

43/142

July 20, 1988

**MEMORANDUM**

**TO:** Bruce Mabrito, CNWRA Director of QA

**FROM:** Thomas Mayces, <sup>Yan</sup>SwRI Senior QA Inspector

**SUBJECT:** Surveillance of the Program Architecture Review Committee Activities

A surveillance of the Program Architecture Review Committee (PARC) activities was performed on July 19, 1988, at the request of CNWRA Quality Assurance. This surveillance was performed to verify compliance to the Technical Operating Procedure (TOP) Nos. TOP-001 and TOP-001-01 as required by Section 6 of TOP-001 and Section 8 of TOP-001-01 by the writer. The PARCs were established with the issuance of a Memorandum dated July 15, 1988, from Mr. Allen R. Whiting to the Center Staff. See Attachment A for a copy of the memo that describes the PARCs' duties and names of the members. The establishment of the PARCs was approved in accordance with the provisions of TOP-001 Revision 1, Paragraph 4.6 by the WSE&I Subelement Manager, Center Technical Director, and Director of SE&I.

Work instruction TOP-001-01 was issued and in the required format as required by Paragraph 4.1 of TOP-001 with the exception that the Procedure No. is incorrect for pages 3 and 4 of 10 of the procedure.

Messrs. John Hageman, Prasad Nair, and H. Pat Brown were the PARC members that were observed on July 19, 1988, reviewing and commenting on the data entries on Page 176 through 181, Record Nos. 6032 through 6084, concerning 10CFR 71 (Subset 5--Category 3: Transportation-Related). I witnessed the PARC verify the following:

The Cognizant Element Designation (described in 4.3 and 5.3 of TOP-001-01),

The Essential and Support Expertise Designation (described in 4.4 and 5.4 of TOP-001-01),

The Cross Reference Designation (described in 4.5 and 5.5 of TOP-001-01).

I also witnessed the PARC advise the WSE&I Subelement Manager when they had completed review and revision of 52 entries to have its work product checked for compliance with the work instruction. No deviation from the requirements of TOP-001-01 or TOP-001 was observed.

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One observation was noted: that the use of TOPs for work instructions can be confusing to a client for determination as to when is a TOP a Technical Operating Procedure or a work instruction.

tan

CC:  
A.R. Whiting  
J.E. Latz  
W.C. Patrick

## CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES

Jul 5, 1988

## MEMORANDUM

TO: Center Staff

FROM: Allen R. Whiting *ARW*

SUBJECT: Establishment of Program Architecture Review Committees

The attachment establishes the subject Program Architecture Review Committees which will be used in reviewing and revising the materials that were input to WSE&I Major Milestone No. 12. This action is taken in accordance with TOP-001 "Program Architecture Development and Maintenance." The attachment should be included in your binder on Center Operating Procedures for easy reference.

Please contact me if there are any questions regarding this matter.

cc: P. Altomare  
J. Bunting

PROGRAM ARCHITECTURE REVIEW COMMITTEES FOR  
REVIEW AND REVISION OF WSE&I MAJOR MILESTONE NO. 12

PURPOSE

The purpose of this memorandum is to establish and name membership to the Program Architecture Review Committees (PARCs) for review and revision of the WSE&I Major Milestone No. 12 inputs to the Program Architecture (PA). This action is taken in accordance with Section 4.6 of TOP-001 "Program Architecture Development and Maintenance", Revision 1. The PARCs named below will use TOP-001-01 "Guidance to the Program Architecture Review Committee Review and Revision of WSE&I Major Milestone No. 12" in fulfilling their responsibilities.

PARC SELECTION CRITERIA

The members of the PARCs identified below were selected based on the following criteria:

- Member of core Center staff to provide continuity.
- Familiarity with the high-level waste program.
- Previous experience in developing inputs to WSE&I Major Milestone No. 12 or similar regulatory analyses on another project.
- Diversity of technical expertise within each PARC.
- Inclusion of legal/regulatory expertise on each PARC.
- Independence from initial work on specific inputs being reviewed.

ESTABLISHMENT OF THE PARCs

PARC No. 1

Membership: John Hageman, Richard Pierce, and Stephen Spector  
(Alternate: R. Ted Romine)

Responsibilities: Process all regulations and statutes initially reviewed and input to the Major Milestone No. 12 database by the Engineered Barrier Systems and Geologic Setting Elements.

PARC No. 2

Membership: Prasad Nair, John Russell, and H. Pat Brown  
(Alternate: Robert Adler)

Responsibilities: Process all regulations and statutes initially reviewed and input to the Major Milestone No. 12 database by the Quality Assurance; Repository Design, Construction, and Operations; and Special Projects and Analytical Evaluations, Including Transportation, Elements.

ATTACHMENT A

11/12

SUBSTITUTIONS

The following substitutions may be made by the WSE&I Subelement Manager: (a) the named Alternate may substitute for either of the technical participants (the first two named parties) in each PARC and (b) the legal staff may be interchanged between the PARCs. All other substitutions must be concurred in by the Center Technical Director.

OTHER PARTICIPATION

In addition to these members of the PARCs, the WSE&I Subelement Manager, Director of Quality Assurance, and Center Technical Director have specific oversight responsibilities in accordance with TOP-001-01, Section 5. Furthermore, the NRC CNWRA Program Manager may assign one or more members of his staff to observe the proceedings of the PARCs.

INITIATION OF WORK

These PARCs will begin work at the direction of the WSE&I Subelement Manager. It is anticipated that one PARC will be used on an initial trial basis to evaluate implementation of the guidance provided in TOP-001 and TOP-001-01. The assignment of priorities to specific regulations and statutes (e.g. "site constrained" items) for PARC action will be provided in subsequent guidance, before initiation of PARC activities.

Please contact the undersigned if there are any questions regarding this matter.

APPROVAL

Establishment of these PARCs is approved, as follows, in accordance with the provisions of TOP-001.

Signed:

*Allen R. Whiting*

Allen R. Whiting  
WSE&I Subelement Manager and  
Director of SE&I

Concurred:

*Wesley C. Patrick*

Wesley C. Patrick  
Technical Director

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STATUS REPORT ON PROGRAM ARCHITECTURE  
June 16, 1988

On March 3, 1988, data input began on program architecture. See attached list for personnel who performed this task.

On March 17, 1988, proofreading began on program architecture printouts. See attached list for personnel who performed this task.

On March 19, 1988, data corrections began on program architecture printouts. The only people performing this task were Sherry Nelson (March 25 and 28, 1988, only), Lupita G. Weston, TaskMaster temporary employee, and Bonnie Garcia, Center employee, for the balance of the days from March 19 - June 8, 1988.

As Bonnie and Lupita typed in corrections and came across errors which the proofreaders had missed, they highlighted these errors in pink as well as correcting them in red.

There were so many cases of 'minor' corrections that a decision was made not to stop, mark, and highlight each and every one as this would have been entirely too time consuming. An example of a 'minor' entry which may not have been highlighted and corrected in writing on the printout (but was corrected in the typewritten text) would be capitalizing a letter or word that had not been capitalized or spelling out a word instead of abbreviating it or adding/deleting a period, space, comma, etc. where necessary.

The total number of records originally entered was 8330, and at this time 8220 records have been given a "QA 1 Status", showing that they have been checked and corrected.

Approximately 110 records have not been given a "QA 1 Status". Of these, approximately 74 are 'deleted records'. This simply means that these records, although still in the file, will not print out with the other records given a "QA 1 Status" as they were incomplete or completely incorrect records.

This leaves a balance of approximately 36-40 records, one of which has been inadvertently and entirely deleted from the file. Record #8257 was a blank record so no information has been lost.

There are approximately 36-40 records that have been determined to be 'problem' records or records that give cause for some kind of question. These records have been flagged with a red tag on the printout and have not been given a "QA 1 Status".

There are also approximately 300 records which were never entered initially (with the first 8330 records) which have now been entered but still require printing, proofreading, and correcting. In addition, there are some records that still need to be entered (part of 49CFR177), but it was decided that those would not be entered at this time until a determination was made as to whether it was actually necessary to enter those particular records.

ORIGINAL DATA INPUT TYPISTS

Christopher J. Ludwig  
Esther S. Rabago  
Keiko Smallwood

Olga S. Ramirez  
P. J. Alexander  
Bonnie Garcia

PROOFREADERS

Cathie Calderon  
Rebecca Little  
Marlene M. Eggers  
Sylvia G. Garza  
Olga Salas  
Donna Hamblen  
Donna Kregel

Della Sue Kelly  
Monica B. Rivas  
Dallas Girard  
Guadalupe R. Weston  
Sherry Nelson  
G. Vincent Garza  
Bonnie Garcia

COLOR LEGEND

Blue (highlight) - color used by proofreaders to mark initial corrections and highlight errors and questions on printouts

Pink (highlight) - color used by typists (for corrections) after proofreaders used blue; This color was used when correction typists found additional errors which proofreaders missed initially.

Green (highlight) - color used by 'correction' typists to highlight and mark a record number after it had been corrected and given a "QA 1 Status" code

Red - color used by proofreaders as they (initially) proofread and corrected errors; Red was also used by Bill Vanzant to mark-up, initial, and date printouts after review and approval.

Black - color used by proofreaders on some printouts to re-check errors previously marked in red by other proofreaders; Black was also used by John Russell to mark-up, initial, and date printouts after review and approval.

Dark Blue - color used by John Hageman to mark-up, initial, and date printouts after review and approval

Dark Green - color used by Don Johnson and Dick Pierce to mark-up, initial, and date printouts

*Bonnie L. Garcia*

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MEMORANDUM

TO: Allen Whiting  
Wes Patrick

May 20, 1988

FROM: Bruce Mabrito 

SUBJECT: Program Architecture Database Input Status

The 8,330 records initially entered into our Program Architecture database have all been verified by the Element/Subelement Managers. This was confirmed in a review accomplished by SwRI Lead Auditor Edwin Goehring on May 20, 1988 (see attached report).

Of the 8,330 records entered from the identified Regulations/Statutes, 185 have not been upgraded in the database. There are various reasons for this, including:

- 74 records from 49CFR Part 178 (Shipping Container Specifications) require expansion of current text to make them complete and this may entail the creation of new records.
- 72 records are "blank records" or show incomplete text (there is either no text or incomplete text tied to the record number).
- 39 records are "problem records" that are not clear, the "notes" entry is too large for the available computer field, or there are questions that need to be answered by the Element/Subelement Manager before the record can be upgraded.

Beyond the initial 8,330 records, 293 additional records have been entered into the database. This is because they were originally missed by the typist or because an Element/Subelement Manager has reconsidered the work of one technical specialist and has had the work reaccomplished, adding to the total number of records entered.

cc: John Latz



51/1+2

May 20, 1988

MEMORANDUM

TO: BRUCE MABRITO

FROM: EDWIN H. GOEHRING *EG*

SUBJECT: PROGRAM ARCHITECTURE DATABASE INPUT STATUS

A review was conducted to determine if the printouts of the hand-written documents were verified by the Element/Subelement Manager. The finding was that all printouts have been reviewed. Attached is documentation showing the Statute/Regulation/Title/Part and the date that the document was reviewed by the appropriate manager.

Should you have any questions regarding this review please contact me at extension 2944.

/bsc

CWRA QUALITY ASSURANCE CHECK

Program Architecture Database Input Status

<u>Statute/Regulations</u> Title/Part	<u>Element/Subelement</u> Assigned	Handwritten Document Completed	Loaded into Computer	Verified by Element/Subelement Manager
OCFR 60 A	EBS			yes 3/18/88
B	RDCO			yes 3/18/88
C	RDCO			yes 3/21/88
D	RDCO			yes 3/21/88
E .101-.102	GS			yes 3/28/88
.111-.122	GS			
.130-.134	RDCO			
.135-.137	EBS			
F	RDCO			yes 3/21/88
G	QA			yes 3/29/88
H	RDCO			yes 3/21/88

QA check by: C. D. Gahring

Date: 20 May 88

25/11/88

CNWRA QUALITY ASSURANCE CHECK

Program Architecture Database Input Status

<u>Statute/Regulations</u> Title/Part	<u>Element/Subelement</u> Assigned	Handwritten Document Completed	Loaded into Computer	Verified by Element/Subelement Manager
10 CFR 50	QA			yes 3/28/88
0 CFR 20	RDCO			<del>yes</del> *
0 CFR 71	SP + AE/T			yes 3/28/88
0 CFR 2	GS			yes 4/25/88
0 CFR 51	GS			yes 3/27/88
0 CFR 73	RDCO			yes 3/30/88
0 CFR 1.60	GS			yes 3/27/88
0 CFR 4	GS			yes 3/27/88
0 CFR 9	QA			yes 3/29/88
0 CFR 10	GS			yes 3/28/88
0 CFR 11	RDCO			yes 4/17/88

QA check by: *E. R. Johnson* Date: 20 May 88

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CNRA QUALITY ASSURANCE CHECK

Program Architecture Database Input Status

<u>Statute/Regulations</u> Title/Part	<u>Element/Subelement</u> Assigned	Handwritten Document Completed	Loaded into Computer	Verified by Element/Subelement Manager
10 CFR 19	QA			yes 3/28/88
10 CFR 21	QA			yes 3/28/88
10 CFR 70	RDCO			yes 3/21/88
10 CFR 72	RDCO			yes 4/12/88
10 CFR 960	GS			yes 3/27/88
10 CFR 1005	GS			yes 3/28/88
10 CFR 1008	RDCO			yes 3/28/88
10 CFR 1016	RDCO			yes 3/28/88
10 CFR 1021	EBS			yes 3/22/88
10 CFR 191	EBS			yes 3/18/88

QA check by:

*Ed Palumbo*

Date:

20 May 88

54/112

CWRA QUALITY ASSURANCE CHECK

Program Architecture Database Input Status

<u>Statute/Regulations</u> Title/Part	<u>Element/Subelement</u> Assigned	Handwritten Document Completed	Loaded into Computer	Verified by Element/Subelement Manager
40 CFR 61	EBS			yes 3/23/88
40 CFR 131	EBS			yes 3/20/88
40 CFR 141	EBS			yes 3/02/88
40 CFR Subchapter J PARTS 300-306	EBS			yes 4/19/88
40 CFR CHAPTER V PARTS 1500-1508	EBS			yes 3/23/88
40 CFR 1506	EBS			yes 3/23/88
49 CFR 107	SP & AE/T			yes 4/4/88

QA check by: *E. Dechering* Date: 20 May 88

55/1157

CNRA QUALITY ASSURANCE CHECK

Program Architecture Database Input Status

<u>Statute/Regulations</u> Title/Part	<u>Element/Subelement</u> Assigned	Handwritten Document Completed	Loaded into Computer	Verified by Element/Subelement Manager
49 CFR 171	SP + AE/T			yes 4/5/88
49 CFR 172	SP + AE/T			yes 5/4/88
49 CFR 173	SP + AE/T			yes 5/4/88
49 CFR 174	SP + AE/T			yes 5/4/88
49 CFR 175	SP + AE/T			yes 4/5/88
49 CFR 176	SP + AE/T			yes 4/11/88
49 CFR 177	SP + AE/T			yes 4/12/88
49 CFR 178	SP + AE/T			yes 5/4/88

QA check by: E. J. DeLong Date: 20 May 88

56/11/2

CWRA QUALITY ASSURANCE CHECK

Program Architecture Database Input Status

<u>Statute/Regulations</u> Title/Part	<u>Element/Subelement</u> Assigned	Handwritten Document Completed	Loaded into Computer	Verified by Element/Subelement Manager
29 CFR 1926	GS			yes 4/19/88
30 CFR 43	GS			yes 3/27/88
30 CFR 48	GS			yes 3/27/88
30 CFR 57	RDCO			yes 4/18/88
10 CFR 100 App. A	RDCO			yes 3/28/88
10 CFR 50 App. F	RDCO			yes 4/17/88
<u>STATUTES</u>				
68 STAT. 921				
42 USC 2011-2277	GS			yes 4/11/88
88 STAT. 1244				
42 USC 5841 ET SEQ.	GS			yes 4/11/88

QA check by: *E. A. ...* Date: *20 May 88* 57/12

CNRA QUALITY ASSURANCE CHECK

Program Architecture Database Input Status

<u>Statute/Regulations</u> Title/Part	<u>Element/Subelement</u> Assigned	Handwritten Document Completed	Loaded into Computer	Verified by Element/Subelement Manager
Pub. Law 100-203	GS			yes 3/27/88
Pub. Law 91-190 42 USC 4321-4347	EBS			yes 5/6/88
49 USC 1761-1762 1801-1812	SP+AE/T			yes 4/28/88
	SP+AE/T			yes 4/28/88
33 USC 1251-1376 [see s 1311 (F)]	EBS			yes 5/5/88
42 USC 300g-1, g-3, j-4, j-9	EBS			yes 5/4/88
42 USC 4701 ETC seq.				yes 4/28/88

QA check by: PK Jahring Date: 20 May 88

5/11/88



CNRA QUALITY ASSURANCE CHECK

Program Architecture Database Input Status

<u>Statute/Regulations</u> Title/Part	<u>Element/Subelement</u> Assigned	Handwritten Document Completed	Loaded into Computer	Verified by Element/Subelement Manager
42 USC 9601 ET SEQ.	EBS			yes 3 May 88
Pub. Law 98-616 42 USC 6901 ET SEQ.	EBS			yes 31 May 88
Pub. Law 91-173 AS AMENDED 30 USC 801 ET SEQ.	RDCCO			yes 22 Mar 88
Pub. Law 99-240	RDCCO			yes 30 Mar 88
Pub. Law 96-164	SP + AE/T			yes 28 Apr 88
Pub. Law 96-368	SP + AE/T			yes 28 Apr 88

QA check by: *E. [Signature]* Date: 20 May 88

59/11/88