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EG&G	Pelan, Michael D.
EG&G 7116	Vieth, Edward A.
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FSN	Stanley, Bruce T.
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GEOMATRIX	Hanson, Kathrine A.
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GEOMATRIX	Kelson, Keith Lettis, William R.
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GEOMATRIX	Wesling, John R.
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H&N	De Klever, Richard Greenwold, Richard C
H&N	Greenwold, Richard C
H&N	Linder, Fred J.
H&N	Schreiner, Randolph
HOLOMETRIX	Soos, Troy Case, John B.
ITC	Case, John B.
ITC	Schultz, Mike
JFTA	Aggson, James R.
JFTA	Hardy, Michael P.
LANL	Bolivar, Stephen L.
LANL	Herbst, Richard J.
LANL	Kalia, Hemendra N.
LANL	Travis, Bryan J.
LANL	Waste Management Off
LATA	Horne, Carolyn A.
LATA	Tillery, Pat M.
LATA 6311	Kalinski, Richard C.
LATA 6311	Seylar, Ronald F.
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LATA 6318	Switzer, Susan K. Doughty, Christine
LBL	Hale, Frank
LBL	Narasimhan, T. N.
LBL	Pruess, Karsten
LBL LBL	Tsang, Yvonne
LBL	Wang, Joe
LLNL	Jardine, Leslie J.
LLNL	Nitao, John J.
MACTEC	Barnes, Curt H.
MACTEC	Foreman, Charles E.
MACTEC 6319	Voigt, James V.
MVS	Wallace, K. G.
NER	Martin, Randolph J.
NWPO	Loux, Robert R.
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PBQ&D	Grieves, Maurice
PBQ&D	Harig, Richard F.
PBQ&D	Richardson, Archie
PNL	Nelson, R. William
PURDUE	Harr, Milton E.
RE/SPEC	Director, Q/A
RE/SPEC	Gnirk, Paul F.
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REECO	Pritchett, Robert F.
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SNLA 6233	Thompson, Mollie E.
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SNLA 6312	Dunn, Ellen T.
SNLA 6312	Heerdt, Mary J.
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SNLA 6312	Shannon, Sharon A.
SNLA 6312	Wilson, Mike L.
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SNLA 6313	Barnard, Ralston W. Blejwas, Thomas E.
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SNLA 6318	Hann, James H.
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SNLA 6318	Tang, Mary A.
SNLA 6319	Baehr, Richard M.
SNLA 6319	Richards, Robert R.
SNLA 6319	Smit, Gene A.
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SNLA 6410	Dahlgren, Dirk A.
SNLA 6415	Tierney, Martin S.
SNLA 6416	Bonano, Evaristo J.
SNLA 6416	Gallegos, David P.
SNLA 7223	Easterling, Bob G.
SNLA 7223	Rutherford, Brian M.
SNLA 7223	Spencer, Floyd W.
SNLA 7252	Arana, Chris R.
SNLA 7522	McCartney, Larry J.
SNLA 7522	Tripp, Judith L.
SNLA 7544	Kelton, David W.
SNLA 9310	Plimpton, James D.
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SNLA 9311	Garbin, H. Douglas
SNLA 9311	Long, Jerald W.
SNLA 9311	Phillips, James S.
SNLA 9316	Dolce, Sanders R.
SNLA 9316	Kinabrew, Clifton B.
SNLA 9316	Steinfort, Terry D.
SNLA 9325	Browne, Douglas C.
SNLA 9325	Lee, Jimmy G.
SNLA 9325	Loukota, John J.
SNLA 9325	Rutter, Robert L.
SNLA 9331	Brouillard, A. John
SNLA 9331	Dye, Richard J.
SNLA 9331	Edwards, Bobby G.
SPECTRA 6312	Dudley, Alan L.
SPECTRA 6313	Gauthier, Jack H.
T&MSS	Davenport, John M.
TRI	Waste Dept. Manager
TRI 6318	Bemesderfer, Joy
TRI 6318	Luetjens, Charlene
TRI 6318	Salisbury, Mary
TRI 6318	Tenorio, Cindy A.
UNM	Connolly, James R.
UNM	Husler, John W.
US NRC	Gilray, John W.
US NRC	Vennedy James F
	Kennedy, James E.
USGS USGS	Craig, Robert
	Hayes, Larry R.
WES/COE	Oldham, Jessie
WES/COE	Wong, G. Sam
WESTON	Kumar, Prasamma
6310	33/12914/REC/1.6/NQ
6310	YMPCRF

# SANDIA NATIONAL LABORATORIES NUCLEAR WASTE REPOSITORY TECHNOLOGY DEPARTMENT 6310 MASTER LIST OF CONTROLLED DOCUMENTS

APPROVED:	E Sharpton RECORDS MANAGER	3/9/9C DATE
APPROVED:	RP Sandoral SUPERVISOR	3/12/90 DATE

EFFECTIVE DATE: 3/12/90

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#### 1.0 Using this Document

This document contains a listing of

- · SNL NWRT Department 6310 controlled documents,
- YMP Administrative Procedures (APs) implemented directly by SNL NWRT Department 6310, and
- other YMP reference documents (mostly YMP controlled documents)

#### 1.1 NWRT Department 6310 Controlled Documents

SNL NWRT Department 6310 documents designated to be controlled by and issued through the NWRT Department Document Control System are categorized as "QA Implementing Procedures" and "Other Controlled Documents," as shown below.

· QA Implementing Procedures

SNL NWRT Department QA Implementing Procedures are comprised of Quality Assurance Procedures (QAPs) and Department Operating Procedures (DOPs). These procedures are listed in numeric order in Section 2.1 of this document.

· Other Controlled Documents

All other SNL NWRT Department controlled documents are listed in alphabetical order by type (i.e., in Section 2.2 of this document, as shown in the Table of Contents.

# 1.2 <u>YMP Administrative Procedures (APs) Implemented Directly by SNL NWRT Department 6310</u>

All YMP APs implemented directly by SNL NWRT Department 6310 are listed in Section 3.0 of this document. No NWRT Department QA implementing procedures (i.e., QAPs or DOPs) have been written to implement these APs in full. APs are issued and controlled by the YMP. A complete set of all YMP APs is maintained for NWRT Department staff use in the NWRT Department Records Center. To be placed on distribution for the APs, complete the YMP request form available from the NWRT Department Controlled Document staff.

### 1.3 Subject Listing of Procedures

QAPs, DOPs, and APs are listed by subject (e.g., Analysis, Design, Testing, etc.) in Section 4.0 of this document, as shown in the Table of Contents.

#### 1.4 YMP Reference Documents

Other YMP documents (mostly YMP controlled documents), which are maintained for reference purposes in the NWRT Department Records Center, are listed in Section 5.0 of this document. For a complete listing of YMP controlled documents, see the NWRT Department Controlled Document staff.

# 2.0 <u>SNL NWRT Department 6310 Controlled Documents</u>

SNL NWRT Department 6310 documents designated to be controlled by and issued through the NWRT Department Document Control System are grouped into two categories, "QA Implementing Procedures" and "Other Controlled Documents," as shown in Sections 2.1 and 2.2 of this document.

# 2.1 **QA Implementing Procedures**

<u>Document</u>	Rev	<u>ICN</u>	<u>Title</u>
QAP 01-01	0	01	QAPP Control
QAP 01-03	A	00	Quality-Related Work Stoppages
QAP 01-04	0	01.	Resolution of QA Disputes
DOP 02-01	A	01	Task Definition Statements
DOP 02-02	E	00	Study Plan Requirements
DOP 02-03	A	00	Work Plans
DOP 02-04	A	00	Analysis Control and Verification
QAP 02-05	С	00	Training and Familiarization Procedures
DOP 02-06	С	02	Qualification and Certification of Project Personnel
QAP 02-07	D	00	Qualification of Quality Assurance Program Audit Personnel
DOP 02-08	A	00	Conduct and Reporting of Management Assessments
DOP 02-09	A	00	Preparedness Review
DOP 03-01	D	01	Preparing, Reviewing, Approving, and Issuing Engineering Drawings
DOP 03-02	В	00	Software Quality Assurance Requirements
DOP 03-03	С	01	Analysis Definition Requirements
DOP 03-04	D	02	Design Investigation Control
DOP 03-05	В	01	Design Control and Verification
DOP 03-06	С	01	Design Change Control
DOP 03-07	В	02	Technical Data Base

Document	Rev	<u>ICN</u>	<u>Title</u>
DOP 03-08	С	00	Reference Information Base Change Process
DOP 03-09	С	01	Interface Control of NWRT Engineering
DOP 03-10	A	00	Routine Calculations
DOP 03-11	A	01	Requirements for Submitting Data to the SEPDB
DOP 03-12	A	01	Peer Reviews
DOP 03-13	C	00	Independent Technical and Management Reviews of Documents
DOP 03-15	A	00	Providing Instructions for NTS Contractor Work
DOP 03-16	A	02	Interface Interactions
DOP 03-17	0	01	Preparing Technical Information Documents
DOP 04-01	С	01	Procurement Document Requirements
DOP 05-01	С	02	Procedure Format and Content Requirements
DOP 05-02	G	00	Technical Procedure Requirements
DOP 05-04	0	00	Use of Quality Related Administrative Procedures (APQs)
DOP 06-01	С	01	Document Control System
DOP 06-02	В	01	Reviewing, Approving, and Issuing Technical Information Documents
DOP 07-01	С	01	Procurement Planning
HQAP 07-01	0	00	Planning, Documentation, and Evaluation of Procurements (Holometrix)
DOP 07-02	В	01	Evaluation for Acceptance of Purchased Items or Services
QAP 07-03	A	00	Evaluation of Contractor QA Program Documents
DOP 08-01	F .	00	Sample Identification and Handling Requirements
DOP 08-02	С	00	Operation of the SNL NWRT Department Samples Library
QAP 10-01	С	00	Surveillance

Document	Rev	ICN	<u>Title</u>
DOP 11-01	G	00	Experiment and Equipment-Test Procedure Requirements
DOP 11-02	D	00	Requirements for Experiment and Equipment-Test Logbooks
DOP 11-03	С	00	Requirements for Interaction with the DRMS
DOP 12-01	D	00	Measuring and Test Equipment Control
DOP 13-01	С	02	Identification, Handling, Shipping, and Storage of Items
HQAP 13-01	0	00	Identification, Handling, Shipping, and Storage of Items (Holometrix)
DOP 14-01	В	00	Status Indication of Items
QAP 15-01	A	00	Nonconformance Control and Reporting
QAP 16-01	В	00	Corrective Action
QAP 16-02	A	00	Deviation Reporting
QAP 16-03	A	00	QA Program Report
DOP 17-01	С	01	Records Management System
DOP 17-02	В	00	DRMS Operation
QAP 18-01	С	00	QA Audits

# 2.2 Other Controlled Documents

# 2.2.1 Design Investigation Memos (DIMs)

Document	<u>Rev</u>	ICN	<u>Title</u>
DIM 020	В	00	Special Studies on Radionuclide Plateout, Dry Deposition, and Fuel Dust
DIM 021	A	00	An Analysis of Scenarios and Potential Radiological Releases Consequences Associated with US Military Aircraft Crashes for the Yucca Mountain Repository
DIM 029	0	00	Ventilation System Investigation and Design Bases
DIM 033	0	00	Document Preparation Support for FY87 Operational Studies Report, SAND87-0088

Document	<u>Rev</u>	ICN	<u>Title</u>
DIM 035	A	00	Repository Design Requirements (RDR)
DIM 037	D	00	Aircraft Crash Consequences Analyses: Part 2
DIM 040	С	00	Source Terms Data Base and Uncertainty Methods Development and Evaluations
DIM 042	0	00	Thermal Consequence of Forced Ventilation System Loss
DIM 043	B	00	MRS System Studies
DIM 044	0	00	Waste Handling BuildingSubsystem Design Studies
DIM 046	0	00	Allowable Stress Levels and Load Combinations for FITS and Non-FITS
DIM 047	0	00	Seismic Design Analysis Methodology for FITS and non-FITS and Methods for Evaluating Seismic Design Margins
DIM 048	0	00	Material Specifications for use in the Surface Facilities
DIM 049	0	00	Design of Seismic Joints
DIM 050	0 .	00	Effects of Various Radiation Source Characteristics on Shielding Requirements
DIM 051	A	00	Establish Physical Characteristics of Waste Handling Equipment
DIM 052	0	00	Shipping Cask Decontamination and Maintenance Facility
DIM 053	0	00	Repository Criticality Safety Study
DIM 054	В	00	MRS Case 2 and 5 Design Development
DIM 055	0	00	Passive VentilationSurface Storage Vault Module
DIM 056	0	00	Exploratory Shaft Facilities Items Important to Safety
DIM 057	0	00	Fault Displacement Analysis Methodology for the Surface Structures of the Yucca Mountain Repository
DIM 058	0	00	Uniform Cost Estimating Model Support Costpro Evaluation

Document	Rev	ICN	<u>Title</u>
DIM 059	0	00	Summary of BNI Studies and Reports
DIM 060	0	00	Repository Items Important to Safety
DIM 102	E	00	Waste Emplacement Orientation Study
DIM 130	С	00	Alternatives for Underground Design
DIM 131	A	00	Seismic Design Criteria
DIM 132	В	00	Seals Integration
DIM 133	В	00	Review of Preliminary Drift Design Methodology
DIM 134	С	00	Criteria for Usable/Required Underground Area
DIM 135	С	00	Design and Review Support for the ESF
DIM 136	A	00	ESF/Repository Interface Working Group (ICWG)
DIM 137	A	00	Performance Conformation
DIM 138	A	00	Cost and Schedule
DIM 139	A	00	Waste Emplacement Geometry
DIM 140	В	00	Retrieval Strategy
DIM 142	В	00	Review of the Underground Layout
DIM 143	A	00	Document Preparation and Support for FY87 Operational ReportSAND87-0088
DIM 144	A	00	Repository Design Requirements (RDR)
DIM 146	В	00	Ventilation System Analysis, Design, and Design Review
DIM 147	В	00	Case History Evaluations
DIM 148	С	00	Empirical Analyses of Opening Stability
DIM 149	В	00	Shaft Analysis
DIM 151	A	00	MRS System Studies
DIM 152	0	00	Scoping and Preliminary Studies to Support the Yucca Mountain Project
DIM 154	0	00	An Evaluation of the Available Technologies for Sealing Underground Openings, Shafts and Ramps

Document	Rev	ICN	Title
DIM 155	0	00	Repository Items Important to Safety
DIM 156	0	00	Alternatives for Access and Subsurface Designs
DIM 202	0	00	Design (and Associated Design Modification) of Development Prototype Boring Machine (DPBM)
DIM 203	0	00	Conceptual Design of Off-Normal Retrieval Equipment
DIM 204	0	00	Conceptual Design of Emplacement/Retrieval (E/R) System
DIM 205	С	00	Waste Emplacement Orientation Recommendation
DIM 206	0	00	Radiological Conditions Underground
DIM 208	0	00	Support of Underground Service System Design
DIM 209	0	00	Support of Systems Engineering for Repository Design Requirements (RDR)
DIM 212	0	00	MRS Systems Studies
DIM 213	0	00	Shaft and Ramp Design Support
DIM 214	0	00	Evaluate Truck-Rail Ratio Impact or Repository Design
DIM 215	0	00	Support and Review of Underground Excavation Design
DIM 216	A	00	Preparation of Miscellaneous Documents
DIM 217	0	00	Waste Emplacement Orientation Recommendation
DIM 218	0	00	Life Cycle Plan for a Simulation System to Model Repository Systems
DIM 219	0	00	Development of a Simulation System to Model Repository Operations
DIM 220	В	00	Records Compilation for SAND84-1895
DIM 221	B	00	Records Compilation for SAND85-0598
DIM 223	0	00	SCP Progress Reports
DIM 224	0	00	SCP Completion Activities

Document	Rev	<u>ICN</u>	<u>Title</u>
DIM 232	0	00	Assist in Preparation of the ESF Title I Design Report
DIM 234	0	00	Position Paper on Retrievability
DIM 235	0	00	Position Paper on the Disturbed Zone
DIM 236	0	00	Records Management Support
DIM 237	0	00	Technical Support for the MGDSTransportation System Interface Committee
DIM 238	0	00	Preliminary Drift Design Methodology for the Yucca Mountain Project
DIM 239	0	00	Development of a Strategy for Sealing Exploratory Boreholes
DIM 240	0	00	Development of a Decision Methodology for the ESF Alternatives Study
DIM 241	0	00	Selection of Evaluation Panel Members
DIM 242	0	00	Development of Preliminary Screening Criteria and Method for the ESF Alternative Study
DIM 243	0	00	Identification of Repository Access and ESF Options
DIM 244	0	00	Identification of Repository and ESF Design Performance and Construction Requirements
DIM 245	0	00	Development of Influence Diagrams and Performance Measures for the ESF Alternative Study

# 2.2.2 Experiment Procedures (EPs)

<u>Document</u>	Rev	<u>ICN</u>	<u>Title</u>
EP 0001	A	00	Geologic Surface and Trench Mapping Near Prospective Surface Facilities
EP 0002	С	00	Effects on Variable Environmental Conditions on Compressive Mechanical PropertiesHigh Temperature/Low Strain Rate Experiments
EP 0004	A	00	Experiment Procedures for Acquiring, Digitizing, Processing, Storing, and Retrieving Ground Motion Data from Underground Nuclear Explosions

Document	Rev	ICN	<u>Title</u>
EP 0006	A	00	Prototype Thermal Stress Testing
EP 0007	В	00	Characterization of the Mineralogy and Petrology of Mechanical Test Samples
EP 0008	0	00	Procedure for Saturation-Pulse Imbibition Experiment
EP 0010	0	00	Bulk Property Measurements on Posttest Mechanical Samples
EP 0011	0	00	Prototype Testing of Blast Effects on Instrumentation in Support of Exploratory Shaft Hydrologic Testing
EP 0012	В	00	Alteration of the Consolidation Behavior and Hydraulic Conductivity of Crushed Tuff Due to the Presence of Fine-Sized Particles
EP 0013	0	00	Detailed Test Plan for Prototype In-Situ Stress Testing
EP 0014	0	00	Development of Tensile Strength Techniques in the Geomechanics Laboratory
EP 0015	0	00	Preliminary Investigation of the Mechanical Anisotropy in Samples of the Topopah Spring Member
EP 0016	0	00	Fracture Properties Testing: Comparison of Triaxial and Rotary Shear Techniques
EP 0018	A	00	Measurement of Tunnel Response Under Explosion Generated Loading
EP 0019	0	00	Rock Mass Response Experiment
EP 0020	0	00	Experiment Procedure for Evaluating the Effects of Explosively Generated Loads on Tunnels
EP 0025	0	00	Preliminary Investigation of the Effects of Partial Saturation on the Mechanical Behavior of Tuff
EP 0027	0	00	Developmental Ground Penetrating Radar Survey Testing
EP 0031	0	00	Unsaturated Flow and Transport Experiment

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# 2.2.3 Interaction Task Memos (ITMs)

<u>Document</u>	<u>Rev</u>	ICN	Title
ITM 002	A	00	ESF Testing Interface Interactions
ITM 003	A	00	ESF Fault Technical Assessment Review (TAR) Activities
ITM 004	A	00	Review of Documentation Packages Resulting from AP-6.8Q, AP-6.10Q, and AP-6.11Q
ITM 005	0	00	Verification of ESF SDRD Benchmark #6
ITM 006	0	00	Interactions Between RIB Development and ESF Title II Activities
ITM 010	0	00	ESF Alternatives Study
	ITM 002 ITM 003 ITM 004 ITM 005 ITM 006	ITM 002 A ITM 003 A ITM 004 A ITM 005 0 ITM 006 0	ITM 002 A 00 ITM 003 A 00 ITM 004 A 00 ITM 005 0 00 ITM 006 0 00

# 2.2.4 Problem Definition Memos (PDMs)

<u>Document</u>	<u>Rev</u>	<u>ICN</u>	<u>Title</u>
PDM 71-32	A	00	Preliminary Benchmark Problem I: Thermo- mechanical Analysis Using a Jointed Rock-Mass Model
PDM 71-33	A	00	Analysis of Spatial Variability of Properties and of the Effect of Parameter Variation on Properties
PDM 71-34	0	00	Verification Analyses for SPECTROM-31
PDM 71-36	0	00	Verification Analyses for SPECTROM-349
PDM 71-39	0	00	In Situ Stress Analysis for the ESF
PDM 71-40	0	00	Analyses to Support Development of Slot Cutting Methods for ESF Thermomechanical Testing
PDM 71-42	0	00	Analyses of the G-Tunnel High-Pressure Flat Jack Development Test
PDM 72-11	В	00	COVE3a Benchmarking Nonisothermal SNL 1511, LBL, LANL
PDM 72-21	0	00	Development of an Analytical Solution of an Emplaced Heat Source
PDM 72-23	A	00	Part I: Ambient Movement of Gas at Yucca Mountain

<u>Document</u>	Rev	ICN	Title
PDM 75-11	0	00	A Parametric Study of Controlling Variables of the Areal Power Density (APD) in Support of ACD
PDM 75-12	0	00	NNWSI Approach for Evaluating Excavation Stability
PDM 75-13	B	00	3-D Far-Field Analyses for the ESF
PDM 75-14	0	00	Thermal Effects on Rock Bolts
PDM 75-15	0	00	Near-Field Analyses for the Exploratory Shaft Facility
PDM 75-16	0	00	Analysis of Ground Motion Data and Theoretical Calculations in Support of the Quantification of Seismic Risk at the Yucca Mountain Site
PDM 75-17	0	00	Thermal Modeling in Support of the Waste Package Emplacement
PDM 75-19	В	00	Shaft Liner Analysis
PDM 75-21	0	00	Scoping Studies to Investigate Two-Phase Flow Phenomena
PDM 75-22	0	00	Preliminary Investigation of the Effects of Pore- Water Boiling, Temperature-Dependant Thermal Properties, and the Modeling of Air Spaces as Rock
PDM 76-05	A	00	Analysis (Using EQ3NR/EQ6) of the Geochemical Effects of Cementitious Materials on Ground Water and Tuff in the MPZ and at the Base of the Shaft
PDM 76-06	0	00	Hydrologic-Related Analyses to Support Development of Section 8.4 of the SCP

# 2.2.5 Task Definition Statements (TDSs)

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Document	Rev ICN	<u>Title</u>
TDS 1410-89	A 00	Conceptual Design of Robotic Nuclear Waste Monitoring and Handling Equipment for the Yucca Mountain Project
TDS 1510-89	0 00	Code Development, Analysis, and Experimental Support for the Yucca Mountain Project
TDS 1520-89	A 00	Thermal and Mechanical Analyses for the Yucca Mountain Project

Document	Rev	<u>ICN</u>	Title
TDS 6230-89	0	00	Rock Mechanics Investigations for the Yucca Mountain Project
TDS 6410-90	0	00	Analysis Support
TDS 7110-89	0	00	Underground Nuclear Explosions (UNE) Data for the Yucca Mountain Project (YMP)
TDS 7120-89	A	00	Rock Mechanics Investigations for the Yucca Mountain Project
TDS 7130-89	0	00	Rock Mechanics Investigations for the Yucca Mountain Project
TDS 7220-89	0	00	Statistical Analysis and Support for the Yucca Mountain Project

# 2.2.6 Technical Procedures (TPs)

Document	<u>Rev</u>	<u>ICN</u>	<u>Title</u>
TP 051	0	00	Preparing Cylindrical Samples, Including Inspection of Dimensional and Shape Tolerances
TP 059	С	00	Procedure for Laboratory Sample Petrology Determination
TP 060	В	00	Procedures for Preparation of Polished Thin Sections
TP 061	A	01	Procedure for Laboratory Sample Bulk Chemical Determination
TP 062	В	00	Laboratory Procedures for Mineralogic Analysis by X-Ray Powder Diffraction, Part 1: Data Gathering
TP 064	0	00	Procedure for Vacuum Saturation of Geologic Core Samples
TP 065	A	00	Drying Geologic Core Samples to Constant Weight
TP 082	В	00	Procedures for Acquiring, Digitizing, Processing, Storing, and Retrieving Ground Motion Data from Underground Nuclear Explosions
TP 083	0	00	Verification of PNE Amplifier Gains and Frequency Response
TP 084	0	00	Verification of Tamarac-B Amplifier Gains and Frequency Response

Document	Rev	<u>ICN</u>	<u>Title</u>
TP 085	0	00	Verification of PFTU Amplifier Gains and Frequency Response
TP 086	0	00	Set-Up and Adjustment of TM Control Box (PNE Seismic)
TP 087	0	00	Set-up and Adjustment of TM Control Box
TP 088	0	00	Ground Motion Gage Operation Verification
TP 089	A	00	Procedures for Storing and Retrieving UNE Ground Motion Data Used for the Yucca Mountain Project
TP 090	0	00	Confined Compression Experiments at 250 Degrees C. and a Strain Rate of 10 (-8) s (-1)
TP 091	0	00	Unconfined Compression Experiments at 22 Deg. (C) and a Strain Rate of $10(-9)$ s $(-1)$ .
TP 093	0	00	Load Cell Calibration at New England Research, Inc.
TP 095	0	00	Furnace and Thermocouple Calibration at New England Research, Inc.
TP 096	0	00	Pressure Transducer Calibration at New England Research, Inc.
TP 102	0	00	Laboratory Procedures for Mineralogic Analysis by X-Ray Powder Diffraction Part 2: Data Analysis

# 2.2.7 Work Plans (WPs)

Document	Rev	<u>ICN</u>	Title
WP 12131	A	00	Site and Engineering Properties Data Base (FY89)
WP 12132	A	00	Computer Graphics Data Base (FY89)
WP 12142	A	00	Radionuclide Source Term (FY89)
WP 1232122	A	00	Faulting Potential at the Repository (FY89)
WP 12412	A	00	Design Basis (FY89)
WP 124211	A	00	Rock-Mass Analysis (FY89)
WP 124212	A	00	Field Tests (FY89)
WP 124213	A	00	Laboratory Properties (FY89)

Document	Rev ICN	<u>Title</u>
WP 1242151	A 00	Prototype Geomechanical Testing (FY89)
WP 1242152	A 00	ESF Geomechanical Testing (FY89)
WP 12433	A 00	Shafts and Ramps (FY89)
WP 12461	A 00	Repository Performance Code Development/ Certification (FY89)
WP 12611	0 00	Exploratory Shaft Management, Planning/Technical Assessment (FY90)

# 2.2.8 Other

Document	<u>Rev</u>	ICN	<u>Title</u>
ESIP	0	00	Exploratory Shaft Facility Alternatives Study Implementation Plan
SLTR 88-0001	E	00	SNL NWRT Quality Assurance Program Plan (QAPP)

# 3.0 <u>YMP Administrative Procedures (APs) Implemented Directly by SNL NWRT Department 6310</u>

Document	<u>Rev</u>	<u>ICN</u>	<u>Title</u>
AP 1.1Q	2	01	Preparation, Review, and Approval of Administrative Procedures
AP 1.5Q	0	01	Issuance and Maintenance of Controlled Documents
AP 1.6Q	0	00	Release of Unpublished Information
AP 1.10Q	1	00	Preparation, Review, and Approval of SCP Study Plans (parts incorporated into DOP 2-2)
AP 3.3Q	1	00	Change Control Process
AP 3.6Q	0	00	Configuration Management
AP 5.2Q	0	01	Technical Information Flow to and from the YMP Technical Data Base (parts incorporated into DOP 3-7 and DOP 3-11)
AP 5.4Q	0	01	Assignment of QA Levels
AP 5.9Q	0	00	Qualification of Data or Data Analysis not Developed Under the YMP QA Plan

Document	<u>Rev</u>	ICN	<u>Title</u>
AP 5.13Q	0	01	Readiness Review
AP 5.17Q	0	01	Application of Graded QA
AP 5.19Q	0	01	Interface Control (parts incorporated in DOP 3-16)
AP 5.20Q	0	00	Hold Control
AP 6.2Q	0	00	Management and Operation of Sample Handling Activities at Borehole Sites
AP 6.3Q	0	00	Interaction of Participants and Outside Interests with YMP Sample Management (parts incorporated in DOP 8-1)
AP 6.4Q	0	00	Procedure for the Submittal, Review, and Approval of Requests for Yucca Mountain Project Geologic Specimens
AP 6.6Q	0	00	Field Collection, Documentation and Specimen Removal of Exploratory Shaft and Drift Rock
AP 6.8Q	1	01	Identification of Items Important to Waste Isolation
AP 6.10Q	0	01	Identification of Items Important to Safety
AP 6.11Q	0	01	Identification of Activities to be Placed on the Quality Activities List
AP 6.17Q	0	00	Determination of the Importance of Items and Activities (effective 3-19-9Q; supersedes AP 6.8Q, AP 6.10Q, and AP 6.11Q)

# 4.0 <u>Subject Listing of Procedures</u>

# 4.1 Analysis

Document	<u>Title</u>
DOP 02-04	Analysis Control and Verification
DOP 03-02	Software Quality Assurance Requirements
DOP 03-03	Analysis Definition Requirements
DOP 03-10	Routine Calculations

### 4.2 Change Control

Document Title

DOP 03-06 Design Change Control

DOP 03-08 Reference Information Base Change Process

DOP 03-16 Interface Interactions

AP-3.3Q Change Control Process

AP-5.19Q Interface Control

#### 4.3 Data, Technical

Document Title

DOP 03-02 Software Quality Assurance Requirements

DOP 03-07 Technical Data Base

DOP 03-08 Reference Information Base Change Process

DOP 03-11 Requirements for Submitting Data to the YMP Project Site and Engineering Properties Data Base (SEPDB)

AP-5.2Q Technical Information Flow To and From the YMP Technical Data Base

AP-5.9Q Qualification of Data or Data Analysis Not Developed Under the YMP QA Plan

## 4.4 <u>Design</u>

<u>Document</u> <u>Title</u>

DOP 03-01 Preparing, Reviewing, Approving, and Issuing Engineering Drawings

DOP 03-02 Software Quality Assurance Requirements

DOP 03-04 Design Investigation Control

DOP 03-05 Design Control and Verification

DOP 03-06 Design Change Control

DOP 03-09 Interface Control of NWRT Engineering

DOP 03-10 Routine Calculations

#### 4.5 <u>Interface Interactions</u>

Document Title

DOP 03-16 Interface Interactions

AP-5.19Q Interface Control

#### 4.6 Personnel Certification, Familiarization, Training

Document Title

QAP 02-05 Training and Familiarization Procedures

DOP 02-06 Qualification and Certification of Project Personnel

QAP 02-07 Qualification of Quality Assurance Program Audit Personnel

### 4.7 Procurement

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Document Title

DOP 04-01 Procurement Document Requirements

DOP 07-01 Procurement Planning

DOP 07-02 Evaluation for Acceptance of Purchased Items or Services

#### 4.8 Quality Assurance

Document Title

QAPP SNL NWRT Department Quality Assurance Program Plan (QAPP), SLTR88-0001

QAP 01-01 Quality Assurance Program Plan Control

QAP 01-03 Quality-Related Work Stoppages

QAP 01-04 Resolution of Quality Assurance Disputes

DOP 02-08 Conduct and Reporting of Management Assessments

DOP 02-09 Preparedness Review

DOP 05-01 Procedure Format and Content Requirements

DOP 05-04 Use of Quality Related Administrative Procedures (APQs)

QAP 07-03 Evaluation of Contractor QA Program Documents

Document Title QAP 10-01 Surveillance Requirements QAP 15-01 Nonconformance Control and Reporting QAP 16-01 Corrective Action QAP 16-02 Deviation Reporting QAP 16-03 Quality Assurance Program Report QAP 18-01 Quality Assurance Audits AP-1.1Q Preparation, Review, and Approval of Administrative Procedures AP-5.4Q Assignment of QA Levels AP-5.17Q Application of Graded QA AP-5.20Q Hold Control AP-6.8Q Identification of Items Important to Waste Isolation AP-6.9Q Identification of Items and Activities Subject to the QA Level Assignment Process AP-6.10Q Identification of Items Important to Safety Identification of Activities to be Placed on the Quality AP-6.11Q Activities List AP 6.17Q Determination of the Importance of Items and Activities Records Management Document <u>Title</u> DOP 06-01 Document Control System

#### 4.9

DOP 17-01 Records Management System

DOP 17-02 Operation of the SNL NNWSI Project Data Records Management System (DRMS)

AP-1.6Q Release of Unpublished Information

#### 4.10 Task Definition Statement Preparation

Document <u>Title</u>

DOP 02-01 Task Definition Statements

### 4.11 Technical Document Preparation and Review

Document Title

DOP 03-12 Peer Reviews

DOP 03-13 Independent Technical and Management Reviews of Documents

DOP 03-17 Preparing Technical Information Documents

DOP 06-02 Reviewing, Approving, and Issuing Technical Information
Documents

### 4.12 Testing

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Document Title

DOP 02-02 Study Plan Requirements

DOP 03-15 Providing Instructions for NTS Contractor Work

DOP 05-02 Technical Procedure Requirements

DOP 07-02 Evaluation for Acceptance of Purchased Items or Services

DOP 08-01 Sample Identification and Handling

DOP 08-02 Operation of the SNL NWRT Department Samples Library

DOP 11-01 Experiment and Equipment-Test Procedure Requirements

DOP 11-02 Requirements for Experiment and Equipment-Test Logbooks

DOP 11-03 Requirements for Interaction with the Data Records Management System

DOP 12-01 Measuring and Test Equipment Control

DOP 13-01 Identification, Handling, Shipping, and Storage of Items

DOP 14-01 Status Indication of Items

AP-5.13Q Readiness Review

AP-6.2Q Management and Operation of Sample Handling Activities at Borehole Sites

AP-6.3Q Interaction of Participants and Outside Interests with YMP Sample Management

AP-6.4Q Procedure for the Submittal, Review, and Approval of Requests for Yucca Mountain Project Geologic Specimens

Document Title

AP-6.6Q Field Collection, Documentation and Specimen Removal of Exploratory Shaft and Drift Rock

# 4.13 Work Plan Preparation

Document Title

DOP 02-03 Work Plans

# 5.0 YMP Reference Documents

Other YMP documents (mostly YMP controlled documents), which are maintained for reference purposes in the NWRT Department Records Center, are listed in below.

<u>Document</u>	<u>Title</u>
YMP/APM-1	ADMINISTRATIVE PROCEDURES, YMP*
AP 1.1Q	Administrative Procedure Preparation*
AP 1.3Q	Publications Review and Approval*
AP 1.4Q	Distribution of Information Products*
AP 1.5Q	Issuance & Maintenance of Controlled Documents*
AP 1.6Q	Release of Unpublished Information*
AP 1.7Q	Records Management*
AP 1.9	Waste Management Project Office (WMPO) Action Item Tracking System*
AP 1.10Q	Preparation, Review, and Approval of SCP Study Plans*
AP 1.16	Litigation Discovery of YMP Records*
AP 2.1	Weekly Highlights Report*
AP 2.3	Major System Acquisitions Report*
AP 2.8	Monthly Technical Data Transfer Report*
AP 3.2	Monthly Reporting and Analysis*

<sup>\*</sup>Designates a YMP controlled document.

Document	<u>Title</u>
AP 3.3Q	Change Control Process*
AP 3.6Q	Configuration Management*
AP 4.1Q	Procurement*
AP 5.2Q	Technical Information Flow to and from the YMP Technical Data Base*
AP 5.3Q	Information Flow into the Reference Information Base*
AP 5.4Q	Assignment of Quality Assurance Levels*
AP 5.9Q	Qualification of Data or Data Analyses not Developed Under the Yucca Mountain Project Quality Assurance Plan*
AP 5.10Q	Use of NTS Contractors on the NNWSI Project*
AP 5.13Q	Readiness Reviews*
AP 5.14Q	Design Review*
AP 5.17Q	Application of Graded QA*
AP 5.18Q	ESF Design Control*
AP 5.19Q	Interface Control*
AP 5.20Q	Hold Control
AP 6.2Q	Management and Operation of Sample Handling Activities at Borehole Sites*
AP 6.3Q	Interaction of Participants and Outside Interests with YMP Sample Management*
AP 6.4Q	Procedure for the Submittal, Review, and Approval of Requests for YMP Geologic Specimens*
AP 6.6Q	Field Collection, Documentation, and Specimen Removal of Exploratory Shaft and Drift Rock*
AP 6.8Q	Identification of Items Important to Waste Isolation*
AP 6.9Q	Identification of Items and Activities Subject to the QA Level Assignment Process*
AP 6.10Q	Identification of Items Important to Safety*

<sup>\*</sup>Designates a YMP controlled document.

Document	<u>Title</u>
AP 6.11Q	Identification of Activities to be Placed on the Quality Activities List*
AP 9.1	NNWSI Project Participant and Public Interaction*
AP 11.1	Electronic Transfer of Correspondence Files*
YMP/88-2A	ADVANCE ACQUISITION OF ASSISTANCE PLAN*
N/A	BASELINE DOCUMENTS, OGR/B3 through OGR/B13, (September 1987)*
YMP/CM-0001	BASELINE DOCUMENT, YMP* Project Budget Baseline Project Cost Plan Project MSA Milestone
N/A	BIBLIOGRAPHY, 1977-1985, NNWSI Project
N/A	BIBLIOGRAPHY, 1986-1987, NNWSI Project
N/A	BIBLIOGRAPHY, 1988, YMP
N/A	BRANCH TECHNICAL PROCEDURES FOR THE ENGINEERING DEVELOPMENT DIVISION, YMP, (May 1989)*
N/A	CHANGE CONTROL BOARD RECORDS, FY 1989, Volume VIII, YMP*
N/A	CHANGE CONTROL BOARD RECORDS, FY 1988, Volume VII, NNWSI Project, (1988)*
N/A	CHANGE CONTROL BOARD RECORDS, FY 1986-1987, Volumes 1-7, NNWSI Project (1986)
YMP/88-4	CONFIGURATION MANAGEMENT PLAN, YMP*
N/A	ESF TITLE I DESIGN, SUMMARY REPORT, Volumes 1-4, YMP, (December 1988)
YMP/89-3	ESF TITLE I DESIGN, ACCEPTABILITY ANALYSIS AND COMPARATIVE EVALUATIONS OF ALTERNATIVE ESF LOCATIONS*
N/A	ESF QUALITY ASSURANCE LEVEL ASSIGNMENT SHEETS (QALAS), YMP
N/A	ESF SDRD, BENCHMARK #5, Volumes 1-2, YMP
DOE/RW-0090	GENERIC REQUIREMENTS FOR A MINED GEOLOGIC DISPOSAL SYSTEM, OGR/B-2*

<sup>\*</sup>Designates a YMP controlled document.

Document Title

YMP/88-2 PROJECT MANAGEMENT PLAN, YMP\*

YMP/88-1 PROJECT PLAN, YMP\*

YMP/CC-0004 QUALITY ASSURANCE LEVEL ASSIGNMENT (QALA) RECORDS, YMP\*

NNWSI/88-9 QUALITY ASSURANCE PLAN, NNWSI PROJECT\*

YMP/CM-0002- QUALITY LISTS, YMP\*

YMP/CM-0005 Identification of Items Important to Waste Isolation Candidate List of Items and Activities Subject to the

Quality Level Assignment Process

Identification of Items Important to Safety

Identification of Activities to be Placed on the Quality

Activities List

NNWSI/88-14 RADIOLOGICAL MONITORING PLAN FOR THE NNWSI PROJECT, Volumes 1-2, NNWSI Project

NNWSI/88-15 RECORDS MANAGEMENT PLAN, NNWSI Project\*

YMP/CC-0002 REFERENCE INFORMATION BASE, YMP\*

YMP/88-11 REGULATORY DOCUMENT MANUAL, Volumes, 1-3, YMP

N/A SCP, Volumes 1-8, YMP, (December 1988)

DOE/RW-0142 SCP CONCEPTUAL DESIGN REPORT, ANNOTATED OUTLINE, OGR/B-6\*

YMP/88-11 SCP MANAGEMENT PLAN, YMP\*

N/A SCP, OVERVIEW, YMP, (December 1988)

N/A SCP PUBLIC HANDBOOK, YMP, (April 1989)

YMPCC-0005 SCP TECHNICAL PLANNING BASIS, YMP\*

- 8.3.1.2.2.2 STUDY PLAN WATER MOVEMENT TESTS, YMP\*
- 8.3.1.2.2.4 STUDY PLAN CHARACTERIZATION OF THE YUCCA MOUNTAIN UNSATURATED ZONE PERCOLATION EXPLORATORY SHAFT FACILITY STUDY, YMP\*
- 8.3.1.4.2.2 STUDY PLAN CHARACTERIZATION OF STRUCTURAL FEATURES IN THE SITE AREA, YMP\*
- 8.3.1.5.2.1 STUDY PLAN CHARACTERIZATION OF THE YUCCA MOUNTAIN QUATERNARY REGIONAL HYDROLOGY, YMP\*

<sup>\*</sup>Designates a YMP controlled document.

Document Title

- 8.3.1.15.1.5 STUDY PLAN EXCAVATION INVESTIGATIONS, YMP\*
- 8.3.1.15.2.1 STUDY PLAN CHARACTERIZATION OF THE SITE AMBIENT STRESS CONDITIONS, YMP\*
- 8.3.1.17.4.2 STUDY PLAN EVALUATING THE LOCATION AND RECENCY OF FAULTING NEAR PROSPECTIVE SURFACE FACILITIES, YMP\*
- NNWSI/88-3 SYSTEMS ENGINEERING MANAGEMENT PLAN, NNWSI Project\*
- YMP/88-18 TECHNICAL DATA MANAGEMENT PLAN, YMP\*
- NNWSI/88-16 TRAINING MANAGEMENT PLAN, NNWSI\*
- YMP/CC-0001 WORK BREAKDOWN STRUCTURE INDEX AND DICTIONARY, YMP\*

<sup>\*</sup>Designates a YMP controlled document.