



Department of Energy
Washington, DC 20585

JAN 02 1992

Mr. Joseph J. Holonich, Director
Repository Licensing and Quality
Assurance Project Directorate
Division of Nuclear Material Safety
and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Holonich:

The Yucca Mountain Quality Assurance Division completed its review and evaluation of the U.S. Geological Survey (USGS) Change Notices 3, 4, 6, and 7 to the USGS Quality Assurance (QA) Program Plan 01, Revision 5. The USGS Change Notice 5 was for an editorial and the change did not have a U.S. Department of Energy (DOE) review.

As a result, it has been determined that the proposed changes are consistent and in compliance with the Office of Civilian Radioactive Waste Management QA Requirements Document, Revision 4, and that there has been no relaxation of the requirements.

Therefore, this letter serves as a formal notice of approval of the change notices by the DOE. The enclosed changes notices are forwarded to the U.S. Nuclear Regulatory Commission for information.

Should you have any questions, please contact Sharon Skuchko of my office at (202) 586-4590.

Sincerely,

John P. Roberts
Acting Associate Director for
Systems and Compliance
Office of Civilian Radioactive
Waste Management

4 Enclosures:
USGS Changes Notices 3, 4, 6, and 7

9201080154 920102
PDR WASTE
WM-11 PDR

102.7
WM-11
N403

cc w/Enclosures:

C. Gertz, YMPO
R. Loux, State of Nevada
K. Whipple, Lincoln County, NV
M. Baughman, Lincoln County, NV
J. Bingham, Clark County, NV
D. Bechtel, Clark County, NV
S. Bradhurst, Nye County, NV
B. Raper, Nye County, NV
P. Niedzielski-Eichner, Nye County, NV
R. Campbell, Inyo County, CA
R. Michener, Inyo County, CA
G. Derby, Lander County, NV
P. Goicoechea, Eureka, NV
C. Schank, Churchill County, NV
C. Jackson, Mineral County, NV
F. Sperry, White Pine County, NV
L. Vaughan, Esmeralda County, NV
K. Hooks, NRC

YMP-USGS
INTERIM CHANGE NOTICE TO THE
QUALITY ASSURANCE PROGRAM PLAN

WBS #: 1.2.3.1
QA: QA

ICN Number: 3

Applies to YMP-USGS-QAPP-01, Rev. 5

Title: U.S. Geological Survey Quality Assurance Program Plan

REQUIRED CHANGES:

<u>Para.</u>	<u>Changed to</u>
2.2.1	Insert "environmental monitoring" after "construction" in line four. Change "PQM" to "Quality Assurance Division Director."
3.1.1.1	After the second sentence insert "Environmental monitoring studies are governed by environmental monitoring plans for the determination of appropriate quality-affecting activities."
4.6	Delete paragraph.
5.3	In first line replace "instruction" with "procedures."
15.1.4.3	Delete paragraph.
15.5	Delete paragraph.
16.2	Delete paragraph.
18.1.2.2	Change entire paragraph to "Applicable elements of the QA Program for organizations on the AVL shall be audited on a triennial basis when supplemented by annual evaluations."
18.1.2.3	Delete paragraph.

Effective Date: _____

Supersedes ICN No. N/A

[Signature]
YMP-USGS Quality Assurance
Manager

5/10/91
Date

[Signature]
Technical Project Officer Date

[Signature]
Chief, Office of Regional
Geology Date

05-14-91

[Signature]
Assistant Chief Hydrologist
for Program Coordination
and Technical Support Date

5/15/91

[Signature]
Assistant Director for
Engineering Geology Date

5/15/91

[Signature]
Project Quality Manager Date

5/11/91

DOE Yucca Mountain Project ENCLOSURE 1

YMP-USGS
INTERIM CHANGE NOTICE TO THE
QUALITY ASSURANCE PROGRAM PLAN

WBS #: 1.2.3.1

QA: QA

Page 1 of 2

ICN Number: 4

Applies to YMP-USGS-QAPP-01, Rev. 5

Title: U.S. Geological Survey Quality Assurance Program Plan

REQUIRED CHANGES:

<u>Para.</u>	<u>Changed to</u>
2.1.6	Replace "QA level" with "QA control" in the second paragraph, replace "QA levels" with "QA controls" in the third paragraph, and replace "QA level" with "QA control" in the fourth paragraph.
2.2.1	Replace "QA level" with "QA control" in the second, third and fifth paragraphs.
2.2.4	Replace " <u>Quality Assurance Level</u> " with " <u>Quality Assurance Controls.</u> "
2.2.5.1	Replace "QUALITY ASSURANCE LEVEL" with "QUALITY ASSURANCE CONTROLS;" replace "QA level" with "QA control" in the first and second paragraphs; and replace "QA levels" with "QA controls" and "YMPO" with "the YMP-USGS QA Manager" in the third paragraph.
2.2.5.2	Delete Section.
2.2.5.3	Delete Section.
2.2.5.4	Delete Section.

Effective Date: _____

Supersedes ICN No. N/A

[Signature]
YMP-USGS Quality Assurance
Manager

5/10/91
Date

Michael W. Reynolds 05-14-91
Chief, Office of Regional
Geology Date

Eugene H. Roseboom Jr 5/15/91
Assistant Director for
Engineering Geology Date

Larry R. Hunt 5/12/91
Technical Project Officer Date

Michael J. Trush 5/15/91
Assistant Chief Hydrologist
for Program Coordination
and Technical Support Date

[Signature] 5/17/91
Project Quality Manager Date
DOE Yucca Mountain Project

ENCLOSURE 2

YMP-USGS
INTERIM CHANGE NOTICE TO THE
QUALITY ASSURANCE PROGRAM PLAN
CONTINUATION SHEET

Page 2 of 2

ICN Number: 4

Applies to YMP-USGS-QAPP-01, Rev. 5

Title: U.S. Geological Survey Quality Assurance Program Plan

REQUIRED CHANGES:

<u>Para.</u>	<u>Changed to</u>
3.1.1.1	Replace "QA level" with "QA control" in third paragraph.
3.1.1.2	Delete "QA levels or" in the last paragraph.
3.1.2	Replace "QA level" with "QA control" in first paragraph.
3.1.3	Replace " <u>Quality Assurance Levels</u> " with " <u>Quality Assurance Controls.</u> "
3.1.3.1	Replace "LEVEL ASSIGNMENT" with "CONTROL ASSIGNMENT," replace "QA levels" with "QA controls" in the first two paragraphs, and replace "QA level" with "QA control" in the third paragraph.
3.1.3.2	Replace "QA levels" with "QA controls."
3.1.8	Replace "QA level" with "QA control."
3.3.1	Replace "perform QA Level I and II analyses" with "support quality-affecting activities."
4.1	Replace last sentence with "To the extent necessary, procurement documents of the USGS shall require that the subtier contractors provide QA controls."
4.3	Replace "QUALITY ASSURANCE LEVEL I ACTIVITIES" with "QUALITY-AFFECTING ACTIVITIES."
4.3.3	Replace second sentence with "QAPPs and documents of subcontractors for purchases supporting quality-affecting activities shall be reviewed and approved by the USGS QA Office or its delegate."
5.4	Replace "QA Level I and II activities." with "quality-affecting activities."
8.4	Replace "QA level" with "QA controls."



Department of Energy
Yucca Mountain Site Characterization
Project Office
P. O. Box 98608
Las Vegas, NV 89193-8608

WBS 1.2.9.3
QA

92-194

OCT-04 1991

Larry R. Hayes
Technical Project Officer
for Yucca Mountain
Site Characterization Project
U.S. Geological Survey
Box 25046 M.S. 425
Denver Federal Center
Denver, CO 80225

YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION (YMQAD) REVIEW AND APPROVAL OF
PROPOSED CHANGES TO ~~LAWRENCE LIVERMORE NATIONAL LABORATORY (LLNL)~~ QUALITY
ASSURANCE PROGRAM PLAN
USGS

Reference: Ltr, Chaney to Horton, dtd 9/25/91

YMQAD has completed its review of the Interim Change Notice (ICN) to the U.S. Geological Survey Quality Assurance Program Plan 01, Revision 5, Section 17, and has arrived at the following:

- o The ICN represents a reformatting of the current revision and has broadened the requirements by including the provision for temporary storage and one-hour safes.

It has been determined that there was no degradation from the previous version. If you have any questions, please contact Catherine E. Hampton at (702) 794-7973 or FTS 544-7973.

Catherine Hampton
Donald G. Horton, Director
Yucca Mountain Quality Assurance Division

YMQAD:CEH-194

Enclosure:
YMP USGS ICN

cc w/o encl:
T. H. Chaney, USGS, Denver, CO
D. D. Porter, SAIC, Golden, CO
R. E. Harpster, SAIC, Las Vegas, NV

YMP-USGS
INTERIM CHANGE NOTICE TO THE
QUALITY ASSURANCE PROGRAM PLAN

YMP-USGS-QAPP-01, R5
Page xiig of xii

WBS #: 1.2.3.1
QA: QA

Page 1 of 5

ICN Number: ICN-6

Applies to YMP-USGS-QAPP-01, Rev. 5

Title: U.S. Geological Survey Quality Assurance Program Plan

REQUIRED CHANGES:

Para. Changed to

Section 17 The entire Section 17, "Quality Assurance Records," should be changed to read:

17.0 GENERAL RECORDS REQUIREMENTS

The quality assurance (QA) records program for the USGS shall be defined, implemented, and enforced in accordance with written procedures, instructions, or other documentation. These documents describe the integrated set of activities required for creating, identifying, collecting, processing, organizing, distributing, storing, preserving, and retrieving of quality assurance records. These documents identify responsibilities of the Quality Assurance organization and other organizations.

Various regulatory agencies have requirements concerning records that are within the scope of this document. The most stringent requirements shall be used to determine final dispositions.

Effective Date: October 4, 1991

Supersedes ICN No. N/A

Harold W. May
YMP-USGS Quality Assurance
Manager

9/5/91
Date

Larry R. Han
Technical Project Officer

9/5/91
Date

Michael W. Reynolds
Chief, Office of Regional
Geology

9-12-91
Date

Wesley J. Truss
Assistant Chief Hydrologist
for Program Coordination
and Technical Support

7/19/91
Date

Engineer H. Roseboom Jr.
Assistant Director for
Engineering Geology

9-19-91
Date

Charles H. Thompson
Project Quality Manager
DOE Yucca Mountain Project

10/4/91
Date

ENCLOSURE

YMP-USGS
INTERIM CHANGE NOTICE TO THE
QUALITY ASSURANCE PROGRAM PLAN

CONTINUATION SHEET

Page 2 of 5

ICN Number: ICN-6

Applies to YMP-USGS-QAPP-01, Rev. 5

REQUIRED CHANGES (Continued):

Para. Changed to

(Section 17, continued)

17.1 USGS RECORDS SYSTEM

A record system or systems has been established by the USGS and is consistent with the schedule for accomplishing work activities. The records management activities to be performed by the USGS, during the processing of QA records, are detailed in the YMP-USGS Management Procedures Manual and the corresponding USGS procedures.

Records shall be distributed, handled, and controlled in accordance with these written procedures.

17.2 RECORD DEFINITION

Quality assurance procedures and instructions define minimum QA records generated as a result of implementation. The term records as used throughout this section, is to be interpreted as QA Records. QA Records include: (1) Individual documents that have been executed, completed, approved, and authenticated by all required signatures, and that furnish evidence of the quality and completeness of data (including raw data), and activities affecting quality; (2) documents prepared and maintained to demonstrate implementation of QA programs (e.g., audit, surveillance, and inspection reports); (3) procurement documents; (4) other documents, such as plans, correspondence, documentation of telecons, specifications, technical data, books, maps, papers, photographs, and data sheets; (5) magnetic media; and (6) other materials that provide data and document quality, regardless of the physical form or characteristic.

Documents that are to become QA Records are considered QA Records upon completion and authentication by all required signatures. A complete QA Record is a document that will receive no more entries and whose revision would be subject to a change control process.

17.3 RECORD GENERATION, COLLECTION, AND PROCESSING

The applicable design specifications, procurement documents, implementing procedures, operational procedures, or other documents shall specify the records to be generated, supplied, or maintained by or for the YMPO. Requirements and responsibilities for record transmittal, distribution, retrieval, retention, maintenance, and disposition of QA records shall be established and documented.

YMP-USGS
INTERIM CHANGE NOTICE TO THE
QUALITY ASSURANCE PROGRAM PLAN

YMP-USGS-QAPP-01,R5
Page xii(1) of xii

CONTINUATION SHEET

Page 3 of 5

ICN Number: ICN-6

Applies to YMP-USGS-QAPP-01, Rev. 5

REQUIRED CHANGES (Continued):

Para. Changed to

(Section 17, Para. 17.3, continued)

Documents designated to become records shall be legible, identifiable, accurate, complete, reproducible, microfilmable, and appropriate to the work accomplished. Documents shall be considered valid records only if stamped, initialed, or signed and dated by authorized personnel, or otherwise authenticated in accordance with approved procedures. These records may be originals or reproduced copies. Authentication may take the form of a statement by the responsible individual or organization. Handwritten signatures are not required if the document is clearly identified as a statement by a reporting individual or organization.

17.4 RECEIPT OF RECORDS

The USGS shall designate a person or organization to be responsible for receiving the records. The designee shall be responsible for organizing and implementing a system of receipt control of records in accordance with approved procedures. The individual or organization responsible for receiving records shall provide protection from damage, deterioration, or loss during the time that the records are in their possession. The receipt-control system shall be structured to permit a current and accurate assessment of the status of records. As a minimum, the receipt control system shall include the following:

- o A method for designating the required records.
- o A method for identifying the records received.
- o Procedures for receipt and inspection of incoming records.
- o A method for submittal of completed records to the permanent storage facility without unnecessary delay.

17.5 RECORD IDENTIFICATION

Records or indexing systems, or both, shall provide sufficient information to permit identification between the record and the items or activities to which it applies. The records shall be indexed, and the indexing system or systems shall include, as a minimum, the location of the record within the record system or systems.

YMP-USGS
INTERIM CHANGE NOTICE TO THE
QUALITY ASSURANCE PROGRAM PLAN

CONTINUATION SHEET

Page 4 of 5

ICN Number: ICN-6

Applies to YMP-USGS-QAPP-01, Rev. 5

REQUIRED CHANGES (Continued):

Para. Changed to

(Section 17, continued)

17.6 RECORDS STORAGE

Upon record initiation and prior to final completion and authentication, measures shall be taken by the record source to protect the integrity of the record. Records are controlled from time of completion through the time of submittal to a permanent storage facility. The Project Central Records Facility (CRF) shall be the permanent storage facility for Project records. Storage, as defined by NQA-1, is the sole responsibility of the CRF.

Upon shipment to the USGS Local Records Center, and prior to and during shipment to the Project Central Records Facility, records shall be stored in locations that meet the requirements of applicable standards. Records maintained by the USGS at their facility or other locations (on an interim or other basis) shall be accessible to the YMP or its designated alternate. The USGS provides temporary storage of records while processing for submittal to the CRF, which at a minimum records shall be stored in a one-hour fire rated container or in dual facilities. The container shall bear a UL label (or equivalent) certifying one-hour fire protection or be certified by a person competent in the technical field of fire protection. Temporary storage shall not exceed two years. For storage requirements that will exceed two years, records shall be stored in either dual storage or an NQA-1, Supplement 17S-1 compliant single storage facility until returned to the LRC for processing and submittal to the CRF.

Records shall be stored to preclude deterioration of the records. The following requirements shall apply:

- o Provisions shall be made in the storage arrangement to prevent damage from moisture, temperature, and pressure.
- o Records shall be firmly attached in binders or placed in folders or envelopes for storage in steel file cabinets or on shelving in containers.
- o Provisions shall be made for special processed records (e.g. radiographs, photographs, negatives, microfilm, magnetic material, etc.) to prevent damage from excessive light, stacking, electromagnetic fields, temperatures, and humidity.

Measures shall be established to preclude the entry of unauthorized personnel in the storage area. A list shall be maintained designating those personnel who shall have access to the files. These measures shall guard against larceny and vandalism. Measures also shall be taken to provide for replacement, restoration, or substitution of lost or damaged records.

YMP-USGS
INTERIM CHANGE NOTICE TO THE
QUALITY ASSURANCE PROGRAM PLAN

YMP-USGS-QAPP-01,R5
Page xiik of xii

CONTINUATION SHEET

Page 5 of 5

ICN Number: ICN-6

Applies to YMP-USGS-QAPP-01, Rev. 5

REQUIRED CHANGES (Continued):

Para. Changed to

17.7 RECORDS CLASSIFICATION

All YMP quality assurance records are classified as lifetime records and they are required to be retained for the life of the Project.

17.8 CORRECTED RECORDS

Records may be corrected in accordance with written procedures that provide for appropriate review or approval by the originating organization or person. The correction shall include the date and the identification of the person authorized to issue such correction.

WBS 1.2.9.3
QA

NOV 12 1991

Larry R. Hayes
Technical Project Officer
for Yucca Mountain
Site Characterization Project
U.S. Geological Survey
101 Convention Center Drive
Suite 860
Las Vegas, NV 89109

NOTICE OF YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION (YMQAD) APPROVAL OF
CHANGES TO REVISION 5 OF THE U.S. GEOLOGICAL SURVEY (USGS) QUALITY ASSURANCE
PROGRAM PLAN (QAPP)

YMQAD has reviewed the changes to the approval sheet, introduction, and
Section 1 of Revision 5 to the USGS QAPP and has determined that none of the
changes diminishes USGS quality assurance program commitments. On that
basis, the changes to Revision 5 of the QAPP are approved.

If you have any questions, please contact either Catherine E. Hampton at
794-7973 or Robert E. Harpster at 794-7840.

"ORIGINAL SIGNED BY"

R. E. SPENCE
Richard E. Spence, Director
Yucca Mountain Quality Assurance Division

YMQAD-CEH-759

Enclosures:

1. ICN to Revision 5 USGS QAPP
2. USGS Quality Assurance Program
Matrix Document, Criterion 1

cc w/encls:

T. E. Chaney, USGS, Las Vegas, NV

cc w/o encls:

J. E. Gilray, NRC, Las Vegas, NV

CONCURRE
RTG. SYM
YMP.....
INITIALS
Hampton
DATE
11/11/91
RTG. SYM
YMP.....
INITIALS
Spence
DATE
11/11/91
RTG. SYM
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WB.1140
DATE

**YMP-USGS
INTERIM CHANGE NOTICE TO THE
QUALITY ASSURANCE PROGRAM DESCRIPTION**

WBS #: 1.2.3.1

QA: QA

Page 1 of 8

ICN Number: _____

Applies to YMP-USGS-QAPP-01, Rev. _____

TITLE: U.S. Geological Survey Quality Assurance Program Plan

REQUIRED CHANGES:

Para. Changed to

See attached for changes to Approval Sheet, ~~Policy Statement~~, Introduction and Section 1.
EHR for JD 10/7/91

Effective Date: _____

[Signature] 10/1/91
YMP-USGS Quality Assurance Date
Manager

[Signature] 10/2/91
Assistant Chief Hydrologist Date
for Program Coordination
and Technical Support

Supersedes ICN No. _____

[Signature] 10/6/91
Chief, Yucca Mountain Project Date
Branch

[Signature] 10/4/91
Assistant Director for
Engineering Geology

[Signature] 10/14/91
Director, Yucca Mountain Quality Date
Assurance Division