplina	665.5/3
Soggetti	Petroleum refineries - Design and construction Earthquake engineering Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	<p>""Cover""; ""Table of Contents""; ""Chapter 1: Introduction""; ""1.1 Objective""; ""1.2 Related Industry Codes, Standards and Specifications""; ""1.3 Organization of the Document""; ""Chapter 2: Design and Evaluation Philosophy""; ""2.1 Introduction""; ""2.2 Considerations for New Design""; ""2.3 Considerations for the Evaluation of Existing Facilities""; ""2.4 Cautions Regarding Design & Evaluation""; ""2.5 Performance Objectives and Occupancy Categories""; ""2.6 Design Approaches for New Facilities""; ""2.7 Evaluation of Existing Structure / Replacement in Kind""</p> <p>""2.8 Considerations for Regulatory Requirements""""2.9 Considerations for Temporary Facilities""; ""2.10 Structural Observation and Inspection""; ""2.11 Quality Assurance""; ""2.12 Peer Review""; ""Chapter 3: Seismic Hazards""; ""3.1 Introduction""; ""3.2 Earthquake Basics""; ""3.3 Ground Shaking""; ""3.4 Design Ground Motions""; ""3.5 Ground Failure""; ""3.6 Tsunami and Seiche""; ""Appendix 3.A: Ground Shaking""; ""Appendix 3.B: Earthquake Related Coastal Inundation""; ""Chapter 4: Seismic Analysis""; ""4.1 Introduction""; ""4.2 Structural Systems in a Petrochemical Facility""</p> <p>""4.3 Selection of Analysis Procedures""""4.4 Equivalent Lateral Force Procedure""; ""4.5 Dynamic Analysis Methods""; ""4.6 Considerations for</p>

Existing Facilities"; "Appendix 4.A: Typical Period (T) Computations for Nonbuilding Structures"; "Appendix 4.B: Guidelines for Determination of Base Shear for Combination Structures"; "Appendix 4.C: Determination of Base Shear for Selected Structures"; "Appendix 4.D: Stability Check Using Energy Balance Approach"; "Appendix 4.E: Methodology for Determination of Sliding Displacements"
"Appendix 4.F: Guidance for California Accidental Release Prevention (CalARP) Program Seismic Assessments""Appendix 4.G: Examples of Configurations of Petrochemical Structures where Dynamic Analysis Is Recommended"; "Chapter 5: Primary Structural Design"; "5.1 Introduction"; "5.2 Design Criteria"; "5.3 Design Considerations"; "5.4 Structural Details"; "5.5 Physical Interaction of Structures and Components"; "5.6 Geotechnical Considerations"; "Chapter 6: Walkdown Evaluations of Existing Facilities"; "6.1 Introduction"; "6.2 Basis for Performing Walkdowns"
"6.3 General Methodology""6.4 System Considerations"; "6.5 Evaluation of Components"; "6.6 Limitations"; "Chapter 7: Design and Evaluation of Tanks at Grade"; "7.1 Introduction"; "7.2 Past Earthquake Performance of Flat-Bottomed Tanks"; "7.3 Walkthrough Inspection"; "7.4 Analytical Evaluation"; "7.5 Mitigation of Seismic Effects"; "7.6 Considerations for Future Investigation"; "7.7 Design of New Tanks"; "Chapter 8: Earthquake Contingency Planning"; "8.1 Introduction"; "8.2 Purpose"; "8.3 Scope of Response Plan"; "8.4 Pre-Earthquake Preparation"
"8.5 Incident Recognition"
