1. Record Nr. UNISALENTO991003522809707536

Autore	Prang, Helmut
Titolo	Die romantische Ironie / Helmut Prang
Pubbl/distr/stampa	Darmstadt : Wissenschaftliche Buchgesellshaft, c1972
Descrizione fisica	VIII, 118 p. ; 20 cm
Collana	Erträge der Forschung ; 12
Disciplina	193
Soggetti	Ironia romantica
Lingua di pubblicazione	Tedesco
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910957625203321

Titolo	Evaluation of the U.S. Department of Energy's alternatives for the removal and disposition of molten salt reactor experiment fluoride salts / / Molten Salt Panel of the Committee on Remediation of Buried and Tank Wastes, Board on Radioactive Waste Management, Commission of Geosciences, Environment, and Resources, National Research Council
Pubbl/distr/stampa	Washington, D.C., : National Academy Press, 1997
ISBN	9786610191765 9780309174923 0309174929 9781280191763 1280191767 9780309590105 0309590108 9780585085395 0585085390
Edizione	[1st ed.]
Descrizione fisica	1 online resource (147 p.)
Disciplina	363.72/89
Soggetti	Radioactive waste disposal - United States Molten salt reactors Fluorides

Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Evaluation of the U.S. Department of Energy's -- Copyright -- Acknowledgments -- Preface -- Contents -- Executive Summary -- THE MSRE FACILITY AND CURRENT REMEDIATION PLANS -- PURPOSE OF THIS REPORT -- SUMMARY OF FINDINGS ON THREE MAJOR ISSUES -- MAJOR CONCLUSIONS -- MAJOR RECOMMENDATIONS -- 1-Introduction -- CURRENT STATUS OF THE MSRE -- ROLE OF THE NATIONAL RESEARCH COUNCIL -- SCOPE AND ORGANIZATION OF THIS REPORT -- 2-Radiolysis and Nuclear Reactions -- RADIOACTIVE SOURCE TERMS -- RADIATION EFFECTS AND GENERAL COMMENTS -- Radiation-Induced Liberation of Fluorine and Uranium Hexafluoride Gases -- Radiation Decomposition of Solid Uranium Hexafluoride -- Long-Term Effects of Leaving Plutonium in the Salt After Uranium Removal -- EXCESS OF REDUCING SPECIES IN THE SALT AND HAZARDS OF SIMPLE REMELTING -- 3-Fluoride Salt Chemistry, Partitioning, and System Corrosion -- CHEMISTRY RELEVANT TO THE PRESENT STATUS -- Chemical Consequences of Radiolysis -- PARTITIONING OF URANIUM FROM THE SALT -- PLUTONIUM PARTITIONING BY FLUORINATION -- NONFLUORINATION OPTION FOR PLUTONIUM SEPARATION -- SYSTEM CORROSION ISSUES -- Radiation-Induced Corrosion Questions -- 4-Preferred Technical Approach -- COMMENTS ON PROCESS STEPS -- DEVELOPMENT OF A PREFERRED APPROACH -- 5-Comments on Specific Separation Technologies -- FLUORINATION -- Direct Fluorination -- Hydrofluorination -- Alternative Fluorinating Agents -- ELECTROREFINING -- DISTILLATION OF MOLTEN SALT -- AQUEOUS DISSOLUTION AND SEPARATION -- Criticality Concerns in Aqueous Processing -- Fluoride Removal -- Conclusions on Aqueous Processing -- STABILIZATION TECHNOLOGIES -- 6-Nuclear Criticality Considerations -- CRITICALITY ISSUES IN PROCESSING -- CRITICALITY HAZARD OF REMELTING THE FLUORIDE SALTS IN THE DRAIN TANKS -- RATIONALE FOR TECHNICAL INSIGNIFICANCE OF A CRITICALITY EXCURSION -- CONCLUDING COMMENTS. 7-Strategic Alternatives -- PERMANENT DISPOSAL IN THE DRAIN TANKS -- DISPOSAL OF ALL KEY CONTAMINANTS IN THE FEDERAL REPOSITORY -- DISPOSAL OF KEY CONTAMINANTS IN THE SALT RESIDUE IN THE WASTE ISOLATION PILOT PLANT (WIPP) -- DISPOSAL OF KEY CONTAMINANTS IN SALT RESIDUE IN THE FEDERAL REPOSITORY -- REUSE OF THE SALT -- INTERIM STORAGE -- RATIONALE FOR REJECTING THE FIRST SIX ALTERNATIVES -- INTERIM VERSUS PERMANENT STORAGE AND DISPOSAL -- 8-Management of MSRE Hazards -- CURRENT HAZARDS -- HAZARD MANAGEMENT ACTIVITIES -- CRUCIAL ROLE OF FURTHER ACTIVITIES FOR CONDITION AND PROCESS ASSESSMENT -- MAJOR RECOMMENDATION CONCERNING HAZARDS -- DETAILED RECOMMENDATIONS REGARDING HAZARDS -- 9-Summary and Responses to Questions in Statement of Task -- TECHNICAL SUMMARY -- STRATEGY FOR REMEDIATION -- Where Is the Uranium? -- How Can a Condition Assessment Affect Remediation Plans? -- The Panel's Preferred Alternative -- Hazards -- RESPONSES TO QUESTIONS IN STATEMENT OF TASK -- Question 1 -- Question 2 -- The Consequences of Failure to Complete According to Plan -- Cost Estimates -- A Possible Strategy -- Question 3 -- PANEL PERSPECTIVE -- OVERALL CONCLUSION -- References -- Appendixes -- Appendix

	A-List of Materials Reviewed -- Appendix B-Alternative Fluorinating Agents -- Appendix C-Contamination Concerns Relating to Radon Gas Spread -- Appendix D-Use of a Nuclear Poison to Inhibit Nuclear Criticality -- Appendix E-Hazard Scoping of Major Actions for Remediation -- Appendix F-List of Acronyms and Abbreviations -- Appendix G-Glossary -- Appendix H-Biographical Sketches of Molten Salt Panel Members and Consultants -- Consultants.
Sommario/riassunto	This book discusses the technical alternatives for cleanup of radioactive fluoride salts that were the fuel for the Molten Salt Reactor Experiment, a novel nuclear reactor design that was tested in the 1960s at the Oak Ridge National Laboratory in Tennessee. These fluoride salts pose an unusual cleanup challenge. The book discusses alternatives for processing and removing the salts based on present knowledge of fluoride salt chemistry and nuclear reactions of the radioactive constituents.