

**CENTER FOR NUCLEAR WASTE
REGULATORY ANALYSES**

QUALITY ASSURANCE PROCEDURE

Proc. QAP-017

Revision 0

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Title QAP-017 DRAWING CONTROL

EFFECTIVITY AND APPROVAL

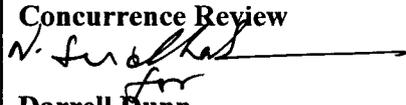
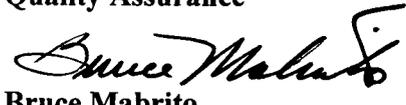
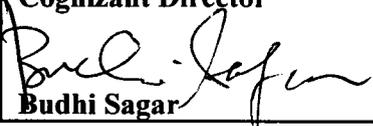
Revision 0 of this procedure became effective on May 12, 2000. This procedure consists of the pages and changes listed below.

<u>Page No.</u>	<u>Change</u>	<u>Date Effective</u>
All	0	5/12/2000

SUPERSEDED

Supersedes Procedure No. None

Approvals

Written By  Mark Ernstom	Date 5/12/2000	Concurrence Review  for Darrell Dunn	Date 5/14/00
Quality Assurance  Bruce Mabrito	Date 5/12/2000	Cognizant Director  Budhi Sagar	Date 5/12/2000

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QAP-017 DRAWING CONTROL

1. PURPOSE

The purpose of this procedure is to describe the measures that shall be implemented in preparation, review, approval, changes, and distribution of drawings/sketches of items, equipment and specimens used in research and testing. This procedure relates to the requirements of the CNWRA QA Manual, section 6, Document Control.

2. RESPONSIBILITY

CNWRA Quality Assurance (QA) will be responsible for maintaining and assigning drawing numbers. The cognizant Element Manager (EM) will be responsible for implementing this procedure and for complying with its provisions

3. PROCEDURE

3.1 Initiation of a Drawing

3.1.1 Numbering

3.1.1.1 CNWRA QA shall maintain a Drawing Number Log Book (see figure 1 for a sample).

3.1.1.2 When requested, QA shall assign a number (as defined below) from the Drawing Number Log. QA shall record the project number, drawing number, revision number, date, drawing title/description and requestor.

3.1.1.3 The individual preparing the drawing shall record the assigned number on the drawing, along with a drawing title if applicable.

3.1.2 Numbering System

3.1.2.1 Unique numbers shall be created by using the appropriate project number, and a subset of numbers designating the drawing.

3.1.3 Review and Approval

After completion, the drawing shall be forwarded to the cognizant Element Manager or designated reviewer for review and approval. An acceptable review of the drawing will be indicated by initials and date on the drawing.

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3.1.4 Drawing Change Control

3.1.4.1 When it is determined a drawing change is necessary, the following steps are required.

- (1) A changed drawing number will be obtained from QA and logged into the Drawing Number Log Book. The number will be the old drawing number followed by the letter "A" signifying the first revision to the original drawing. All additional revisions to that drawing will follow the next sequential letter.
- (2) The new drawing change shall reference the old drawing being changed.
- (3) Review of the changed drawing shall be performed by the same individuals/groups who performed the review on the original drawing.

3.1.5 Distribution

3.1.5.1 After review and approval, original drawings shall be maintained in the EM's project files or in the Principal Investigator's scientific notebook, and must be submitted to QA records for final retention.

3.1.5.2 The drawing requester shall be responsible for distribution of drawings and drawing changes. The requester shall maintain a list identifying the personnel/organizations that received the drawing(s).

3.1.5.3 The EM shall be responsible for assuring that drawings of the appropriate issue are used for fabrication, assembly, and/or test.

4. RECORDS

Original drawings and changed drawings shall be in the Principal Investigator's scientific notebook or the EM's project files and controlled in accordance with CQAM Section 17, Quality Assurance Records. CNWRA QA will maintain a copy in the QA Records room.

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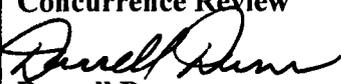
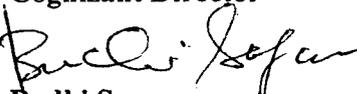
EFFECTIVITY AND APPROVAL

Revision 0 of this procedure became effective on May 12, 2000. This procedure consists of the pages and changes listed below.

<u>Page No.</u>	<u>Change</u>	<u>Date Effective</u>
All	0	5/12/2000
2-3	1	7/17/2000

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Approvals

Written By  Mark Elstrom	Date 7/12/2000	Concurrence Review  Darrell Dunn	Date 7/12/2000
Quality Assurance  Bruce Mabrito	Date 7/13/2000	Cognizant Director  Budhi Sagar	Date 7/14/2000

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QAP-017 DRAWING CONTROL

1. **PURPOSE**

The purpose of this procedure is to describe the measures that shall be implemented in preparation, review, approval, changes, and distribution of drawings/sketches of items, equipment and specimens used in research and testing. This procedure is to be applied to Center for Nuclear Waste Regulatory Analyses (CNWRA) drawings that are used to convey requirements to suppliers, etc., not for drawings that are retained in scientific notebooks, etc. This procedure relates to the requirements of the Center Quality Assurance Manual (CQAM), section 6, Document Control.

2. **RESPONSIBILITY**

CNWRA Quality Assurance (QA) will be responsible for maintaining and assigning drawing numbers. The cognizant Element Manager (EM) will be responsible for implementing this procedure and for complying with its provisions.

3. **PROCEDURE**

3.1 Initiation of a Drawing

3.1.1 Numbering

3.1.1.1 CNWRA QA shall maintain a Drawing Number Log Book (see figure 1 for a sample).

3.1.1.2 When requested, QA shall assign a number (as defined below) from the Drawing Number Log. QA shall record the project number, drawing number, revision number, date, drawing title/description and requestor.

3.1.1.3 The individual preparing the drawing shall record the assigned number on the drawing, along with a drawing title if applicable.

3.1.2 Numbering System

3.1.2.1 Unique numbers shall be created by using the appropriate project number, and a subset of numbers uniquely designating the drawing.

3.1.3 Drawing Control

Each drawing shall contain signature and date blocks for the drawing initiator and drawing reviewer. The drawing shall contain sufficient detail for the end user to perform an activity without ambiguity or question. The drawing shall include appropriate quantitative and qualitative acceptance criteria.

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3.1.4 Review and Approval

After completion, the drawing shall identify and be signed and dated by the individual preparing the drawing and then forwarded to the cognizant EM or designated reviewer for final review and approval. An acceptable review of the drawing will be indicated by signing and dating the drawing.

3.1.5 Drawing Change Control

3.1.5.1 When it is determined a drawing change is necessary, the following steps are required.

- (1) A changed drawing number will be obtained from QA and logged into the Drawing Number Log Book. The number will be the old drawing number followed by the letter "A" signifying the first revision to the original drawing. All additional revisions to that drawing will follow the next sequential letter.
- (2) The new drawing change shall reference the old drawing being changed.
- (3) Review of the changed drawing shall be performed by the same individuals/groups who performed the review on the original drawing.

3.1.6 Distribution

3.1.6.1 After review and approval, original drawings shall be maintained in the QA records room. Copies of drawings should be maintained in the CNWRA EMs project files or in the Principal Investigators (PIs) scientific notebook.

3.1.6.2 The drawing requester shall be responsible for distribution of drawings and drawing changes. The requester shall maintain a list identifying the personnel/organizations that received the drawing(s).

3.1.6.3 The EM shall be responsible for assuring that drawings of the appropriate issue are used for fabrication, assembly, and/or test.

4. RECORDS

Original and changed drawings shall be maintained in the QA Records Room and controlled in accordance with CQAM, section 17, Quality Assurance Records. The PI or EM will retain copies in the cognizant scientific notebook or project files.

