TABLE OF CONTENTS

Summary S-1
Table of Contents i
List of Figures x
List of Tables xi
Acronyms and Abbreviations xiv
Metric Conversion Chart xviii
Metric Prefixes xviii
Chemicals and Units of Measure xix

Chapter 1
Introduction, Purpose and Need, and Overview 1-1
1.1 Introduction 1-1
1.2 Purpose and Need for DOE Action 1-1
1.3 The Decision Process 1-2
1.3.1 The NEPA Process 1-2
1.3.2 Public Involvement 1-3
1.3.3 Significant Issues for Analysis 1-4
1.4 Policy and Public Law Considerations 1-4
1.5 Relationship to Other DOE Actions 1-5
1.5.1 Interagency Cooperation 1-5
1.5.2 Related NEPA Reviews 1-6
1.5.2.1 Brookhaven National Laboratory Final Environmental Impact Statement 1-6
1.5.2.2 U.S. Nuclear Regulatory Commission Safety Assessment of the High Flux Beam Reactor at the Brookhaven National Laboratory 1-6
1.5.2.3 Programmatic Spent Nuclear Fuel Management and Idaho National Engineering Laboratory Environmental Restoration and Waste Management Programs Final Environmental Impact Statement 1-6
1.5.2.4 Final Waste Management Programmatic Environmental Impact Statement 1-7
1.5.2.5 Spallation Neutron Source Draft Environmental Impact Statement 1-8
1.6 BNL Overview 1-8
1.6.1 History of BNL 1-8
1.6.2 Current Missions and Major Research Facilities 1-11
1.6.2.1 Current Missions 1-11
1.6.2.2 Major Research Facilities 1-12
1.7 HFBR Overview 1-13
1.7.1 History of the HFBR 1-13
1.7.1.1 Unique Capabilities of the HFBR 1-13
1.7.1.2 Research Achievements 1-14
1.7.1.3 Planned and Future Research 1-16
1.7.2 Role of the HFBR in Providing Neutrons for Research 1-17
1.7.3 The HFBR Reactor and Physical Plant 1-18
1.8 Tritium and Remediation 1-21
1.8.1 Airborne Releases 1-22
1.8.2 Water Releases 1-22
1.8.3 Past Problems 1-23
1.8.3.1 Source Evaluation 1-23

DRAFT

1.8.3.2 Tritium Remediation Project 1-25
1.9 References 1-26

Chapter 2
Alternatives 2-1
2.1 Alternatives Analyzed in the HFBR EIS 2-1
2.1.1 No Action Alternative 2-1
2.1.2 Resume Operation Alternative 2-1
2.1.2.1 30 MW Power Level 2-1
2.1.2.2 60 MW Power Level 2-2
2.1.3 Resume Operations and Enhance Facility Alternative 2-2
2.1.4 Permanent Shutdown Alternative 2-3
2.2 Other Alternatives Considered but Not Analyzed in Detail 2-4
2.2.1 Immediate Initiation of Vessel Replacement Followed by Operation at 60 MW 2-4
2.2.2 Immediate Decommissioning of the HFBR 2-4
2.2.3 Conversion of the HFBR Building to a Non-Nuclear Facility 2-4
2.2.4 Relocation of the HFBR off of Long Island 2-5
2.3 Modifications to the HFBR 2-5
2.3.1 Repair of Floor Joints and Penetrations 2-5
2.3.2 Piping Systems and Sumps 2-6
2.3.3 Stack Drains 2-6
2.3.4 Seismic Reinforcement 2-7
2.3.5 Spent Fuel Pool Liner System 2-7
2.4 Comparison of Alternatives 2-8
2.5 Preferred Alternative 2-9
2.6 References 2-9

Chapter 3
Affected Environment 3-1
3.1 Project Background 3-1
3.2 Land Use/Visual Resources 3-2
3.2.1 Background to Land Use/Visual Resources 3-2
3.2.1.1 Definition of Resources 3-2
3.2.1.2 Approach to Defining Environmental Setting 3-2
3.2.2 Affected Environment 3-2
3.2.2.1 Land Use 3-2
3.2.2.2 Visual Resources 3-5
3.3 Infrastructure 3-7
3.3.1 Background to Infrastructure 3-7
3.3.1.1 Definition of Resources 3-7
3.3.1.2 Approach to Defining the Environmental Setting 3-7
3.3.2 Affected Environment 3-7
3.4 Air Quality/Noise 3-9
3.4.1 Background to Air Quality/Noise 3-9
3.4.1.1 Definition of Resources and Approach 3-9
3.4.2 Affected Environment 3-10
3.4.2.1 Air Quality 3-10
3.4.2.2 Noise 3-10
3.5 Water Resources 3-12

DRAFT

3.5.1 Background to Water Resources 3-12
3.5.1.1 Definition of Resources 3-12
3.5.1.2 Approach to Defining the Environmental Setting 3-12
3.5.2 Affected Environment 3-12
3.5.2.1 Surface Water 3-12
3.5.2.2 Groundwater 3-13
3.5.2.3 HFBR Water Usage 3-16
3.5.2.4 Site Groundwater Quality 3-17
3.5.2.4.1 Overview of CERCLA Investigations 3-18
3.5.2.4.2 HFBR Related Groundwater Issues – Tritium Plume 3-22
3.6 Geology/Seismicity 3-26
3.6.1 Background to Geology/Seismicity 3-26
3.6.1.1 Definition of Resources 3-26
3.6.1.2 Approach to Defining the Environmental Setting 3-26
3.6.2 Affected Environment 3-26
3.7 Ecological Resources 3-31
3.7.1 Background to Ecological Resources 3-31
3.7.1.1 Definition of Resources 3-31
3.7.1.2 Approach to Defining the Environmental Setting 3-31
3.7.2 Affected Environment 3-32
3.7.2.1 Terrestrial Resources 3-32
3.7.2.2 Wetlands 3-37
3.7.2.3 Aquatic Resources 3-38
3.7.2.4 Threatened and Endangered Species 3-39
3.8 Cultural Resources 3-42
3.8.1 Background to Cultural Resources 3-42
3.8.1.1 Definition of Resources 3-42
3.8.1.2 Approach to Defining the Environmental Setting 3-42
3.8.2 Affected Environment 3-43
3.8.2.1 Cultural Resources 3-44
3.8.2.2 Paleontological Resources 3-44
3.9 Socioeconomics 3-46
3.9.1 Definition of Resources 3-46
3.9.2 Defining Environmental Setting 3-46
3.9.3 Affected Environment 3-46
3.9.3.1 Employment and Income 3-46
3.9.3.2 Population 3-47
3.9.3.3 Housing 3-48
3.9.3.4 Community Services 3-48
3.10 Transportation 3-50
3.10.1 Background to Transportation 3-50
3.10.1.1 Definition of Resources and Approach 3-50
3.10.2 Affected Environment 3-50
3.10.2.1 Traffic 3-50
3.10.2.2 Transportation of Spent Fuel 3-52
3.11 Public and Occupational Health and Safety 3-54
3.11.1 Background to Public and Occupational Health and Safety 3-54
3.11.1.1 Definition of Resources 3-54
3.11.1.2 Approach to Defining the Environmental Setting 3-54
3.11.2 Affected Environment 3-54

DRAFT

3.11.2.1 Radiation in the Environment ... 3-55
3.11.2.1.1 Radiation Sources ... 3-55
3.11.2.1.2 Radiation Doses to the Public from the HFBR ... 3-57
3.11.2.1.3 Radiation Doses to HFBR and BNL Workers ... 3-58
3.11.2.2 Chemical Environment ... 3-59
3.11.2.3 Industrial Hazards ... 3-63
3.11.2.4 Health Effects Studies ... 3-64
3.11.2.5 Accident History at HFBR ... 3-64
3.11.2.6 Emergency Preparedness ... 3-65
3.12 Waste Management ... 3-67
3.12.1 Background to Waste Management ... 3-67
3.12.1.1 Approach to Defining the Environmental Setting ... 3-67
3.12.2 Affected Environment ... 3-68
3.12.2.1 Waste Management at Brookhaven National Laboratory ... 3-68
3.12.2.2 Spent Nuclear Fuel ... 3-68
3.12.2.3 Low-Level Radioactive Waste ... 3-69
3.12.2.4 Mixed Waste ... 3-70
3.12.2.5 Hazardous Waste ... 3-70
3.12.2.6 Industrial Waste ... 3-70
3.13 Environmental Justice ... 3-71
3.13.1 Definition of Resource ... 3-71
3.13.2 Defining Environmental Setting ... 3-71
3.13.3 Affected Environmental ... 3-72
3.14 References ... 3-75

Chapter 4
Environmental Impacts ... 4-1
4.1 Environmental Impacts ... 4-1
4.2 Land Use/Visual Resources ... 4-2
4.2.1 No Action Alternative ... 4-2
4.2.2 Resume Operation Alternative – 30 MW Power Level ... 4-2
4.2.3 Resume Operation Alternative – 60 MW Power Level ... 4-2
4.2.4 Resume Operation and Enhance Facility Alternative ... 4-2
4.2.5 Permanent Shutdown Alternative ... 4-2
4.3 Infrastructure ... 4-3
4.3.1 No Action Alternative ... 4-3
4.3.2 Resume Operation Alternative – 30 MW Power Level ... 4-3
4.3.3 Resume Operation Alternative – 60 MW Power Level ... 4-3
4.3.4 Resume Operation and Enhance Facility Alternative ... 4-5
4.3.5 Permanent Shutdown Alternative ... 4-5
4.4 Air Quality/Noise ... 4-6
4.4.1 No Action Alternative ... 4-6
4.4.1.1 Air Quality ... 4-6
4.4.1.2 Noise ... 4-6
4.4.2 Resume Operation Alternative – 30 MW Power Level ... 4-6
4.4.2.1 Air Quality ... 4-6
4.4.2.2 Noise ... 4-7
4.4.3 Resume Operation Alternative – 60 MW Power Level ... 4-7
4.4.3.1 Air Quality ... 4-7

DRAFT

4.4.3.2 Noise ... 4-7
4.4.4 Resume Operation and Enhance Facility Alternative ... 4-7
4.4.4.1 Air Quality ... 4-7
4.4.4.2 Noise ... 4-7
4.4.5 Permanent Shutdown Alternative ... 4-8
4.4.5.1 Air Quality ... 4-8
4.4.5.2 Noise ... 4-8
4.5 Water Resources ... 4-9
4.5.1 No Action Alternative ... 4-9
4.5.1.1 Surface Water ... 4-9
4.5.1.2 Groundwater ... 4-9
4.5.2 Resume Operation Alternative – 30 MW Power Level ... 4-9
4.5.2.1 Surface Water ... 4-9
4.5.2.2 Groundwater ... 4-10
4.5.3 Resume Operation Alternative – 60 MW Power Level ... 4-11
4.5.3.1 Surface Water ... 4-11
4.5.3.2 Groundwater ... 4-11
4.5.4 Resume Operation and Enhance Facility Alternative ... 4-11
4.5.5 Permanent Shutdown Alternative ... 4-12
4.5.5.1 Surface Water ... 4-12
4.5.5.2 Groundwater ... 4-12
4.5.6 Potential Mitigation Measures ... 4-12
4.6 Geology/Seismicity ... 4-13
4.6.1 No Action Alternative ... 4-13
4.6.2 Resume Operation Alternative – 30 MW Power Level ... 4-13
4.6.3 Resume Operation Alternative – 60 MW Power Level ... 4-13
4.6.4 Resume Operation and Enhance Facility Alternative ... 4-13
4.6.5 Permanent Shutdown Alternative ... 4-13
4.7 Ecological Resources ... 4-14
4.7.1 No Action Alternative ... 4-14
4.7.1.1 Terrestrial Resources ... 4-14
4.7.1.2 Wetlands ... 4-14
4.7.1.3 Aquatic Resources ... 4-14
4.7.1.4 Threatened and Endangered Species ... 4-15
4.7.2 Resume Operation Alternative – 30 MW Power Level ... 4-15
4.7.2.1 Terrestrial Resources ... 4-15
4.7.2.2 Wetlands ... 4-15
4.7.2.3 Aquatic Resources ... 4-15
4.7.2.4 Threatened and Endangered Species ... 4-16
4.7.3 Resume Operation Alternative – 60 MW Power Level ... 4-16
4.7.3.1 Terrestrial Resources ... 4-16
4.7.3.2 Wetlands ... 4-16
4.7.3.3 Aquatic Resources ... 4-16
4.7.3.4 Threatened and Endangered Species ... 4-17
4.7.4 Resume Operation and Enhance Facility Alternative ... 4-17
4.7.4.1 Terrestrial Resources ... 4-17
4.7.4.2 Wetlands ... 4-17
4.7.4.3 Aquatic Resources ... 4-17
4.7.4.4 Threatened and Endangered Species ... 4-18
4.7.5 Permanent Shutdown Alternative ... 4-18

DRAFT

4.7.5.1 Terrestrial Resources 4-18
4.7.5.2 Wetlands 4-18
4.7.5.3 Aquatic Resources 4-18
4.7.5.4 Threatened and Endangered Species 4-18
4.8 Cultural Resources 4-19
4.8.1 No Action Alternative 4-19
4.8.2 Resume Operation Alternative – 30 MW Power Level 4-19
4.8.3 Resume Operation Alternative – 60 MW Power Level 4-19
4.8.4 Resume Operation and Enhance Facility Alternative 4-19
4.8.5 Permanent Shutdown Alternative 4-19
4.9 Socioeconomics 4-20
4.9.1 No Action Alternative 4-20
4.9.2 Resume Operation Alternative – 30 MW Power Level 4-20
4.9.3 Resume Operation Alternative – 60 MW Power Level 4-20
4.9.4 Resume Operation and Enhance Facility Alternative 4-20
4.9.5 Permanent Shutdown Alternative 4-21
4.10 Transportation 4-22
4.10.1 No Action Alternative 4-22
4.10.1.1 Traffic 4-22
4.10.1.2 Transportation 4-22
4.10.2 Resume Operation Alternative – 30 MW Power Level 4-22
4.10.2.1 Traffic 4-22
4.10.2.2 Transportation 4-22
4.10.3 Resume Operation Alternative – 60 MW Power Level 4-23
4.10.3.1 Traffic 4-23
4.10.3.2 Transportation 4-23
4.10.4 Resume Operation and Enhance Facility Alternative 4-23
4.10.4.1 Traffic 4-23
4.10.4.2 Transportation 4-23
4.10.5 Permanent Shutdown Alternative 4-23
4.10.5.1 Traffic 4-23
4.10.5.2 Transportation 4-24
4.11 Public and Occupational Health & Safety 4-25
4.11.1 No Action Alternative 4-25
4.11.1.1 Normal Operations 4-25
4.11.1.2 Facility Accidents 4-27
4.11.2 Resume Operation Alternative – 30 MW Power Level 4-28
4.11.2.1 Normal Operations 4-28
4.11.2.2 Facility Accidents 4-30
4.11.3 Resume Operation Alternative – 60 MW Power Level 4-32
4.11.3.1 Normal Operations 4-32
4.11.3.2 Facility Accidents 4-33
4.11.4 Resume Operation and Enhance Facility Alternative 4-36
4.11.4.1 Normal Operations 4-36
4.11.4.2 Facility Accidents 4-37
4.11.5 Permanent Shutdown Alternative 4-37
4.11.5.1 Normal Operations 4-37
4.11.5.2 Facility Accidents 4-38
4.12 Waste Management 4-39
4.12.1 Estimating Waste Generation Rates 4-39

DRAFT

4.12.1.1 Estimating Waste Generation for the No Action and the Permanent Shutdown Alternatives 4-39
4.12.1.2 Estimating Waste Generation for the Resume Operation and the Resume Operation and Enhance Facility Alternatives 4-39
4.12.2 No Action Alternative 4-39
4.12.3 Resume Operation Alternative – 30 MW Power Level 4-40
4.12.4 Resume Operation Alternative – 60 MW Power Level 4-40
4.12.5 Resume Operation and Enhance Facility Alternative 4-41
4.12.6 Permanent Shutdown Alternative 4-41
4.12.7 Waste Management Impacts 4-42
4.13 Environmental Justice 4-44
4.14 Cumulative Impacts 4-45
4.14.1 Regulatory Requirements 4-45
4.14.2 Scope 4-45
4.14.3 Air Quality 4-46
4.14.3.1 Past Actions 4-46
4.14.3.2 Present and Future Actions 4-46
4.14.3.3 Conclusions 4-47
4.14.4 Water Quality 4-47
4.14.4.1 Past Actions 4-47
4.14.4.2 Present and Future Actions 4-47
4.14.4.3 Conclusions 4-48
4.14.5 Radiological Waste Management 4-49
4.14.5.1 Past Actions 4-49
4.14.5.2 Present and Future Actions 4-49
4.14.5.3 Conclusions 4-51
4.15 Unavoidable Adverse Impacts 4-53
4.16 Relationship Between Local/Short-Term Uses of the Environment and Enhancement of Long-Term Productivity 4-54
4.17 Irreversible and Irretrievable Commitments of Resources 4-55
4.18 References 4-56

Chapter 5
Environmental, and Occupational Safety and Health Permit and Compliance Requirements 5-1
5.1 Introduction and Background 5-1
5.2 Environmental Requirements 5-1
5.2.1 Environmental Statutes, Orders, and Agreements 5-1
5.2.2 Environmental Consultations 5-2
5.2.3 Environmental Permits 5-2
5.2.4 Compliance with Occupational Safety and Health Requirements 5-2
5.3 Environmental Regulatory Status at BNL 5-2
5.3.1 Air 5-3
5.3.2 Water 5-4
5.3.3 Land 5-4

Chapter 6
Glossary of Terms 6-1

DRAFT

Chapter 7
Index 7-1

Chapter 8
List of Preparers 8-1

Chapter 9
Distribution List 9-1

Appendix A: DOE Guidance A-1

Appendix B: Air Quality B-1
B.1 Introduction B-1

Appendix C: Health And Safety C-1
C.1 Introduction C-1
C.2 Radiological Impacts to Human Health During Normal Operations C-1
C.2.1 Background C-1
C.2.1.1 Nature of Radiation and its Effects on Humans C-1
C.2.1.2 Health Effects C-5
C.2.2 Methodologies for Estimating Radiological Impacts of Normal Operations C-8
C.2.2.1 Data and Assumptions C-8
C.2.2.2 Methodology for Dose Equivalent Calculations – Atmospheric Release Pathway C-8
C.2.3 Normal Operations Radiological Releases C-9
C.2.3.1 Public Doses and Health Effects C-9
C.2.3.2 Worker Doses and Health Effects C-10
C.3 Hazardous Chemical Impacts to Human Health C-11
C.3.1 Background C-11
C.3.2 Hazardous Chemical Risk/Effects C-12
C.4 Human Health Effects Studies: Epidemiology C-12
C.4.1 Background C-12
C.4.1.1 Ecologic Studies C-12
C.4.1.2 Cohort Studies C-13
C.4.1.3 Case-Control Studies C-13
C.4.2 Epidemiological Studies C-14
C.5 Facility Accidents C-15
C.5.1 Evaluation Methodologies and Assumptions C-15
C.5.1.1 Introduction C-22
C.5.1.1.1 Overview of PRA Results C-22
C.5.1.1.2 Selection of Suitable Scenarios to Support Comparison of Alternatives C-27
C.5.1.1.2.1 Large Loss-of-Coolant Accident (LOCA) C-30
C.5.1.1.2.2 Loss of Offsite Power (LOOP) C-35
C.5.1.1.2.3 Beam Tube Rupture C-37
C.5.1.1.2.4 Severe Wind Event C-41
C.5.1.1.2.5 Fuel Handling Accident C-43
C.5.1.1.2.6 D_2O Release Accident C-43

DRAFT

C.5.1.1.2.7 Experimental Facilities Accidents C-44
C.5.1.1.2.8 Aircraft Crash Analysis C-45
C.5.1.1.3 Supplementary Consequence Analyses C-46
C.5.1.2 Analysis Methodology C-48
C.5.2 No Action Alternative C-50
C.5.2.1 Accident Scenarios and Source Terms C-50
C.5.2.2 Accident Impacts C-50
C.5.3 Resume Operation Alternative – 30 MW Power Level C-50
C.5.3.1 Accident Scenarios and Source Terms C-50
C.5.3.2 Accident Impacts C-51
C.5.4 Resume Operation Alternative – 60 MW Power Level C-51
C.5.4.1 Accident Scenarios and Source Terms C-51
C.5.4.2 Accident Impacts C-51
C.5.5 Resume Operation and Enhance Facility Alternative C-52
C.5.5.1 Accident Scenarios and Source Terms C-52
C.5.5.2 Accident Impacts C-52
C.5.6 Permanent Shutdown Alternative C-53
C.5.6.1 Accident Scenarios and Source Terms C-53
C.5.6.2 Accident Impacts C-53
C.6 References C-56

Appendix D: Correspondence with Consulting Agencies D-1

DRAFT

LIST OF FIGURES

Figure 1.6-1 Location of Brookhaven National Laboratory on Long Island 1-9
Figure 1.6-2 Location of BNL 1-10
Figure 1.6-3 BNL Facilities 1-12
Figure 1.7-1 The HFBR Offers Scientists Two Ways to Perform Their Experiments – Neutron Irradiation and Neutron Scattering 1-15
Figure 1.7-2 A Fuel Element from the HFBR Core 1-18
Figure 1.7-3 Inside the HFBR Reactor Vessel 1-19
Figure 1.7-4 A Cutaway View of the HFBR 1-20
Figure 3.2-1 Land Use 3-3
Figure 3.5-1 Location of Supply Wells and Recharge Basins 3-14
Figure 3.5-2 General Hydrogeologic Cross-Section 3-15
Figure 3.5-3 HFBR Water Use During Operation 3-17
Figure 3.5-4 Operable Units Boundaries 3-19
Figure 3.5-5 Tritium and VOC Plumes 3-20
Figure 3.6-1 Seismic Zone Map of Northeastern United States 3-29
Figure 3.8-1 Historically Significant Sites at BNL 3-45
Figure 3.10-1 State and County 1995 Estimated Average Daily Traffic (Two Way Vehicle Volumes) 3-51
Figure 3.13-1 Minority Populations Surrounding the Brookhaven National Laboratory 3-73
Figure 3.13-2 Low-Income Populations Surrounding the Brookhaven National Laboratory 3-74

DRAFT

LIST OF TABLES

Table 2.4-1 Comparison of Alternatives 2-10

Table 3.3-1 Baseline Infrastructure Characteristics for BNL and the HFBR 3-8

Table 3.6-1 The Modified Mercalli Scale of 1931, with Approximate Correlations to Richter Scale and Maximum Ground Acceleration 3-30

Table 3.7-1 Approximate Area of Ecological Communities on and Around the BNL Property 3-33

Table 3.7-2 Ecological Communities, Food Supplies, and Consumers Associated With Each Habitat Observed at BNL 3-34

Table 3.7-3 State and Federally Listed Threatened, Endangered, or Special Concern Wildlife Species Reported to Occur in the Study Area 3-41

Table 3.9-1 ROI Employment by Sector 3-47

Table 3.9-2 Population Estimates for BNL Region of Influence 3-48

Table 3.9-3 Housing Characteristics (1990) 3-48

Table 3.10-1 Summary of State and County 1995 Estimated Average Daily Two Way Traffic 3-52

Table 3.11-1 Sources of Radiation Exposure to Long Islanders in the Vicinity of the HFBR 3-55

Table 3.11-2 Airborne Radionuclides Released by HFBR in 1997 (0 MW) 3-56

Table 3.11-3 Annual Radiation Doses to the Public From HFBR 1997 (0 MW) 3-58

Table 3.11-4 Radiation Doses to the Worker From Normal Operations in 1997 (0 MW) 3-59

Table 3.11-5 Identification of Chemical and Other Nonradiological Hazards at the HFBR 3-61

Table 3.13-1 Selected Demographic Characteristics for the BNL Region of Influence 3-72

Table 4.3-1 Impacts of Alternatives on HFBR Infrastructure 4-4

Table 4.11-1 Annual Radiological Impacts to the Public Attributable to the HFBR for the No Action Alternative 4-26

Table 4.11-2 Radiological Impacts to the Workforce Attributable to the HFBR for the No Action Alternative 4-27

Table 4.11-3 Annual Radiological Impacts to the Public Attributable to the HFBR for the 30 MW Alternative 4-29

DRAFT

Table 4.11-4 Annual Radiological Impacts to the Workforce Attributable to the HFBR for the 30 MW Alternative 4-29

Table 4.11-5 30 MW Operation Alternative Accident Impacts at the HFBR 4-31

Table 4.11-6 Annual Radiological Impacts to the Public Attributable to the HFBR for the 60 MW Alternative 4-32

Table 4.11-7 Annual Radiological Impacts to the Workforce Attributable to the HFBR for the 60 MW Alternative 4-33

Table 4.11-8 60 MW Operation Alternative Accident Impacts at HFBR 4-35

Table 4.12-1 Estimated Annual Waste Generation for the HFBR Alternatives 4-43

Table 4.14-1 HFBR Annual Radiological Waste Generated for 1996 4-49

Table 4.14-2 Annual Radioactive Waste Generation by the SNS 4-50

Table 4.14-3 Expected Annual Cumulative Radiological Waste Generated at BNL 4-52

Table 5.2-1 Federal Environmental Statutes, Regulations, and Orders 5-5

Table 5.2-2 Department of Energy Environment, Safety, and Health Orders 5-9

Table 5.2-3 Department of Energy Agreements with Federal and State Environmental Regulatory Agencies 5-10

Table 5.2-4 New York State Environmental Statutes and Regulations 5-11

Table C.2-1 Lifetime Risks per 100,000 Persons Exposed to a Single Exposure of 10 Rem C-7

Table C.2-2 Atmospheric Radiological Releases Attributable to the HFBR for the Years 1988, 1990, and 1995 ....C-9

Table C.2-3 Annual Radiation Doses to the Public for Normal HFBR Operations C-10

Table C.2-4 HFBR Worker Doses and Health Effects for Three Operational Years C-10

Table C.3-1 Key Characteristics of HFBR Chemicals C-11

Table C.5-1 “Major” Core Damage Frequency by Initiator Category, Internal Events C-24

Table C.5-2 “Minor” Core Damage Frequency by Initiator Category, Internal Events C-24

Table C.5-3 Latent Cancer Fatalities by Initiator Category, Internal Events C-25

Table C.5-4 Contributors to CDF and Latent Cancer Fatalities (60 MW Operation) C-25

Table C.5-5 Contributions to Latent Cancer Fatalities by Initiator Category, External Events C-26

DRAFT

Table C.5-6 Latent Cancer Fatalities by Power Level and Initiator Category C-26

Table C.5-7 Representative High-Consequence and Medium-Consequence Scenarios Analyzed in PRA C-28

Table C.5-8 Representative Low-Consequence Scenarios C-30

Table C.5-9 Comparison of PRA Assumption (1990) With Accident Analysis (1998) C-31

Table C.5-10 Reanalysis of "Large" LOCA Accident Sequences at 60 MW C-34

Table C.5-11 Comparison of Original and Revised Loss of Offsite Power Core Damage Frequency Results C-37

Table C.5-12 Comparison of Original and Revised Severe Wind/Tornado Accident Core Damage Frequency Results C-43

Table C.5-13 Frequency of Aircraft Crash C-46

Table C.5-14 Representative Accidents C-49

Table C.5-15 30 MW Operation Alternative Accident Impacts at the HFBR C-54

Table C.5-16 60 MW Operation Alternative Accident Impacts at the HFBR C-55

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Acronyms and Abbreviations

AC	air conditioning
ADL	Arthur D. Little, Inc
AGS	Alternating Gradient Synchrotron
AHA	American Hospital Association
AMA	American Medical Association
AIRFA	*American Indian Religious Freedom Act*
ALARA	as low as reasonably achievable
AOC 29	Area of Concern 29
ARPA	*Archaeological Resources Protection Act*
ATWS	anticipated transient without scram
BAF	Booster Applications Facility
BEA	Bureau of Economic Analysis
BEIR	Biological Effects of Ionizing Radiation
BGRR	Brookhaven Graphite Research Reactor
BLIP	Brookhaven Linac Isotope Producer
BLM	Bureau of Land Management
BLS	Bureau of Labor Statistics
BMRR	Brookhaven Medical Research Reactor
bmsl	below mean sea level
BNL	Brookhaven National Laboratory
BSA	Brookhaven Science Associates
BTR	beam tube rupture
CAA	*Clean Air Act*
CAAA	*Clean Air Act* amendments
CAP-88 PC	Clean Air Act Assessment Package 1988
CDF	core damage frequency
CEDE	committed effective dose equivalent
CEQ	Council on Environmental Quality
CERCLA	*Comprehensive Environmental Response, Compensation, and Liability Act*
CFR	*Code of Federal Regulations*
CMS	Chemical Management System
CNF	Cold Neutron Facility
COE	U.S. Army Corps of Engineers
CP-5	Chicago Pile-Five
CWA	*Clean Water Act*
D&D	decontamination and decommissioning
DBE	design basis earthquake
dc	direct current
DEIS	*Draft Environmental Impact Statement*
DoD	U.S. Department of Defense
DOE	U.S. Department of Energy
DOH	U.S. Department of Health
DOI	U.S. Department of Interior
DOJ	U.S. Department of Justice
DOT	U.S. Department of Transportation
EA	Environmental Assessment
EAL	Emergency Action Level
ECR	Environmental Compliance Representatives
EDE	effective dose equivalent
EFC	experimental facilities cooler
EIS	Environmental Impact Statement

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EPA	U.S. Environmental Protection Agency
EPRI	Electric Power Research Institute
ERDA	U.S. Energy Research and Development Administration
ERPG	Emergency Response Planning Guidelines
ES&H	environment, safety, and health
et seq.	*et sequens* – Latin, meaning "and the following"
FEIS	*Final Environmental Impact Statement*
FFCA	*Federal Facilities Compliance Act*
FHA	fuel-handling accident
FONSI	*Finding of No Significant Impact*
GE	General Emergency
HEPA	high-efficiency particulate air
HEU	highly enriched uranium
HFBR	High Flux Beam Reactor
HHS	U.S. Department of Health and Human Services
HLW	high-level radioactive waste
HTO	tritiated water
HVAC	heating, ventilation, and air conditioning
HWMF	Hazardous Waste Management Facility
IAG	Interagency Agreement
IRM	interim remedial measure
L10WH	lacustrine, limnetic, open water, flooded permanently
LCF	latent cancer fatality
LET	Linear Energy Transfer
LIBN	Long Island Business News
LIE	Long Island Expressway
LILCO	Long Island Lighting Company
LIPA	Long Island Power Authority
LIRR	Long Island Railroad
LLMW	low level mixed waste
LLOCA	large loss of coolant accident
LLW	low level radioactive waste
LMS	Lawler, Matusky and Skelly Engineers
LOCA	loss of coolant accident
LOOP	loss of offsite power
LWM	Light Water Make-up
LWR	light water reactor
MACCS	Melcor Accident Consequence Code System
MCL	maximum contaminant level
MEI	maximally exposed individual
MOA	Memorandum of Agreement
msl	mean sea level
NAAQS	National Ambient Air Quality Standards
NAEP	National Association of Environmental Professionals
NAGPRA	*Native American Graves Protection and Repatriation Act*
NCP	National Contingency Plan
NEPA	*National Environmental Policy Act* of 1969
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHPA	*National Historic Preservation Act*
NIOSH	National Institute for Occupational Safety and Health
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRC	U.S. Nuclear Regulatory Commission

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NRHP	National Register of Historic Places
NSLS	National Synchrotron Light Source
NWI	National Wetland Inventory
NYCRR	New York Codes, Rules and Regulations
NYMTC	New York Metropolitan Transportation Council
NYPA	New York Power Authority
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOT	New York State Department of Transportation
OER	Office of Environmental Restoration
ORR	Operational Readiness Review
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PAG	Protective Action Guidelines
PEIS	*Programmatic Environmental Impact Statement*
PEL	Permissible Exposure Limit
PEM1E	palustrine emergent, persistent, seasonally flooded/saturated
PFO1C	palustrine forested, broad-leaved deciduous, seasonally flooded
PFO1E	palustrine forested, broad-leaved deciduous, seasonally flooded/saturated
POWF	palustrine open water, semipermanently flooded
POWH	palustrine open water, permanently flooded
POWKFx	palustrine open water, artificial, semipermanently flooded, excavated
POWZ	palustrine open water, intermittently exposed
PRA	Probabilistic Risk Assessment
PSD	Prevention of Significant Deterioration
PSS1E	palustrine scrub/shrub, broad-leaved deciduous, seasonally flooded/saturated
PSS1C	palustrine scrub/shrub, broad-leaved deciduous, seasonally flooded
PWS	Poison Water System
R&D	research and development
R2OWh	riverine, lower perennial, open water, permanent
RBOF	Receiving Basin for Offsite Fuels
RCRA	*Resource Conservation and Recovery Act*
RHIC	Relativistic Heavy Ion Collider
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
ROI	Region of Influence
RQ	reportable quantity
S&M	surveillance and maintenance
SAE	Site Area Emergency
SANS	Small Angle Neutron Scattering
SAR	Safety Analysis Report
SARA	*Superfund Amendments and Reauthorization Act*
SC	Suffolk County
SCDHS	Suffolk County Department of Health Services
SDWA	*Safe Drinking Water Act*
SECE	Schneider Engineering Consulting Engineers
SER	Site Environmental Report
SHPO	(New York) State Historic Preservation Office
SLOCA	small loss of coolant accident
SMR	standardized mortality ratio
SNF	spent nuclear fuel
SPAM	Secondary Poison Water Addition Method
SPDES	State Pollutant Discharge Elimination System

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SRS	Savannah River Site
STEM	Scanning Transmission Electron Microscope
STP	sewage treatment plant
SWT	severe wind-tornado
TAL	Target Analyte List
TEDE	total effective dose equivalent
TOB	Town of Brookhaven
TPQ	threshold planning quantities
TQ	threshold quantity
TRP	Tritium Remediation Project
TRU	transuranic waste
TSCA	*Toxic Substances Control Act*
TSR	Technical Safety Requirements
TVOC	total volatile organic compound
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VOC	volatile organic compound
WM	waste management

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METRIC CONVERSION CHART

To Convert Into Metric			To Convert Out of Metric		
If You Know	**Multiply By**	**To Get**	**If You Know**	**Multiply By**	**To Get**
		Length			
Inches (in)	2.54	centimeters (cm)	centimeters (cm)	0.3937	inches (in)
Feet (ft)	30.48	centimeters (cm)	centimeters (cm)	0.0328	feet (ft)
Feet (ft)	0.3048	meters (m)	meters (m)	3.281	feet (ft)
Yards (yd)	0.9144	meters (m)	meters (m)	1.0936	yards (yd)
Miles (mi)	1.60934	kilometers (km)	kilometers (km)	0.6214	miles (mi)
		Area			
Sq. inches (in^2)	6.4516	sq. centimeters(cm^2)	sq. centimeters(cm^2)	0.155	sq. inches (in^2)
Sq. feet (ft^2)	0.092903	sq. meters (m^2)	sq. meters (m^2)	10.7639	sq. feet (ft^2)
Sq. yards (yd^2)	0.8361	sq. meters (m^2)	sq. meters (m^2)	1.196	sq. yards (yd^2)
Acres	0.40469	hectares (ha)	hectares (ha)	2.471	acres
Sq. miles (mi^2)	2.58999	sq. kilometers (km^2)	sq. kilometers (km^2)	0.3861	sq. miles (mi^2)
		Volume			
fluid ounces (fl oz)	29.574	milliliters (ml)	milliliters (ml)	0.0338	fluid ounces (fl oz)
gallons (gal)	3.7854	liters (l)	liters (l)	0.26417	gallons (gal)
cubic feet (ft^3)	0.028317	cubic meters (m^3)	cubic meters (m^3)	35.315	cubic feet (ft^3)
cubic yards (yd^3)	0.76455	cubic meters (m^3)	cubic meters (m^3)	1.308	cubic yards (yd^3)
		Weight			
ounces (oz)	28.3495	grams (g)	grams (g)	0.03527	ounces (oz)
pounds (lb)	0.45360	kilometers (kg)	kilometers (kg)	2.2046	pounds (lb)
short tons	0.90718	metric tons	metric tons	1.1023	short tons
		Force			
dynes (dyn)	.00001	Newtons (N)	Newtons (N)	100,000	dynes (dyn)
		Temperature			
Fahrenheit (ºF)	Subtract 32 then Multiply by 5/9ths	Celsius (ºC)	Celsius (ºC)	Multiply by 9/5ths, then add 32	Fahrenheit (ºF)

METRIC PREFIXES

Prefix	Symbol	Multiplication Factor		
exa-	E	1 000 000 000 000 000 000	=	10^{18}
peta-	P	1 000 000 000 000 000	=	10^{15}
tera-	T	1 000 000 000 000	=	10^{12}
giga-	G	1 000 000 000	=	10^{9}
mega-	M	1 000 000	=	10^{6}
kilo-	k	1 000	=	10^{3}
hecto-	h	l00	=	10^{2}
deka-	da	l0	=	10^{1}
deci-	d	0.1	=	10^{-1}
centi-	c	0.01	=	10^{-2}
milli-	m	0.001	=	10^{-3}
micro-	µ	0.000 001	=	10^{-6}
nano-	n	0.000 000 001	=	10^{-9}
pico-	p	0.000 000 000 001	=	10^{-12}
femto-	f	0.000 000 000 000 001	=	10^{-15}
atto-	a	0.000 000 000 000 000 001	=	10^{-18}

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CHEMICALS AND UNITS OF MEASURE

Ar^{41}	Argon-41
Be^{7}	Beryllium-7
Bi^{211}	Bismuth-211
Br^{82}	Bromine-82
°C	degrees Celsius
C^{14}	Carbon-14
cfm	cubic feet per minute
Ci	Curie
Ci/cm^3	curies per cubic centimeter
cis-1,2-DCE	cis-1,2-dichloroethene
cm	centimeter(s)
CO	carbon monoxide
CO_2	carbon dioxide
Cs	cesium
Cs^{137}	Cesium-137
Cu	copper
D	deuterium
D_2O	deuterium oxide, also known as “heavy water”
dB	decibel
dBA	day-night average sound level
DCA	1,1-dichloroethane
DCE	1,1-dichloroethene
EDB	ethylene dibromide
°F	degrees Fahrenheit
Fe	iron
fl oz	fluid ounce(s)
fl oz/d	fluid ounces per day
ft	foot or feet
ft^2	square feet
ft^3	cubic feet
ft/d	feet per day

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g	gravitational acceleration
gal	gallon(s)
gpm	gallons per minute
GPD	gallons per day
GWd	gigawatt-days
H_2	hydrogen
H_2O	water
H^3	tritium
ha	hectare(s)
hr	hour(s)
HTO	tritiated water
I^{131}	Iodine-131
I^{133}	Iodine-133
in	inch(es)
kg	kilogram(s)
kg/s	kilograms per second
kg/yr	kilograms per year
km	kilometer(s)
kmh	kilometers per hour
km/s	kilometers per second
kV	kilovolt(s)
l	liter(s)
lb	pound(s)
lpd	liters per day
lpm	liters per minute
m	meter(s)
m^2	square meters
m^3	cubic meters
m/d	meters per day
m^3/yr	cubic meters per year
mCi	millicurie
mg	milligram(s)
MGD	million gallons per day

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mi	mile(s)
mi/s	miles per second
ml/d	milliliters per day
MLD	million liters per day
mph	miles per hour
mrem	millirem
mrem/yr	millirem per year
MW	megawatt(s)
MWe	megawatts, electric
MWh/yr	megawatt-hours per year
nCi	nanocurie(s)
nCi/g	nanocuries per gram
NO_2	nitrogen dioxide
NO_x	oxides of nitrogen
O_3	ozone
O^{15}	Oxygen-15
Pb	lead
PCA	1,1,2,2-tetrachloroethane
PCB	polychlorinated biphenyl
PCE	tetrachloroethene
pCi	picocurie(s)
pCi/l	picocuries per liter
pCi/m^3	picocuries per cubic meter
PM_{10}	particulate matter less than or equal to 10 microns
ppm	parts per million
ppb	parts per billion
R	Roentgen(s)
R/hr	Roentgens per hour
rem	Roentgen equivalent man
s	second(s)
Sn^{117}	tin-117
SO_2	sulfur dioxide
Sr^{90}	strontium-90

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TCA	1,1,1-trichloroethane
TCE	trichloroethene
Tc^{99m}	technetium-99 metastable
ton	short ton(s)
U^{235}	uranium-235
yr	year(s)
µCi	microcurie(s)
µCi/l	microcuries per liter
µCi/cm^3	microcuries per cubic centimeter
µg	microgram(s)

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