1. Record Nr. UNINA9911006674303321 Autore Acorn William R **Titolo** Code compliance for advanced technology facilities : a comprehensive guide for semiconductor and other hazardous occupancies / / by William R. Acorn Park Ridge, N.J., U.S.A., : Noves Publications, c1993 Pubbl/distr/stampa **ISBN** 1-282-01356-4 9786612013560 0-8155-1648-7 Descrizione fisica 1 online resource (374 p.) Materials science and process technology series Collana 620 Disciplina Soggetti Hazardous substances - Safety measures Hazardous substances - Law and legislation - United States Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di contenuto Front Cover: Code Compliance for Advanced Technology Facilities: A Comprehensive Guide for Semiconductor and Other Hazardous Occupancies; Copyright Page; Preface; Acknowledgements; Table of Contents; Chapter 1. Introduction to Codes; 1.1 History of the Hazardous Occupancy Codes; 1.2 Overview of Applicable Codes; 1.3 Overview of Uniform Building Code; 1.4 Overview of Uniform Fire Code; 1.5 Occupancy Classifications of Proposed Facilities: 1.6 Retrofit and Renovation; 1.7 Understanding Code Intent & Philosophy; 1.8 Insurance Carrier Requirements 1.9 Designer/Building Official/Owner Relationship and Liabilities1.10 Integrated Approach; Chapter Summary; Chapter 2. Architectural Issues; 2.1 General; 2.2 Renovation; 2.3 Occupancy Classification; 2.4 Allowable Area and Separations; 2.5 Location; 2.6 Exiting; 2.7 Allowable Fabrication Area (H-6); 2.8 Multi-Level Fab Concept (H-6); 2.9 Corridors; 2.10 Chemical Storage; Chapter Summary; Chapter 3. Hazardous Materials Storage & Handling; 3.1 Introduction; 3.2 Hazardous Materials; 3.3 Maximum Allowable Quantities of HPMs; 3.4 ""Transportation of HPMs; 3.5 Control Areas 3.6 Hazardous Material storage Rooms3.7 Hazardous Material

Dispensing, Use and Handling; 3.8 HPM Piping Systems; 3.9 Code

Citations; Chapter Summary; Chapter 4. Mechanical Heating, Ventilating and Air Conditioning Systems; 4.1 General; 4.2 Recirculating Air Handling Systems: 4.3 Exhaust Ventilation and Operation: 4.4 Make-Up Air Systems; 4.5 Emergency Ventilation and Operation; 4.6 Exhaust Treatment and Separation of Reactive Materials; 4.7 Air Handling System Isolation; 4.8 Smoke and Fire Barriers; 4.9 Temperature Control; Chapter Summary; Chapter 5. Fire Suppression; 5.1 General 5.2 Revisions and Upgrades 5.3 H-6 Occupancies; 5.4 Storage Occupancies: 5.5 Exhaust Ducts Containing Flammable Vapors: 5.6 Exhaust Ducts Containing Corrosive Vapors; 5.7 Gas Cabinets; 5.8 Exit Corridors; 5.9 Service Corridors; 5.10 Alternate Suppression Systems 80; 5.11 Zoning; Chapter Summary; Chapter 6. Electrical; 6.1 Electrical Power Systems: 6.2 Design Considerations: 6.3 Emergency Shut offs: 6.4 Hazardous Area Electrical Requirements; Chapter Summary; Chapter 7. Life Safety Alarm & Monitoring Systems; 7.1 Introduction; 7.2 Emergency Control Station (ECS) 7.3 Alarm and Monitoring Systems7.4 Continuous Toxic Gas Monitoring; 7.5 Emergency Spill Alarm; 7.6 Audible Alarm Evacuation; 7.7 Visual Alarm Signaling; 7.8 Fireman's Command Station; 7.9 Miscellaneous Equipment; 7.10 Head End Equipment; 7.11 Wiring; Chapter Summary: Chapter 8. Retrofit & Renovation of Wafer Fabs to Comply with Hazardous Occupancy Codes; 8.1 Introduction; 8.2 Code Agency Liaison; 8.3 Prioritizing Code Compliance Issues; 8.4 Project

Chapter 10. Uniform Fire Code Definitions and Abbreviations

Definitions and Abbreviations

Phasing; Chapter Summary; Chapter 9. Uniform Building Code

Sommario/riassunto

Facilities which utilize hazardous liquids and gases represent a significant potential liability to the owner, operator, and general public in terms of personnel safety and preservation of assets. It is obvious that a catastrophic incident or loss of property or personnel is to be avoided at all costs. This book was conceived to give the reader a guide to understanding the requirements of the various codes and regulations that apply to the design, construction, and operation of facilities utilizing hazardous materials in their processes.