

1. Record Nr.	UNINA9910145314303321
Autore	(CCPS) Center for Chemical Process Safety
Titolo	Guidelines for Performing Effective Pre-Startup Safety Reviews [[electronic resource]]
Pubbl/distr/stampa	Hoboken, : Wiley, 2010
ISBN	1-282-77414-X 9786612774140 0-470-92497-7 0-470-92498-5 1-60119-896-5
Descrizione fisica	1 online resource (193 p.)
Disciplina	660.2804 660/.2815
Soggetti	Measuring instruments Measuring instruments --Handbooks, manuals, etc Process control Process control --Handbooks, manuals, etc Mechanical Engineering Engineering & Applied Sciences Industrial & Management 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 contenuto	GUIDELINES FOR PERFORMING EFFECTIVE PRE-STARTUP SAFETY REVIEWS; CONTENTS; List of Tables; List of Figures; Items on the CD Accompanying This Book; Acronyms and abbreviations; Glossary; Acknowledgements; Preface; 1 INTRODUCTION; 1.1 What are the Benefits of Performing Pre-startup Safety Reviews?; 1.2 How PSSR Relates to Other Process Safety Elements; 1.3 An Overview of the Risk-based Approach to PSSR; 1.4 What is the Scope of a PSSR? Process Safety, Environmental, Quality and Personnel Safety Considerations; 1.5 This Guideline's Audience; 1.6 How to use this Guideline; 1.7 References

2 WHAT IS A PRE-STARTUP SAFETY REVIEW? 2.1 The Basics of Pre-startup Safety Review; 2.1.1 Some Common Steps for Performing PSSR; 2.2 What is a Risk-based Approach to PSSR?; 2.3 The Role of Training in Pre-startup Safety Review; 2.3.1 Training Team Leaders and Members; 2.3.2 Training Managers and the Remaining Workforce; 2.4 Scheduling Considerations; 2.4.1 Capital Projects; 2.4.2 Changes to Operating Facilities; 2.4.3 Temporary Changes; 2.4.4 Restarting a Mothballed Process; 2.4.5 Post-turnaround Startup; 2.4.6 Routine Maintenance; 2.4.7 Startup After Emergency Shutdown; 2.5 References

3 REGULATORY ISSUES 3.1 An Overview of PSSR Industry Guidelines and Regulations; 3.2 Best Practices for PSSR; 3.3 Environmental Considerations; 3.4 General Safety, Security, and Occupational Health Considerations; 3.5 References; 4 A RISK-BASED APPROACH TO PRE-STARTUP SAFETY REVIEW; 4.1 Using Risk Analysis Techniques to Select the Level of Detail for a PSSR; 4.1.1 A Case of Complexity Versus Simplicity; 4.1.2 The Term Complexity Includes Novelty; 4.1.3 The Effect of Complexity on PSSR Team Size and Expertise; 4.1.4 The Effect on the Level and Scope of the Review

4.2 A Decision Guideline for Designing a PSSR 4.2.1 A Definition of Risk-based PSSR - A Qualitative Approach; 4.2.2 An Example Algorithm; 4.3 Typical Considerations for all Pre-startup Safety Reviews; 4.3.1 Hardware and Software: Equipment, Instrumentation, and Process Control; 4.3.2 Documentation: Process Safety Information, Procedures, and Maintenance Management System Data; 4.3.3 Training: Quality and Verification of Completeness; 4.3.4 Special Items: Specific Safety, Health, and Environmental Issues; 4.4 An Example Risk-based Questionnaire

4.5 Two Examples of Using a Risk-based Approach to PSSR Design 4.5.1 A Simple PSSR; 4.5.2 A More Complex PSSR; 4.6 References; 5 THE PRE-STARTUP SAFETY REVIEW WORK PROCESS; 5.1 Defining the PSSR System; 5.1.1 Double Checking Management of Change; 5.1.2 Who Is Responsible for Driving the System?; 5.2 PSSR Sub-elements; 5.2.1 Construction and equipment meet the designed specifications.; 5.2.2 Safety, operating, maintenance and emergency procedures are in place and adequate.; 5.2.3 A PHA has been performed for new facilities.; 5.2.4 Training of each employee involved in the process is complete. 5.2.5 General requirements

## Sommario/riassunto

This book provides guidance to those with responsibility for scheduling and executing a Pre-Startup Safety Review (PSSR). It outlines a protocol and tool for use by project or turnaround teams, to effectively and efficiently schedule and execute a PSSR. Integrates PSSR throughout the project/turnaround phases, with a verification check at the traditional PSSR step. Supports a "right first time" and "check only once" project philosophy to eliminate surprises. Features how-to checklists, hazard assessment, batch and continuous processes, validation, and documentation. Includes a