

SNL/NM Hazardous Waste Management Facility Part B Permit Renewal Request

CONTENTS

VOLUME I

Overview

Attachment to Overview—presentation slides from pre-application public meeting

Part 1

General Part A—Part A Form

Appendix A—Active Environmental Permits

Appendix B—Location-Specific Process Code Listings, Design Capacities, Figures, and Photographs (note this is text only; figures and photographs are included in Volume I figures)

Part 2

General Part B—Waste Management Units—Site-Wide General Text

Appendix A—Site-Wide Description

Appendix B—Site-Wide Waste Analysis Plan

Appendix C—Site-Wide Inspection Plan

Appendix D—Site-Wide Personnel Training Plan

Appendix E—Site-Wide Contingency Plan

Appendix F—Site-Wide Closure Plan

Appendix G—Site-Wide Treatment Plan

Appendix H—Site-Wide Recordkeeping and Reporting Plan

Module I—Hazardous Waste Management Facility

Attachment A—Unit Description

Attachment B—Waste Analysis Plan

Attachment C—Inspection Plan

Attachment D—Personnel Training Plan

Attachment E—Contingency Plan

Attachment F—Closure Plan

Attachment G—Treatment Plan

Module II—Thermal Treatment Facility

Attachment A—Unit Description

Attachment B—Waste Analysis Plan

Attachment C—Inspection Plan

Attachment D—Personnel Training Plan

Attachment E—Contingency Plan

Attachment F—Closure Plan

Attachment G—Treatment Plan

Module III—Radioactive and Mixed Waste Management Facility

Attachment A—Unit Description

Attachment B—Waste Analysis Plan

Attachment C—Inspection Plan

Attachment D—Personnel Training Plan

Attachment E—Contingency Plan

Attachment F—Closure Plan

Attachment G—Treatment Plan

Module IV—High Bay Waste Storage Facility

Attachment A—Unit Description

Attachment B—Waste Analysis Plan

Attachment C—Inspection Plan

Attachment D—Personnel Training Plan

Attachment E—Contingency Plan

Attachment F—Closure Plan

Attachment G—Treatment Plan

Module V—Auxiliary Hot Cell Facility

Attachment A—Unit Description

Attachment B—Waste Analysis Plan

Attachment C—Inspection Plan

Attachment D—Personnel Training Plan

Attachment E—Contingency Plan

Attachment F—Closure Plan

Attachment G—Treatment Plan

Module VI—Manzano Storage Bunkers

Attachment A—Unit Description

Attachment B—Waste Analysis Plan

Attachment C—Inspection Plan

Attachment D—Personnel Training Plan

Attachment E—Contingency Plan

Attachment F—Closure Plan

Attachment G—Treatment Plan

Figures—Volume I—Parts 1 and 2 (General Part A, General Part B)

NOTE: figures that are NOT included in this electronic copy:

Part 1: Figure B-1 Unit Location Map

Part 2: Appendix A: Figure A-2 Unit Location Map

Part 2: Module 1 Attachment A: Figure A-4 Topographic Map, Hazardous Waste Management Facility

Part 2: Module 2 Attachment A: Figure A-4 Topographic Map, Thermal Treatment Facility

Part 2: Module 3 Attachment A: Figure A-4 Unit Location Map, Radioactive and Mixed Waste Management Facility

Part 2: Module 4 Attachment A: Figure A-4 Topographic Map, High Bay Waste Storage Facility

Part 2: Module 5 Attachment A: Figure A-5 Topographic Map, Auxiliary Hot Cell Facility

Part 2: Module 6 Attachment A: Figure A-4 Topographic Map, Manzano Storage Bunkers

VOLUME II

Table of Contents

Part 3

Table of Contents

Additional Information Requirements Protection of Groundwater

Part 4

Table of Contents

Solid Waste Management Units

OU-1289 Mixed Waste Landfill

SWMU 76 Mixed Waste Landfill Site Summary

SWMU 76 Site Map

OU-1295 Septic Tanks and Drainfields

SWMU 49 Building 9820 Drains Site Summary

SWMU 49 Site Map

SWMU 101 Explosive Contaminated Sumps, Drains (Building 9926) Site Summary

SWMU 101 Site Map

SWMU 116 Building 9990 Septic System Site Summary

SWMU 116 Site Map

SWMU 137 Building 6540-6542 Septic System Site Summary

SWMU 137 Site Map

SWMU 138 Building 6630 Septic System Site Summary

SWMU 138 Site Map

SWMU 140 Building 9965 Septic System (Thunder Range) Site Summary

SWMU 140 Site Map

SWMU 146 Building 9920 Drain System Site Summary

SWMU 146 Site Map

SWMU 147 Building 9925 Septic Systems Site Summary

SWMU 147 Site Map

SWMU 148 Building 9927 Septic System Site Summary

SWMU 148 Site Map

SWMU 149 Building 9930 Septic System Site Summary

SWMU 149 Site Map

SWMU 150 Building 9939-9939A Septic Systems Site Summary

SWMU 150 Site Map

SWMU 152 Building 9950 Septic System Site Summary

SWMU 152 Site Map

SWMU 153 Building 9956 Septic Systems Site Summary

SWMU 153 Site Map

SWMU 154 Building 9960 Septic Systems Site Summary

SWMU 154 Site Map

SWMU 161 Building 6636 Septic System Site Summary

SWMU 161 Site Map

OU-1302 TA-I

SWMU 30 PCB Spill (Reclamation Yard) Site Summary

SWMU 30 Site Map

SWMU 33 Motor Pool Oil Spill Site Summary

SWMU 33 Site Map

SWMU 96 Storm Drain System Site Summary
SWMU 98 Building 863 TCA Photochemical Releases Site Summary
SWMU 98 Site Map
SWMU 187 TA-I Sanitary Sewer Lines Site Summary
SWMU 190 Steam Plant Tank Farm Site Summary
SWMU 190 Site Map
SWMU 226 Old Acid Waste Line (TA-I) Site Summary

OU-1303 TA-II

SWMU 1 Radioactive Waste Landfill (TAII) Site Summary
SWMU 1 Site Map
SWMU 2 Classified Waste Landfill (TA-II) Site Summary
SWMU 2 Site Map
SWMU 3 Chemical Disposal Pit (TA-II) Site Summary
SWMU 48 Building 904 Septic System (TA-II) Site Summary
SWMU 48 Site Map
SWMU 114 Explosive Burn Pit (TA-II) Site Summary
SWMU 114 Site Map
SWMU 135 Building 906 Drain System Site Summary
SWMU 135 Site Map
SWMU 136 Building 907 Septic System Site Summary
SWMU 136 Site Map
SWMU 159 Building 935 Septic System Site Summary
SWMU 159 Site Map
SWMU 165 Building 901 Septic System Site Summary
SWMU 165 Site Map
SWMU 166 Building 919 Septic System Site Summary
SWMU 166 Site Map
SWMU 167 Building 940 Septic System Site Summary
SWMU 167 Site Map

OU-1306 TA 3/5

SWMU 18 Concrete Pad Site Summary
SWMU 18 Site Map
SWMU 26 Burial Site (Western Part of TA-III) Site Summary
SWMU 26 Site Map
SWMU 35 Vibration Facility Oil Spill (TA-III) Site Summary
SWMU 35 Site Map
SWMU 78 Gas Cylinder Disposal Pit (TA-III) Site Summary
SWMU 78 Site Map
SWMU 83 Long Sled Track (TA-III) Site Summary
SWMU 83 Site Map
SWMU 84 Gun Facilities (TA-III) Site Summary
SWMU 84 Site Map
SWMU 107 Explosives Test Area (Southeast TA-III) Site Summary
SWMU 107 Site Map
SWMU 196 Building 6597 Cistern (TA-V) Site Summary
SWMU 196 Site Map
SWMU 240 Short Sled Track Site Summary
SWMU 240 Site Map

SWMU 241 Storage Yard Site Summary
SWMU 241 Site Map

- OU-1307 Liquid Waste Disposal System (LWDS)
SWMU 4 LWDS Surface Impoundments Site Summary
SWMU 4 Site Map
SWMU 5 LWDS Drainfield Site Summary
SWMU 5 Site Map
SWMU 52 LWDS Holding Tanks Site Summary
SWMU 52 Site Map

- OU-1309 Tijeras Arroyo
SWMU 45 Liquid Discharge (Behind TA-IV) Site Summary
SWMU 45 Site Map
SWMU 46 Old Acid Waste Line Outfall (Southwest of TA-IV) Site Summary
SWMU 46 Site Map
SWMU 227 Bunker 904 Outfall (Southeast of TA-II) Site Summary
SWMU 227 Site Map
SWMU 229 Storm Drain System Outfall (Southeast of TA-II) Site Summary
SWMU 229 Site Map
SWMU 230 Storm Drain System Outfall (East side of TA-IV) Site Summary
SWMU 230 Site Map
SWMU 231 Storm Drain System Outfall (Southeast Side of TA-IV) Site Summary
SWMU 231 Site Map
SWMU 232 Storm Drain System Outfall (Southeast of TA-IV) Site Summary
SWMU 232 Site Map
SWMU 233 Storm Drain System Outfall (South side of TA-IV) Site Summary
SWMU 233 Site Map
SWMU 234 Storm Drain System Outfall (South side of TA-IV) Site Summary
SWMU 234 Site Map

- OU-1332 Foothills Test Area
SWMU 8 Open Dump (Coyote Canyon Blast Area) Site Summary
SWMU 8 Site Map
SWMU 28 Mine Shafts Site Summary
SWMU 28-2 Site Map
SWMU 58 Coyote Canyon Blast Area Site Summary
SWMU 58 Site Map
SWMU 66 Boxcar Site Summary
SWMU 66 Site Map
SWMU 87 Building 9990 Firing Site Summary
SWMU 87 Site Map

- OU-1333 Canyons Test Area
SWMU 94 Lurance Canyon Burn Site Summary
SWMU 94b Site Map
SWMU 94f Site Map
SWMU 94h Site Map

- OU-1334 Central Coyote Test Area

SWMU 9 Burial Site-Open Dump (Schoolhouse Mesa) Site Summary
SWMU 9 Site Map
SWMU 68 Old Burn Site Summary
SWMU 68 Site Map

OU-1335

SWMU 91 Lead Firing Site (Thunder Range) Site Summary
SWMU 91 Site Map

Sites Qualified to Be on Permit

Building 828 Site Summary
Building 828 Site Map
TNT Site Summary
TNT Site Map

NERDSS Sites Qualified to Be on Permit

SWMU 276 Former Building 829X Silver Recovery Sump, TA-1 Site Summary
SWMU 276 Site Map
SWMU 1001 Building 898 Septic System, TA-1 Site Summary
SWMU 1001 Site Map
SWMU 1003 Building 915-922 Septic System, TA-II Site Summary
SWMU 1003 Site Map
SWMU 1004 Building 6969 Septic System Robotic Vehicle Range Site Summary
SWMU 1004 Site Map
SWMU 1006 Building 6741 Septic System, TA-III Site Summary
SWMU 1006 Site Map
SWMU 1007 Building 6730 Septic System, TA-III Site Summary
SWMU 1007 Site Map
SWMU 1008 Building 6750 Septic System, TA-III Site Summary
SWMU 1008 Site Map
SWMU 1009 Building 6620 Internal Sump, TA-III Site Summary
SWMU 1009 Site Map
SWMU 1010 Building 6536 Septic and Drain Systems, TA-III Site Summary
SWMU 1010 Site Map
SWMU 1014 Former Buildings T-12, T-43 Septic System, TA-V Site Summary
SWMU 1014 Site Map
SWMU 1015 Former MO 231-234 Septic System, TA-V Site Summary
SWMU 1015 Site Map
SWMU 1020 MO-146, MO-235, and T-40 Septic System, TA-III Site Summary
SWMU 1020 Site Map
SWMU 1024 MOs 242-245 Septic System, TA-III Site Summary
SWMU 1024 Site Map
SWMU 1025 Building 6501 East Septic System, TA-III Site Summary
SWMU 1025 Site Map
SWMU 1026 Building 6501 West Septic System, TA-III Site Summary
SWMU 1026 Site Map
SWMU 1027 Building 6530 Septic System, TA-III Site Summary
SWMU 1027 Site Map
SWMU 1028 Building 6560 Septic System, TA-III Site Summary
SWMU 1028 Site Map

SWMU 1029 Building 6584 North Septic System, TA-III Site Summary
SWMU 1029 Site Map
SWMU 1030 Building 6587 Septic System, TA-III Site Summary
SWMU 1030 Site Map
SWMU 1031 Former Buildings 6589-6600 Septic System TA-III Site Summary
SWMU 1031 Site Map
SWMU 1032 Building 6610 Septic System, TA-III Site Summary
SWMU 1032 Site Map
SWMU 1033 Building 6631 Septic System, TA-III Site Summary
SWMU 1033 Site Map
SWMU 1034 Building 6710 Septic System, TA-III Site Summary
SWMU 1034 Site Map
SWMU 1035 Building 6715 Septic System, TA-III Site Summary
SWMU 1035 Site Map
SWMU 1036 Building 6922 Septic System, TA-III Site Summary
SWMU 1036 Site Map
SWMU 1052 Building 803 Seepage Pit, TA-I Site Summary
SWMU 1052 Site Map
SWMU 1072 Building T-52 and Former Building 6500 Septic System, TA-V Site Summary
SWMU 1072 Site Map
SWMU 1073 Building 6580 Seepage Pit, TA-V Site Summary
SWMU 1073 Site Map
SWMU 1077 Building 6920 Septic System, TA-III Site Summary
SWMU 1077 Site Map
SWMU 1078 Building 6640 Septic System, TA-III Site Summary
SWMU 1078 Site Map
SWMU 1079 Building 6643 Septic System, TA-III Site Summary
SWMU 1079 Site Map
SWMU 1080 Building 6644 Septic System, TA-III Site Summary
SWMU 1080 Site Map
SWMU 1081 Building 6650 Septic System, TA-III Site Summary
SWMU 1081 Site Map
SWMU 1082 Building 6620 Septic System, TA-III Site Summary
SWMU 1082 Site Map
SWMU 1083 Building 6570 Septic System (TA-III) Site Summary
SWMU 1083 Site Map
SWMU 1084 Building 6505 Septic System, TA-III Site Summary
SWMU 1084 Site Map
SWMU 1086 Building 6523 Septic System, TA-III Site Summary
SWMU 1086 Site Map
SWMU 1087 Building 6743 Seepage Pit, TA-III Site Summary
SWMU 1087 Site Map
SWMU 1089 Building 6734 Seepage Pit, TA-III Site Summary
SWMU 1089 Site Map
SWMU 1090 Building 6721 Septic System, TA-III Site Summary
SWMU 1090 Site Map
SWMU 1091 Building 6720 Septic System TA-III Site Summary
SWMU 1091 Site Map
SWMU 1092 MOs 228-230 Septic System, TA-III Site Summary
SWMU 1092 Site Map

SWMU 1093 Building 6584 W Septic System, TA-III Site Summary
SWMU 1093 Site Map
SWMU 1094 Live Fire Range East Septic System, Lurance Canyon Site Summary
SWMU 1094 Site Map
SWMU 1095 Building 9938 Seepage Pit, Coyote Test Field Site Summary
SWMU 1095 Site Map
SWMU 1096 Building 6583 Septic System, TA-III Site Summary
SWMU 1096 Site Map
SWMU 1098 TA-V Plenum Rooms Seepage Pit, TA-V Site Summary
SWMU 1098 Site Map
SWMU 1101 Building 885 Septic System, TA-I Site Summary
SWMU 1101 Site Map
SWMU 1102 Building 889 Septic System, TA-I Site Summary
SWMU 1102 Site Map
SWMU 1104 Building 6595 Seepage Pit, TA-V Site Summary
SWMU 1104 Site Map
SWMU 1105 Building 6596 Seepage Pit, TA-V Site Summary
SWMU 1105 Site Map
SWMU 1108 Building 6531 Seepage Pits, TA-III Site Summary
SWMU 1108 Site Map
SWMU 1110 Building 6536 Drain System, TA-III Site Summary
SWMU 1110 Site Map
SWMU 1111 Building 6720 Seepage Pit, TA-III Site Summary
SWMU 1111 Site Map
SWMU 1112 Building 6590 Reactor Sump Drywell, TA-V Site Summary
SWMU 1112 Site Map
SWMU 1113 Building 6597 Drywell, TA-V Site Summary
SWMU 1113 Site Map
SWMU 1114 Building 9978 Drywell, Coyote Test Field Site Summary
SWMU 1114 Site Map
SWMU 1115 Former Solar Complex Offices Septic System Site Summary
SWMU 1115 Site Map
SWMU 1116 Building 9981A Seepage Pit, Solar Tower complex Site Summary
SWMU 1116 Site Map
SWMU 1117 Building 9982 Drywell, Solar Tower complex Site Summary
SWMU 1117 Site Map
SWMU 1120 Building 6643 Seepage Pit, TA-III Site Summary
SWMU 1120 Site Map

NOTE: figures that are NOT included in this electronic copy:

Part 4: Figure—Location of Solid Waste Management Units, Sites Qualified to be on the Permit, and the Chemical Waste Landfill at SNL New Mexico

VOLUME III

Part 5

Corrective Action Management Unit—Table of Contents

Class III Permit Modification Request for the Management of Hazardous Remediation Waste

Figures

Appendix A—Waste Analysis Plan

Appendix B—Attachment G—Supplement to Site-Wide Contingency

Appendix C—Personnel Training Plan

Appendix D—Closure Plan

Appendix E—Alternative to Groundwater Monitoring

Attachment E1—Hydraulic Conductivity Values

Attachment E2—Sampling and Analysis Plan for the CWL Sanitary Sewer Line Monitoring System

Attachment E3—Sampling and Analysis Plan for the Primary Subliner Monitoring System

Attachment E4—Sampling and Analysis Plan for the Vertical Sensor Array Monitoring System

Attachment E5—Monitoring System Analytes Using EPA Method TO-14

Attachment E6—Estimation of Runoff at the SNL/NM TA III for the 24-hour 100-year Precipitation Event

Appendix F—Quality Assurance Plan for the CAMU Containment Cell

NOTE: Attachment B specifications are not included in this electronic copy

Appendix G—Operating Procedures

Appendix H—DOE Authorized Limit for Unrestricted Release

Appendix I—Calculation of SNL/NM CAMU Threshold Levels

Temporary Authorization Request for Low-Temperature Thermal Desorption Treatment Operations

Appendix A—CAMU Cross-Sections, Vicinity Maps, and Meteorological Data

Appendix B—Proof of Performance Test Results for the Longhorn Army Ammunition Plant—Dioxin/Furan Emission Estimates

Appendix C—Sampling and Analysis Plan

Appendix D—Addendum to the Personnel Training Plan

Appendix E—Interim Closure Plan for the Treatment Operations

Class II Permit Modification Request for Temporary Unit Treatment Operations

Appendix A—Cross-Sectional Diagram of the CAMU, TA III and Two Vicinity Maps Containment Cell Details (figure)

Containment Cell Cap Details (figure)

Appendix B—Soil Washing Treatment Operations and Unit Design

Appendix C—Sampling and Analysis Plan for the Temporary Treatment Unit Operations

Appendix D—Addendum to the Personnel Training Plan

Appendix E—Interim Closure Plan for the Temporary Unit Treatment Operations

NOTE: figures that are NOT included in this electronic copy:

Part 5, CAMU: Figure 2-3 Location Map