

1. Record Nr.	UNINA9910789369703321
Titolo	Assessment of supercritical water oxidation system testing for the Blue Grass Chemical Agent Destruction Pilot Plant // Committee to Assess Supercritical Water Oxidation System Testing for the Blue Grass Chemical Agent Destruction Pilot Plant, Board on Army Science and Technology, Division on Engineering and Physical Sciences, National Research Council of the National Academies
Pubbl/distr/stampa	Washington, District of Columbia : , : The National Academies Press, , [2013] ©2013
ISBN	0-309-28732-4 0-309-28730-8
Descrizione fisica	1 online resource (58 p.)
Disciplina	358.3482
Soggetti	Oxidation
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.
Nota di contenuto	""Front Matter""; ""Preface""; ""Acknowledgments""; ""Contents""; ""Tables and Figures""; ""Acronyms and Abbreviations""; ""Summary""; ""1 Introduction""; ""2 First-of-a-Kind Testing""; ""3 Implementation of Supercritical Water Oxidation at Blue Grass""; ""4 Systemization of the Supercritical Water Oxidation System with the Water Recovery System""; ""Appendixes""; ""Appendix A: Committee Activities""; ""Appendix B: Biographical Sketches of Committee Members""
Sommario/riassunto	"Assessment of Supercritical Water Oxidation System Testing for the Blue Grass Chemical Agent Destruction Pilot Plant reviews and evaluates the results of the tests conducted on one of the SCWO units to be provided to Blue Grass Chemical Agent Destruction Pilot Plant. The Army Element, Assembled Chemical Weapons Alternatives (ACWA) is responsible for managing the conduct of destruction operations for the remaining 10 percent of the nation's chemical agent stockpile, stored at the Blue Grass Army Depot (Kentucky) and the Pueblo Chemical Depot (Colorado). Facilities to destroy the agents and their associated munitions are currently being constructed at these sites. The Blue Grass

Chemical Agent Destruction Pilot Plant (BGCAPP) will destroy chemical agent and some associated energetic materials by a process of chemical neutralization known as hydrolysis. The resulting chemical waste stream is known as hydrolysate. Among the first-of-a-kind equipment to be installed at BGCAPP are three supercritical water oxidation (SCWO) reactor systems. These particular hydrolysate feeds present unique non-agent-related challenges to subsequent processing via SCWO due to their caustic nature and issues of salt management. This report provides recommendations on SCWO systemization testing inclusive of durability testing and discusses systemization testing objectives and concepts."--Publisher's description.
