

Contents

- i **Summary 1**
The Challenge 2
The Office of Technology Assessment Study 3
Dismantlement of Nuclear Warheads 5
Management of Nuclear Materials 10
Information Access 13
Cooperation With Russia 14
Conclusion 15
- 2 Analysis of Warhead Retirement Programs and Plans 17**
DOD: Weapons Return and Preparations for Dismantlement 22
Nuclear Weapons Safety Issues 25
Conclusion 30
Chapter 2 References 31
- 3 Warhead Dismantlement Programs and Plans 33**
Present DOE Activities and Plans 33
Environmental, Health, and Safety Issues in Dismantlement 45
Conclusions 61
Chapter 3 References 62
- 4 Future Disposition of Nuclear Materials from Dismantled Weapons 67**
Overall Disposition Concerns 70
Plutonium Storage 77
Plutonium Processing 87
Plutonium Disposition-Conclusion 99
Disposition of Highly Enriched Uranium 100
Chapter 4 References 105
- 5 Public Concerns and Information Access 109**
Public Concerns 111
Information Access 116
Approaches for Institutional Changes 120
Conclusion 122
Chapter 5 References 123



6 Opportunities to Aid Russian Dismantlement 125

- Warhead Dismantlement in Russia 126
- Management of Russian Plutonium 135
- U.S. Agreement for Purchase of Russian Weapons HEU 137
- Conclusion 143
- Chapter preferences 145

7 Policy Issues and Initiatives 149

- A National Dismantlement Policy 151
- Strengthening DOE Management 152
- Nuclear Materials Storage 154
- Nuclear Materials Disposition 157
- A New Materials Management Organization 159
- Information Access 161
- Cooperation With Russia 163
- Conclusion 166

APPENDIXES

- A Plutonium Pit Storage at Pantex 169**
- B United States and Russia Joint Understanding on Strategic Offensive Arms 179**
- C United States and Russian Agreement on the SSD Program 181**
- D United States and Russian Agreement on the Disposition of Uranium from Nuclear Weapons 185**
- E Labor and the Mission Change Within DOE 189**
- F Acronyms and Glossary 197**
- G Reviewers 201**