

INTEROFFICE CORRESPONDENCE
TRW Environmental Safety Systems Inc.



Subject
QA Readiness

Date
April 6, 1992

From *RWG*
R. W. Godman

To
Quality Assurance Readiness Review
Team

cc

Location/Phone
TES1/8584
703.204-8605

In accordance with M&O, QAP-2-6, Readiness Review, the enclosed Attributes Lists are approved for use by the Readiness Review Team for conducting the M&O QA Program Review in Vienna.

RWG:agc

Enclosures: Attributes Lists (19)

Civilian Radioactive Waste Management

Page 1 of 2

Management & Operating Contractor

QA
Checklist #1

READINESS REVIEW ATTRIBUTE LIST

READINESS:

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 1 ORGANIZATION	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
1.	Has a Quality Assurance program been established?	✓		RM
2.	Is the program documented?	✓		RM
3.	Do Quality Assurance workers have organizational freedom to:			
a)	Identify quality problems?	✓		RM
b)	Initiate, recommend, or provide solutions?	✓		RM
c)	Verify implementation of solution?	✓		RM
d)	Assure that further processing, delivery, installation, or use is controlled until disposition of a nonconformance, deficiency - unsatisfactory condition has occurred.	✓		RM
4.	Does the highest QA Management position report to the same or higher organizational level as the highest line manager responsible for performing activities affecting quality?	✓		RM
5.	Is the QA management position independent of the functional work units so that full attention can be applied to the responsibilities of the QA program?	✓		RM
6.	Does the QA program have monitors that overview QAWs such as surveillances, audits or reviews?	✓		RM
7.	Has a program been established to allow workers performing QAW to report allegations of inadequate Quality work?	✓		RM

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 2 of 2

Management & Operating Contractor

QA

Checklist #1

READINESS REVIEW ATTRIBUTE LIST

READINESS: QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 1 ORGANIZATION	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
8.	Does personnel understand that they have the authority to report allegation of inadequate quality?	✓		RM
9.	Have procedures been established for issuing and lifting stop work orders?	✓		RM
10.	Are responsibilities of line managers involved in QAW identified and documented?			
11.	Has the M&O QAPD been approved by the DOE?	✓		RM
12.	Does the M&O General Manager and the M&O QA Manager approve all Quality Administrative Procedures?	✓		RM

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Management & Operating Contractor

QA
Checklist #2

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 2 QA PROGRAM	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
1.	<p>Has a Readiness Review Procedure been established that addresses the following characteristics:</p> <ul style="list-style-type: none"> a) Work activity prerequisites have been established? b) Detailed technical and QA program administrative procedures have been reviewed for appropriateness? c) Personnel have been suitably trained and qualified? 	<p>✓</p> <p>✓</p> <p>✓</p>		<p>RM</p> <p>RM</p> <p>RM</p>
2.	<p>Has a graded QA program procedure been established?</p>	<p>✓</p>		<p>RM</p>
3.	<p>Does the procedure have a selective application approach commensurate with the following factors:</p> <ul style="list-style-type: none"> a) Consequence of failure? b) Importance of data? c) Complexity of function? d) Reliability of process? 	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>		<p>RM</p> <p>RM</p> <p>RM</p> <p>RM</p>

Civilian Radioactive Waste Management

Page 2 of 3

Management & Operating Contractor

QA

Checklist #2

READINESS REVIEW ATTRIBUTE LIST

READINESS		QA PROGRAM		
ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 2 QA PROGRAM	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
	e) Reproducibility of results?	✓		mm
	f) Uniqueness of results?	✓		mm
	g) Degree of functional product demonstration?	✓		mm
	h) Degree of standardization?	✓		mm
	i) History of quality?	✓		mm
	j) Impact on schedule or cost to replace in the event of failure?	✓		mm
	k) Necessity of special controls or processes?	✓		mm
	l) Significance to licensing process?	✓		mm
4.	Has a policy statement been signed by a Senior Management official executing the QA program?	✓		mm
5.	Have surveillances or audits been performed to assess the Quality of Work performed?	✓		mm
6.	Has a procedure been established for Training and Indoctrination of personnel who will perform QAW?	✓		mm
7.	Is the Training and Indoctrination program adequate to assure that suitable proficiency of requirements is achieved and maintained?		10	mm
8.	Do QA training matrixes exist for QA personnel who perform QAW?	✓		mm
9.	Do M&O Managers establish training lists for personnel?	✓		mm

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 3 of 3

Management & Operating Contractor

QA
Checklist #2

READINESS REVIEW ATTRIBUTE LIST

READINESS		QA PROGRAM		
ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 2 QA PROGRAM	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
10.	Have provisions been established that demonstrate through a matrix system that applicable requirements of the QARD are properly documented in the QAPD and implementing procedures?	✓		mm
11.	Has a QA Program Management Information Reporting and Tracking System been established?		Reference MRS OPEN ITEM 15	mm

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 1 of 9

Management & Operating Contractor

QA

Checklist #3

READINESS REVIEW ATTRIBUTE LIST

READINESS		QA PROGRAM		
ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 3 DESIGN CONTROL	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
1.	<u>Design Control. General:</u>			
	a) Is the graded quality assurance approach (QAP-2-3) fully understood and applied to designs important to safety, waste isolation, and program objectives?		18, 19, 20, 23	RMS
	b) Do design schedules and related planning documents incorporate the applicable SEMP (Systems Engineering Management Plan) factors?	✓	—	RMS
	c) Are configuration management procedures for baselining design documents and controlling subsequent changes in place and approved?	✓	—	RMS
	d) Are the personnel trained in these procedures?		28	RMS
	e) Are the design activities mature enough to proceed to the next implementation phase?	✓	—	RMS
2.	<u>Design Input:</u>			
	a) Are measures in place such that applicable design inputs including design basis, performance requirements, regulatory requirements, codes and standards, and appropriate quality assurance standards are identified, documented, reviewed, and approved by the responsible design organization?		22	RMS
	b) Are design inputs specified and approved on a timely basis and to a level of detail necessary to permit the design activity to be carried out in a correct manner and to provide a consistent basis for making design decisions, accomplishing design verification measures, and evaluating design changes?	✓	—	RMS

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 2 of 9

Management & Operating Contractor

QA
Checklist #3

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 3 DESIGN CONTROL	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
3.	<p><u>Design Process</u></p> <p>c) Are changes from approved design inputs including the reason for the changes identified, approved, documented, and controlled in the same manner as the original design?</p>	✓	-	RMS
	<p>a) Are measures in place to assure that the design activities are prescribed and documented on a timely basis and to the level of detail necessary to permit the design process to be carried out in a correct manner, and to permit verification that the design meets requirements?</p>	✓	-	RMS
	<p>b) Will the design documents be adequate to support facility design, construction, and operation?</p>		27	RMS
	<p>c) Are appropriate quality standards identified, documented, and their selection reviewed and approved?</p>	✓	-	RMS
	<p>d) Will changes from specified quality standards be documented, approved, and controlled?</p>	✓	-	RMS
	<p>e) Are design methods, materials, parts, equipment, and processes that are essential to the function of the structure, system, or component appropriately selected and reviewed for suitability of the application?</p>	✓	-	RMS
	<p>f) Has all applicable information derived from experience as set forth in reports or other documentation been made available to cognizant design personnel?</p>	✓	-	RMS

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 3 of 9

Management & Operating Contractor

QA

Checklist #3

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 3 DESIGN CONTROL	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
	g) Is there reasonable assurance that the design product will be relatable to the design input by documentation in sufficient detail to permit design verification?	✓	-	RMS
	h) Is it clearly required that the final designs (approved design output documents and approved changes to these documents) identify all assemblies and/or components that are part of the item being designed?	✓	-	RMS
	i) Are commercial grade items, which are modified or selected by special inspection and/or testing to requirements more restrictive than the Supplier's published product description, appropriately documented?	✓	-	RMS
	j) Does the design control program provide for the correct translation of applicable regulatory requirements and design bases into design, procurement, and procedural documents?	✓	-	RMS
	k) Is a systems engineering approach being integrated into the design process?	✓	-	RMS
4.	<u>Design Analyses:</u>			
	a) Are measures in place to assure that design analyses will be performed in a planned, controlled, and documented manner?	✓	-	RMS
	b) Will the analyses be sufficiently detailed as to purpose, method, assumptions, design input, references, and units such that a person technically qualified in the subject can review and understand the analyses and verify the adequacy of the results without recourse to the originator?	✓	-	RMS

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 4 of 9

Management & Operating Contractor

QA

Checklist #3

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 3 DESIGN CONTROL	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
	c) Will calculations be appropriately identified by subject (including structure, system, or component to which the calculation applies), originator, reviewer, and date?	✓	-	RMS
	d) Based on this are the calculations fully retrievable?	✓	-	RMS
	e) Will computer programs be controlled to assure that changes are documented and approved by authorized personnel?	✓	-	RMS
	f) How will computer program verification be handled?	✓	-	RMS
	g) Are computer programs utilized for design analysis which have not been individually analyzed?	✓	-	RMS
	h) Under what circumstances are such computer programs utilized?	✓	-	RMS
	i) Will documentation of design analyses include the following: <ul style="list-style-type: none"> - Definition of the objective of the analyses - Definition of design inputs and their sources - Results of literature searches or other applicable background data - Identification of assumptions and indication of those that must be verified as the design proceeds - Identification of any computer calculation including computer type, computer program, revision identification, inputs, outputs, evidence of or reference to computer 	✓	-	RMS

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 5 of 9

Management & Operating Contractor

QA

Checklist #3

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 3 DESIGN CONTROL	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
5.	<p>program verification, and the bases supporting application of the computer program to the specific physical problem.</p> <ul style="list-style-type: none"> - Review and approval 			
	<p>j) Are measures in place to assure design analysis documents are legible, reproducible, and retrievable?</p>	✓	-	RMS
	<p><u>Design Verification:</u></p>			
	<p>a) Are design control measures in place to verify the adequacy of design through one or more of the following:</p> <ul style="list-style-type: none"> - Design Reviews - Calculations or analyses - Qualification tests 	✓	-	RMS
	<p>b) Will the result of the verification be clearly documented with the identification of the verifier clearly indicated?</p>	✓	-	RMS
	<p>c) Does the design organization identify and document the particular design verification method(s) used?</p>	✓	-	RMS
	<p>d) Is the criteria for determining the method of verification clearly established?</p>	✓	-	RMS
<p>e) Is it required that design verification be performed by competent individual(s) or group(s) other than those who performed the original design?</p>		21	RMS	
<p>f) Is the supervisor of the original design permitted to verify the design? Under what circumstances?</p>		21	RMS	

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 6 of 9

Management & Operating Contractor

QA

Checklist #3

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 3 DESIGN CONTROL	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
	<p>If utilized, supervisor cannot have specified a singular design approach or ruled out certain design considerations, and did not establish the design inputs. The only exception to the above is if the supervisor is the only individual in the organization competent to perform the verification.</p>			
	g) Are these verifications sufficiently detailed (cursory reviews are not satisfactory) to support a full and independent confirmation?	✓	-	RMS
	h) Are the responsibilities of persons performing the verification clearly defined?	✓	-	RMS
	i) Are measures in place to identify, track, and resolve any comments/open items in the verification reviews?	✓	-	RMS
	j) Does the procedure clearly define the documents required for completion of the verification process?	✓	-	RMS
	k) Is design verification required prior to release for procurement, manufacture, construction, or release to another organization requiring the design for other design activities? What are the exceptions? Are controls in place to permit partially unverified designs being released?	✓	-	RMS
	l) Will the basis for the extent of required design verification be clearly documented?	✓	-	RMS

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 7 of 9

Management & Operating Contractor

QA

Checklist #3

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 3 DESIGN CONTROL	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
	<p>m) Do design technical review requirements minimally include the following:</p> <ul style="list-style-type: none"> - Design inputs correctly selected? - Design assumptions clearly stated? Are they reasonable? Are re-verification requirements covered? - Appropriate design method used? - Design inputs appropriately incorporated into the design? - Design output reasonable compared to design inputs? 		24	RMS
	n) Does the design review provide all important considerations, including analysis, material compatibility, inspection, and test acceptance criteria?	✓	-	RMS
	o) Is alternate calculation (calculations/analyses utilizing alternate methods from the original calculations/analyses) usage appropriately defined?	✓	-	RMS
	p) Is qualification testing usage appropriately defined?	✓	-	RMS
	q) Do peer reviews (for studies and designs outside of the state-for-the-art) comply with the reference commitments in NUREG-1297, "Generic Technical Position on Peer Review for High Level Nuclear Waste Repositories?"	✓	-	RMS
	r) Are provisions in place to provide peer reviews when studies and designs are outside the state-of-the-art?		25	RMS
	s) Are the same controls applied to peer reviews as design reviews (technical reviews)?	✓	-	RMS

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 8 of 9

Management & Operating Contractor

QA

Checklist #3

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 3 DESIGN CONTROL	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
6.	<p><u>Design Change Control:</u></p> <p>a) Are changes subjected to the same control measures as the original design? Does this include the design analyses?</p> <p>b) Is the design verification process identical to the original design?</p> <p>c) Are provisions in place to cover responsibility changes in the organization's reviewing and approving the original designs if these individuals are not available to review the proposed change?</p> <p>d) Is provision procedurally made to review and modify as necessary the design process and verification procedure when a significant design change is necessary?</p> <p>e) Does Quality Assurance review design changes?</p> <p>f) Are errors and deficiencies in approved design and design input documentation documented and resolved in accordance with QAP-16-1, Corrective Action Report?</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	<p>—</p> <p>—</p> <p>—</p> <p>—</p> <p>—</p> <p>—</p>	<p>RMS</p> <p>RMS</p> <p>RMS</p> <p>RMS</p> <p>RMS</p> <p>RMS</p>
7.	<p><u>Interface Control:</u></p> <p>a) Are design interface responsibilities identified and controlled in applicable procedures and procurement documents among the participating organizations?</p>		26	RMS

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 9 of 9

Management & Operating Contractor

QA

Checklist #3

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 3 DESIGN CONTROL	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
	b) Are internal and external design interfaces identified by an interface control document and controlled in accordance with the M&O Configuration Management Plan and approved procedures?	✓	—	RMS
	c) Do interface controls include the assignment of responsibility and the establishment of procedures among participating design organizations for the review, approval, release, distribution, and revision of documents involving design interfaces?	✓	—	RMS
	d) Are provisions made for documenting and controlling design information transmitted across interfaces? Is the status of transmitted design information clearly identified? Are incomplete items requiring further evaluation, review, and approval so noted?	✓	—	RMS
	e) Is oral transmission of design information permitted? What follow up provisions are required?	✓	—	RMS
8.	<u>Design Documentation and Records:</u>			
	a) Are provisions in place to assure that design documentation and records are collected, stored and maintained which provide sufficient evidence that design and design verification processes were performed in accordance with the requirements of NQA-1 and QAPD?	✓	—	RMS
	b) Does this include documentation which identifies the important steps in the design process including sources of design inputs that support the final design?	✓	—	RMS

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Management & Operating Contractor

QA
Checklist #4

READINESS REVIEW ATTRIBUTE LIST

READINESS		QA PROGRAM		
ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 4 PROCUREMENT DOCUMENT CONTROL	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
1	Is there a review of procurement documents by technical and QA organizations to assure technical and QA requirements are included?	✓		RPR
2.	Does the procurement procedure evaluate the Suppliers QA program to verify they meet the requirements of the DOE and M&O QA program?	✓		RPR
3.	Does the procurement procedure require the Supplier to have an established QA program?	✓		RPR
4.	Does the procurement document specify the QA program applicable to the item being procured?	✓		RPR
5.	Does the procurement procedure require the scope of work to be adequately described in the procurement document?	✓		RPR
6.	Are applicable codes, standards, regulations, drawings, procedures and/or instructions pertaining to the design criteria specifying technical requirements of the item or service adequately described in the procurement document?	✓		RPR
7.	Are specified tests, inspections and acceptance requirements described in the procurement document?	✓		RPR
8.	Is there evidence of appropriate procurement document planning to describe the details of the generation, review and approval of procurement documents?	✓		RPR
9.	Are the personnel involved in procurement planning and preparation, review and approval appropriately indoctrinated and trained on the appropriate procurement, technical and QA procedures?		9	RPR

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Management & Operating Contractor

QA
Checklist #4

READINESS REVIEW ATTRIBUTE LIST

READINESS		QA PROGRAM		
ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 4 PROCUREMENT DOCUMENT CONTROL	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
10.	Does the procurement procedure reference the QA requirements of the QARD commensurate with the scope, complexity and safety implementation of the item or service?	✓		PRR
11.	Does the procurement procedure allow the Supplier to work to the M&O QA program if the Supplier's QA program is not utilized?	✓		PRR
12.	Does the procurement document specify what portions of the Purchaser's QA program and procedures are applicable to the Suppliers work?	✓		PRR
13.	Does the procurement document specify that QARD and M&O QA requirements are incorporated into subtier procurement documents and contractor procedures and verified by M&O QA?	✓		PRR
14.	Is the right of access by M&O QA personnel and/or their representatives to the Suppliers and subtier facilities described in the procurement procedure?	✓		PRR
15.	Does the procurement document procedure specify the requirements for documentation required to be submitted for information, review and/or approval?	✓		PRR
16.	Does the procurement document procedure specify the time when documentation is to be submitted?	✓		PRR
17.	Does the procurement document procedure address if the Supplier is to retain documentation and the retention times specified?	✓		PRR
18.	Does the procurement document procedure identify which and when dispositions of nonconformances are to be identified to the M&O for reporting and/or approving?	✓		PRR

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 3 of 3

Management & Operating Contractor

QA

Checklist #4

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 4 PROCUREMENT DOCUMENT CONTROL	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
19.	If the M&O QA program and procedures are utilized by the Supplier is there adequate verification that the Supplier has received indoctrination and training in the M&O program and procedures?	✓		PPR
20.	Does the procurement document procedure require the identification of appropriate spare and replacement parts/items and the applicable QA requirement for those spares?	✓		PPR
21.	Are the procurement documents and changes thereto appropriately reviewed for both technical and quality requirements prior to contract award?	✓		PPR
22.	Are changes to both technical and QA requirements as a result of precontract negotiations appropriately incorporated into procurement documents?	✓		PPR
23.	Does the procurement document procedure require revisions/changes to undergo the same level of review as the original procurement document?	✓		PPR
24.	Does the procurement document procedure describe which documents are to be quality affecting and controlled as a QA record by the document control provisions of the M&O QA program?	✓		PPR
25.	Is the training program (M&O QAP 2-1) for the personnel performing QAW properly being administered?		10	PPR

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 1 of 1

Management & Operating Contractor

QA
Checklist #5

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 5 PLANS, PROCEDURES AND DRAWINGS	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
1	Are M&O quality affecting work activities prescribed by and performed in accordance with documented instructions, procedures or drawings of a type appropriate to the circumstances?	✓		mm
2.	Do established procedures assure that instructions, procedures and drawings include acceptance criteria for determining that quality related activities have been satisfactorily accomplished?		Reference MRS OPEN ITEM 16	mm
3.	Is training provided on procedures, instructions or drawings prior to the start of quality affecting work?	✓		mm
4.	Does a process exist which allows the affected organizations including QA the opportunity to make comments and recommendations to line management concerning the acceptance of lower tier QA program documents?		14	mm
5.	Are implementing line procedures reviewed by groups that have: <ul style="list-style-type: none"> a) Actions in the procedure? b) Comments resolved? c) Documentation retained in QA Records Management System? 	✓ ✓ ✓		mm mm mm

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Management & Operating Contractor

QA
Checklist #6

READINESS REVIEW ATTRIBUTE LIST

READINESS	QA PROGRAM			
ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 6 DOCUMENT CONTROL	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
1.	Is there a procedure for Criteria 6?	✓		CSA
2.	Does it define what a controlled document is?	✓		CSA
3.	Are documents which are to be controlled			
	a) Identified?	✓		CSA
	b) Is distribution established?	✓		CSA
	c) Are responsibilities identified for the			
	1) Preparation of controlled documents?	✓		CSA
	2) Review of controlled documents?	✓		CSA
	3) Approval of controlled documents?	✓		CSA
	4) Issuance of controlled documents?	✓		CSA
4.	Are major changes to documents reviewed and approved by the same organization that performed the original review and approval unless specifically stated?		Reference Nevada Open Item 15 + MRS Open Item 9	CSA
5.	Is the process and authorization to implement a minor change (inconsequential editorial correction) to a document clearly delineated?		Nevada Open Item 14	CSA

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Management & Operating Contractor

QA
Checklist #6

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 6 DOCUMENT CONTROL	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
6.	<p>Are document issuance and distribution instructions clearly defined to ensure that</p> <p>a) Correct?</p> <p>b) Applicable?</p> <p>c) Current?</p> <p>documents are available to M&O personnel performing QA activities?</p>	<p>✓</p> <p>✓</p> <p>✓</p>		<p>CSA</p> <p>CSA</p> <p>CSA</p>
7.	<p>Does the procedure in place address the following:</p> <p>a) Description of the identification and marking of documents?</p> <p>b) Receipt acknowledgement system?</p> <p>c) Distribution lists?</p> <p>d) Distribution of unverified portions of documents released prior to verification?</p> <p>e) Marking, removal, or destruction of obsolete or superseded controlled documents?</p> <p>f) Controlled document list providing current revision status?</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>		<p>CSA</p> <p>CSA</p> <p>CSA</p> <p>CSA</p> <p>CSA</p> <p>CSA</p>

Civilian Radioactive Waste Management

Page 3 of 3

Management & Operating Contractor

QA

Checklist #6

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA & DOCUMENT CONTROL	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
	<p>g) Resolution of mandatory comments prior to approval and issuance?</p>		14	CSJ
8.	Are appropriate interface controls in place to require organizations other than the M&O to perform QAW to M&O procedures?	N/A*		CSJ
9.	Are personnel performing work with controlled documents appropriately trained?	✓		CSJ
	<p>* Question applicable to MRS RR, not M&O.</p>			

Civilian Radioactive Waste Management

Page 1 of 9

Management & Operating Contractor

QA

Checklist #7

READINESS REVIEW ATTRIBUTE LIST

READINESS I		QA PROGRAM		
ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 7 CONTROL OF PURCHASED SERVICES	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
1	Is there a systematic planned approach to generating a procurement document which includes the following attributes:			
	a) What is to be accomplished?	✓		PPR
	b) Who is responsible for performing the required tasks in the procurement process?	✓		PPR
	c) Is there a documented process for generating the procurement document?	✓		PPR
	d) Does the procurement document specify when the work is to be accomplished?	✓		PPR
2.	Is there an established procurement planning process to ensure that procurement activities do not commence prior to developing interface compatibilities and a prescribed program of procuring is established?	✓		PPR
3.	Does the procurement planning process describe the methodology utilized in procurement activities, steps taken and milestones set for the activities listed in #4?	✓		PPR
4.	Are applicable procedures in place to control the following activities prior to their being implemented?	✓		PPR
	a) Procurement document preparation, review and change control?	✓		PPR
	b) Selection of procurement sources?	✓		PPR
	c) Bid evaluation and award?	✓		PPR
	d) Purchaser control of Supplier performance?	✓		PPR

FTX-A043
REV.0

QAP-2-6

Checklist #7 F-18

Civilian Radioactive Waste Management

Management & Operating Contractor

QA
Checklist #7

READINESS REVIEW ATTRIBUTE LIST

READINESS I		QA PROGRAM		
ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 7 CONTROL OF PURCHASED SERVICES	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
	e) Verification of quality attached work activities by Purchaser?	✓		PRR
	f) Establish, as appropriate, notification of hold and witness points with Supplier?	✓		PRR
	g) Control of nonconformances by Supplier with established interface with Purchaser?	✓		PRR
	h) Established corrective action program?	✓		PRR
	e) Acceptance of item or service?	✓		PRR
	j) Quality Assurance records?	✓		PRR
5.	Are there provisions in the procurement planning procedure to integrate the items listed in #4 above?	✓		PRR
6.	Is there a vendor evaluation process to verify the Supplier can provide items and/or services in accordance with established technical and QA requirements as specified in the procurement document prior to award of the contract?	✓		PRR
7.	Are there established procedures for the evaluation and selection of Suppliers based on technical and QA requirements?	✓		PRR
8.	Does the procurement process described who in the Purchaser's organization is responsible for determining a Supplier's technical and quality assurance capability and how this evaluation is documented?	✓		PRR
9.	Is there an established program (procedure) for the evaluation and selection of procurement sources (including documentation)?	✓		PRR
10.	Are the results of the evaluation and selection process documented and based on one or more of the following provisions?	✓		PRR

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Management & Operating Contractor

QA

Checklist #7

READINESS REVIEW ATTRIBUTE LIST

READINESS I

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 7 CONTROL OF PURCHASED SERVICES	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
	a) Evaluation of Supplier's history of providing needed product with emphasis on current capability and actual product?	✓		PPR
	b) Review of Supplier's current qualitative and quantitative experience?	✓		PPR
	c) Assessment of Suppliers technical and QA capability by means of a direct evaluation of both their program and personnel and implementation of their QA program?	✓		PPR
11.	Is there procedural provisions for bids to be evaluated by appropriate qualified personnel for conformance to the procurement documents?	✓		PPR
12.	Are the bids from potential Suppliers evaluated for the following considerations by appropriately qualified individuals?	✓		PPR
	a) Technical Requirements?	✓		PPR
	b) QA Requirements?	✓		PPR
	c) Supplier's personnel?	✓		PPR
	d) Supplier's production capability?	✓		PPR
	e) Supplier's past performance?	✓		PPR
	f) Alternatives?	✓		PPR
	g) Exceptions?	✓		PPR
13.	Are provisions addressed in the procurement procedure to resolve or obtain commitments to resolve unacceptable quality conditions identified from the submitted bid evaluation?	✓		PPR

Civilian Radioactive Waste Management

Page 4 of 9

Management & Operating Contractor

QA

Checklist #7

READINESS REVIEW ATTRIBUTE LIST

READINESS I

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 7 CONTROL OF PURCHASED SERVICES	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
14.	Does the procurement procedure establish the requirements to evaluate the Supplier's performance based on the item's relative importance and complexity?	✓		RPR
15.	Does the procurement procedure delineate the following measures to be evaluated? a) Establishing an understanding between Purchaser and Supplier of the provisions and specifications of the procurement document? b) Requiring the Supplier to identify their program to be used to meet the requirements of the procurement document? c) Reviewing documentation required by the purchase document? d) How to identify and implement purchase order changes? e) Establish requirements of what and how documents are to be transmitted between the Purchaser and Supplier? f) Establishing the extent of source surveillance and inspections?	✓ ✓ ✓ ✓ ✓ ✓ ✓		RPR RPR RPR RPR RPR RPR
16.	Does the procurement procedure require that verification activities performed by the Purchaser not relieve the Supplier of their responsibilities for verification of quality achievement?	✓		RPR
17.	Does the procurement procedure delineate the qualification requirements of personnel performing verification (check, audit, inspect, witness) for the Purchaser?	✓		RPR

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 5 of 9

Management & Operating Contractor

QA

Checklist #7

READINESS REVIEW ATTRIBUTE LIST

READINESS I		QA PROGRAM		
ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 7 CONTROL OF PURCHASED SERVICES	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
18.	Does the procurement procedure specify that records of activities performed to verify quality be recorded and maintained?	✓		PPR
19.	Does the procurement document require that the records generated as a result of quality activities be evaluated for their effectiveness?	✓		PPR
20.	Does the procurement procedure specify how quality records generated by the Supplier are to be controlled, handled, approved, shipped and stored?	✓		PPR
21.	Does the procurement procedure specify how quality records are to be submitted, processed and reviewed for technical and quality requirements against established standards?	✓		PPR
22.	Is there a provision in the procurement procedure describing how to control changes to procurement documents in accordance with established quality standards?	✓		PPR
23.	Does the procurement procedure require that changes to either technical and/or quality requirements in procurement documents be evaluated and handled in the same manner and with the same criteria as the original procurement document?	✓		PPR
24.	Does the procurement procedure establish requirements for accepting items or services as having satisfied the procurement requirements?	✓		PPR
25.	Does the procurement document have provisions for notifying appropriate regulatory agencies if procured items or services are found to be actually or potentially defective and could create substantial safety hazards or the item or service fails to meet QA regulatory requirements?	✓		PPR

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 6 of 9

Management & Operating Contractor

QA

Checklist #7

READINESS REVIEW ATTRIBUTE LIST

READINESS I		QA PROGRAM		
ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 7 CONTROL OF PURCHASED SERVICES	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
26.	Does the procurement procedure verify the installation or use of items or services, contingent upon their acceptance, to procurement documents as applicable?	✓		RPR
27.	Does the procurement procedure require that the Supplier verify their item or service meets the procurement requirements?	✓		RPR
28.	Does the procurement procedure require the acceptance of items by one or more of the following methods?	✓		RPR
	a) Supplier Certificate of Conformance (C of C)?	✓		RPR
	b) Source Verification?	✓		RPR
	c) Receiving inspection?	✓		RPR
	d) Post-installation testing?	✓		RPR
29.	When a C of C is required by the procurements document are the following criteria addressed in the C of C?	✓		RPR
	a) C of C identifies item or service?	✓		RPR
	b) C of C shall state that it meets codes, standards or specification required by the procurement document?	✓		RPR
	c) C of C shall state exceptions taken to procurement document?	✓		RPR
	d) C of C shall be signed by an individual responsible for the quality function being stated on the C of C?	✓		RPR
	e) The C of C shall be described in either the Purchaser's or Supplier's Q. A. program?	✓		RPR

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Management & Operating Contractor

QA

Checklist #7

READINESS REVIEW ATTRIBUTE LIST

READINESS I		QA PROGRAM		
ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 7 CONTROL OF PURCHASED SERVICES	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
	f) An independent verification of the Suppliers C of C system shall be performed by the Purchaser to verify the quality of the C of C?	✓		RRR
30.	When source verification is specified in the procurement document is the verification performed to monitor, witness or observe activities based on that items importance or complexity?	✓		RRR
31.	Is the source verification implemented as a result of preplanning to perform test inspection or examinations?	✓		RRR
32.	When receiving inspection is specified by the procurement document, are there receiving inspection instructions (procedures) to instruct the Purchaser on what attributes to inspect an item or service to?	✓		RRR
33.	Is the receiving inspection coordinated with the review of other documentation supplied with the item when required by the procurement document?	✓		RRR
34.	When Post-Installation testing is specified, are the requirements of post-installation testing established in the procurement documents?	✓		RRR
35.	Does the procurement procedure define who will be responsible for source verification, receiving inspect, review of C of C's and post-installation testing and their required qualifications?	✓		RRR
36.	Does the procurement document require services i.e.; third party inspections, engineering and consulting services to be accepted by one of the following methods?	✓		RRR
	a) Technical verification of data produced?	✓		RRR

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Management & Operating Contractor

QA
Checklist #7

READINESS REVIEW ATTRIBUTE LIST

READINESS I		QA PROGRAM		
ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 7 CONTROL OF PURCHASED SERVICES	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
	b) Audit and/or surveillance of the activity?	✓		PPR
	c) Review of objective documentation i.e., C of C's, stress reports, MTR's, etc. for conformance to procurement requirements?	✓		PPR
37.	Does the procurement procedure specify how Supplier generated nonconformance's to the purchase documents are to be handled with regards to which nonconformances are required to be sent to the Purchaser for notification and disposition?	✓		PPR
38.	Does the procurement procedure specify the following requirements to be addressed when items or services do not meeting procurement documentation requirements?	✓		PPR
	a) Evaluation of nonconformance?	✓		PPR
	b) Submittal of nonconformance with recommended disposition?	✓		PPR
	c) Purchaser disposition of Supplier's recommendation?	✓		PPR
	d) Verification of implementation of disposition?	✓		PPR
	e) Maintenance of records of Supplier - submitted nonconformances?	✓		PPR
39.	Does the procurement procedure require Supplier nonconformances that consist of any of the below listed shall be submitted to the Purchaser for approval of recommended disposition?	✓		PPR
	a) Technical or material requirements violated?	✓		PPR
	b) Nonconformances that cannot be corrected by rework or modification?	✓		PPR

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 9 of 9

Management & Operating Contractor

QA

Checklist #7

READINESS REVIEW ATTRIBUTE LIST

READINESS I

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 7 CONTROL OF PURCHASED SERVICES	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
40.	<p>c) Item does not conform to original requirements but can function in a condition to meet procedure requirements unimpaired?</p> <p>Does the procurement document for commercial grade items provide for augmented procedure requirements as follows?</p> <p>a) Commercial grade items are identified in design output documents?</p> <p>b) Based on the complexity and importance to safety of commercial grade items source evaluation and selection will be handled in the same manner as quality related items or services?</p> <p>c) Commercial grade items are identified as Supplier's standardized product i.e., catalog number?</p> <p>d) Receipt inspection of commercial grade items to assure no shipping damage, received correct item, any testing is performed if required by procurement document and required documentation is acceptable?</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>		<p>RRR</p> <p>RRR</p> <p>RRR</p> <p>RRR</p> <p>RRR</p> <p>RRR</p>

FTX-A043
REV.0

QAP-2-6

Checklist #7 F-18

Civilian Radioactive Waste Management

Page 1 of 1

Management & Operating Contractor

QA
Checklist #8

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA & CONTROL OF MATERIALS, PARTS AND COMPONENTS	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
1	Verify that under the present scope of work, the M&O QA program does not necessitate the establishment of management controls for Section 8 of the QARD.	✓		TAF

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 1 of 1

Management & Operating Contractor

QA

Checklist #9

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA & CONTROL OF PROCESSES	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
1	Verify that under the present scope of work, the M&O QA program does not necessitate the establishment of management controls for Section 9 of the QARD.	✓		TAF

FTX-A043
REV.0

QAP-2-6

Checklist #9 F-18

Civilian Radioactive Waste Management

Page 1 of 1

Management & Operating Contractor

QA
Checklist #10

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 10 INSPECTION	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
1	Verify that under the present scope of work, the M&O QA program does not necessitate the establishment of management controls for Section 10 of the QARD.	✓		TAF

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 1 of 1

Management & Operating Contractor

QA

Checklist #11

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 11 TEST CONTROL	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
1	Verify that under the present scope of work, the M&O QA program does not necessitate the establishment of management controls for Section 11 of the QARD.	✓		TAF

FTX-A043
REV.0

QAP-2-6

Checklist #11 F-18

Civilian Radioactive Waste Management

Page 1 of 1

Management & Operating Contractor

QA

Checklist #12

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 12 CONTROL OF MEASURING AND TEST EQUIPMENT	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
1	Verify that under the present scope of work, the M&O QA program does not necessitate the establishment of management controls for Section 12 of the QARD.	✓		TRF

FTX-A049
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 1 of 1

Management & Operating Contractor

QA

Checklist #13

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 13 HANDLING STORAGE & SHIPPING	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
1	Verify that under the present scope of work, the M&O QA program does not necessitate the establishment of management controls for Section 13 of the QARD.	✓		DAF

FTX-A043
REV.0

QAP-2-6

Checklist #13 F-18

Civilian Radioactive Waste Management

Page 1 of 1

Management & Operating Contractor

QA

Checklist #14

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 14 INSPECTION, TEST & OPERATING STATUS	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
1	Verify that under the present scope of work, the M&O QA program does not necessitate the establishment of management controls for Section 14 of the QARD.	✓		TAF

FTX-A043
REV.0

QAP-2-6

Checklist #14 F-18

Civilian Radioactive Waste Management

Page 1 of 1

Management & Operating Contractor

QA

Checklist #15

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 15 CONTROL OF NON CONFORMING ITEMS	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
1	Verify that under the present scope of work, the M&O QA program does not necessitate the establishment of management controls for Section 15 of the QARD.	✓		TAF

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 1 of 2

Management & Operating Contractor

QA
Checklist #16

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 16 CORRECTIVE ACTION	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
1.	<p>Are appropriate procedures in place to implement all the corrective action processes required by NQA-1, Section 16, i.e.:</p> <p>a) Prompt identification and correction of all conditions adverse to quality?</p> <p>b) Causes of significant conditions adverse to quality and prevention of recurrence?</p> <p>c) Documentation and reporting to appropriate levels of management the identification, causes and corrective actions for all significant conditions adverse to quality?</p>		11	DJB
	a)		11	DJB
	b)		11	DJB
	c)		11	DJB
2.	Do the procedures establish QA's responsibilities for performing trend analysis for all types of quality information as specified in section 16.1 of the QARD?		12	DJB
3.	Do the procedures establish the criteria and methodology for performing:			
	a) Root cause analysis? N/A	✓		
	b) Trend analysis, and for distinguishing significant results?			DJB
4.	Do the procedures establish criteria and methodology for identifying the organization responsible for correction action?	✓		DJB
	a) For identifying the level (or levels) of upper management to which the significant results should be reported?	✓		DJB
	b) For use by upper management in performing reviews and assessments?	✓		DJB

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 2 of 2

Management & Operating Contractor

QA
Checklist #16

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
5.	Have appropriate criteria for classification of significant conditions adverse to quality been established?			
6.	Is QA concurrence required before or after corrective action is implemented?	✓		DBB
	a) Is QA concurrence contingent upon the corrective action being appropriate to the prevention of reoccurrence for root causes?	✓		DBB
	b) Is it given without knowledge of the root cause and/or preventive action?	✓		DBB
7.	What procedures, criteria, methodology are in place to prescribe time limits for corrective action?	✓		DBB
	a) To enforce compliance?	✓		DBB
8.	Do procedures exist for appropriately addressing, prioritizing, tracking, and trending all deficiencies?		12	DBB
9.	What criteria are utilized to identify adverse trends?	✓		DBB
10.	What organizations are responsible for initiating and documenting remedial actions?	✓		DBB
11.	Is there a procedure governing the QA close out and documentation of remedial action?	✓		DBB
12.	Have personnel performing QAW been trained in QAP 16-1, Corrective Action and QAP 2-3, Establishing QA Controls (Classification and Grading)?	✓		DBB

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 1 of 4

Management & Operating Contractor

QA
Checklist #17

READINESS REVIEW ATTRIBUTE LIST

READINESS		QA PROGRAM		
ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 17 QA RECORDS	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
1.	Does a procedure exist for Criteria 17?	CSA 4492	15	CSA
2.	Are records and records packages clearly defined?	✓		CSA
3.	Are instructions including roles and responsibilities for the preparation/organization of records/record packages clear and unambiguous?	✓		CSA
4.	Does the Records Center maintain lists that contain the signatures and initials of personnel authorized to authenticate records?	✓		CSA
5.	Is there a procedure which describes the responsibilities and methodology for the			
	a) Receipt, processing and inspection	✓		CSA
	b) Indexing	✓		CSA
	c) Storage, retrieval and disposition of Program Records?	✓		CSA
6.	Is the receipt control system structured to permit a current and accurate assessment of the status of records during the receiving process?	✓		CSA
	Does it include:			
	a) A method for designating the required records to be maintained?	✓		CSA
	b) A method for identifying the records received?	✓		CSA
	c) Procedures for receipt and inspection of incoming records?	✓		CSA

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 2 of 4

Management & Operating Contractor

QA

Checklist #17

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 17 QA RECORDS	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
	d) A method for resolution of records and records packages which are incomplete, illegible, or inaccurate or inappropriate to the work?	✓		CSA
	e) A receipt control process until final disposition (after receipt from Record Sources)?	✓		CSA
7.	Is there a records tracking and control system?	✓		CSA
	a) Does it provide sufficient information to permit timely retrieval while records/packages are within the LRC (Prior to turnover to the CRF)?	✓		CSA
	b) Does it provide sufficient information to permit timely retrieval after turnover to the CRF?	✓		CSA
8.	Has the Records Center/CRF organized and implemented a system for control of records for permanent and temporary storage?	✓		CSA
9.	Are records stored in steel filing cabinets or on shelving in containers in binders, folders or envelopes?	✓		CSA
10.	Does the storage procedure for controlling records from the time they are completed until they are stored in predetermined locations meet the requirements of the OCRWM QARD and include: Does the storage procedure include:	✓		CSA
	a) A description of the storage facility?	✓		CSA
	b) The filing system to be used?	✓		CSA

FTX-A043
REV.0

QAP-2-6

Checklist #17-18

Civilian Radioactive Waste Management

Management & Operating Contractor

QA
Checklist #17

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 17 QA RECORDS	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
	c) A method for verifying that the records received are legible and in agreement with the transmittal documents?	✓		CSJ
	d) Rules governing access to and control of the files?	✓		CSJ
	e) A method for maintaining control of and accountability for records removed from the storage area?	✓		CSJ
	f) A method for filing supplemental information?	✓		CSJ
11.	Does the storage system provide for the timely retrieval of information?	✓		CSJ
12.	Have provisions been made to prevent damage to records from moisture, temperature, and pressure?	✓		CSJ
13.	Are special processed records (including microfilm) protected to prevent damage from excessive light, stacking, electromagnetic fields, temperature and humidity?	✓		CSJ
14.	Is there adequate provision for record protection from damage, deterioration, and loss while in the Records Center and CRF?	✓		CSJ
15.	Is there a provision for inspection of records for deterioration after turnover to the permanent storage facility?	✓		CSJ

Civilian Radioactive Waste Management

Management & Operating Contractor

QA
Checklist #17

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 17 QA RECORDS	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
16.	Are procedures in place for the replacement, restoration, or substitution of lost or damaged records?		16	CSA
17.	Are procedures in place detailing corrections to records, including the date and the identification of the person authorized to make the correction?	✓		CSA
18.	Are lists dated, posted, and maintained of designated personnel who may access the files in the Records Center?	✓		CSA
	a) Are these posted in the entrance to the Records Centers or on the top drawer of any appropriately approved fireproof filing devices used for temporary storage?	✓		CSA
19.	Are DOE System 80 requirements addressed?	✓		CSA
20.	Are personnel performing work appropriately trained?		17	CSA
21.	Are all M&O records classified as lifetime and retained until turnover to DOE OCRWM?	✓		CSA

Civilian Radioactive Waste Management

Page 1 of 2

Management & Operating Contractor

QA

Checklist #18

READINESS REVIEW ATTRIBUTE LIST

READINESS	QA PROGRAM			
ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 18 AUDITS	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
1	Have internal audits been planned and scheduled to verify compliance with the requirements of the quality assurance program and determine its effectiveness with respect to the performance of the QAW tasks to be performed under the M&O program in FY'92?	✓		DJB
2.	Did internal audit plans fully address programmatic compliance?	✓		DJB
3.	Did the scope of technical evaluations covered by audits include procedures, instructions, techniques and items?	✓		DJB
4.	Is evidence available to show that the audit team members are qualified per QARD 18 section 18.1?	✓		DJB
	a) Indoctrinated in audit techniques?	✓		DJB
5.	Is management - at all levels - involved with the audit process?	✓		DJB
6.	Do criteria and methodology exist for analyzing the adequacy and effectiveness of the QA program?		13	DJB
7.	Are internal audits scheduled at least once during the life of the QAW activity, and/or annually?	✓		DJB
8.	Are audits scheduled in response to changes and do they reflect consideration of the results of previous surveillance and audits?	✓		DJB
9.	Have applicable supplier audits been performed per QARD 18.4.b?	N/A		DJB
10.	Have follow-up actions been taken in all cases where the need was indicated by audit results?	✓		DJB

FTX-A043
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QAP-2-6

Civilian Radioactive Waste Management

Page 2 of 2

Management & Operating Contractor

QA
Checklist #18

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 18 AUDITS	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
11.	Have all the needs for external audits been evaluated?	N/A		DJB
12.	Have external organizations been performing audits on supplies for TRW? If so, are they complying with QARD 18.4.d?	N/A		DJB
13.	Do audit plans contain all material required by NQA-1, supplement 18S-1?	✓		DJB
14.	Do audit plans and/or procedures require the depth of investigation and the scope of activities necessary and appropriate to evaluate the adequacy and effectiveness of the QA program in all areas?		13	DJB
15.	Do audit reports comply with Section 5 of NQA-1 Supplement 18 S-1?	✓		DJB
16.	Do audit records include audit plans, reports, replies, and records of correction action completion?	✓		DJB

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 1 of 4

Management & Operating Contractor

QA

Checklist #19

READINESS REVIEW ATTRIBUTE LIST

READINESS		QA PROGRAM		
ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 19 COMPUTER SOFTWARE DESIGN AND CONTROL	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
	Computer Software Quality Assurance Plan - CSQAP			
1.	The QARD calls for a Software Quality Assurance Plan (SQAP). Does a plan exist?	✓		R
2.	Does the CSQAP require independent plans for each major piece of software developed, review and approval of these independent CSQAPs to include: requirements, methods, documentation, interface management, establishing baselines, verification process, and discrepancy reporting?	✓		R
3.	Does the CSQAP require individual CSQAPs to include: products, organizational responsibilities, required documentation, and software reviews?	✓		R
4.	Does the CSQAP define the computer life-cycle management controls and include S/W development phases: requirements, design, implementation, test, installation, and Operations and Maintenance?	✓		R
	Computer Software Verification and Validation QAP 19-1			
5.	Is there an approved QAP for computer software verification and validation?	✓		R
6.	Is QAP 19-1 sufficient to meet the requirements of NQA-1 and of the QARD for software V&V?	✓		R
7.	Does the procedure require that computer software programs developed or modified be documented in accordance with the applicable elements of NUREG-856 (P. 19-1, 19.7, P 19-10)?	✓		R

FTX-A043
REV.0

QAP-2-6

Checklist #19 F-18

Civillian Radioactive Waste Management

Page 2 of 4

Management & Operating Contractor

QA
Checklist #19

READINESS REVIEW ATTRIBUTE LIST

READINESS		QA PROGRAM		
ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 19 COMPUTER SOFTWARE DESIGN AND CONTROL	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
8.	The QARD calls for a Software Verification and Validation Plan and that verification of the software is done before the license application (P19-5). Is there a plan to insure that all software used for QAW is verified prior to the license application?	✓		R
9.	Do the V&V plans specify the method of verification and validation? How was the method of V&V selected? Are they valid?	✓		R
10.	Do the V&V methods chosen assure that the software adequately perform all intended functions and none not intended?	✓		R
11.	Does the procedure provide how the results of the model validation will be justified relative to the intent of the use of the model?	✓		R
12.	Does the V&V Plan require that independent organizations or individuals not connected with the development of the S/W do the verification?	✓		R
13.	Does the Plan/Procedure describe how the results of the validation and verification are going to be recorded?	✓		R
14.	Verification - Does the V&V Plan address verification of the software to insure that the software requirements are correctly implemented in the design and the design is implemented in the code?	✓		R
15.	Validation - Does the V&V Plan address validation of the software and describe a process to compare the test results of the software against verified and traceable data from outside verified sources? <i>(applies to model validation as well)</i> <i>(4/1/12 R)</i>			

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 3 of 4

Management & Operating Contractor

QA

Checklist #19

READINESS REVIEW ATTRIBUTE LIST

READINESS		QA PROGRAM		
ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 19 COMPUTER SOFTWARE DESIGN AND CONTROL	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
16.	Is documentation required where alternative approaches to validation are required?	✓		RJ
17.	The QARD calls for qualification of existing software. Is there an approved plan for qualifying existing software?	✓		RJ
18.	Minimum acceptable life-cycle documentation is required for software that has been developed or modified.	✓		RJ
	a) Is there a software development plan which requires documentation?	✓		RJ
	b) Is the requirement of the software V&V plan acceptable?	✓		RJ
19.	Is there an approved QAP for computer software configuration management?	✓		RJ
20.	Is there a procedure to place QAW software under CM control to establish a baseline?	✓		RJ
21.	Do the procedures require a configuration baseline be established at the end of each major phase of the computer software life cycle?	✓		RJ
22.	Is there a configuration item labeling system for individual items and versions?	✓		RJ
23.	Does the procedure for identifying changes to the configuration baseline conform to the QARD?			
	a) Is there a procedure for evaluating, coordinating, and approving changes to S/W?	✓		RJ

FTX-A043
REV.0

QAP-2-6

Civilian Radioactive Waste Management

Page 4 of 4

Management & Operating Contractor

QA
Checklist #19

READINESS REVIEW ATTRIBUTE LIST

READINESS

QA PROGRAM

ATTRIBUTE NUMBER	DESCRIPTION OF PREREQUISITE QAPD CRITERIA 19 COMPUTER SOFTWARE DESIGN AND CONTROL	CLOSED	OPEN ITEM NUMBER	EVALUATED BY (INITIALS)
24.	<p>Do configuration status accounting reports include:</p> <ul style="list-style-type: none"> a) List of approved configuration items, status of proposed changes, change implementation & version chronology? b) Status of proposed changed? c) Change implementation? d) Version chronology? 	<p style="text-align: center;">✓ ✓ ✓ ✓</p>		<p style="text-align: center;">EW EW EW EW</p>

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QAP-2-6

Readiness Review Plan
for
Civilian Radioactive Waste Management System
Management and Operating Contractor

Quality Assurance Program

March 3, 1992



Approved
Readiness Review Team Leader



Approved
Readiness Review Board Chairperson

TABLE OF CONTENTS

1.	INTRODUCTION AND OVERVIEW	1
2.	SCOPE	1
2.1	Task Assignments	2
3.	OBJECTIVES	2
4.	REFERENCE DOCUMENTS	3
5.	READINESS REVIEW GUIDELINES	3
6.	READINESS REVIEW ASSUMPTIONS	4
7.	READINESS REVIEW SCHEDULE, PARTICIPANTS AND PROCESS	4
7.1	Schedule	4
7.2	Participants	5
7.3	Process	6
8.	ATTACHMENTS	7
8.1	ATTACHMENT I - Program Work Breakdown Structure	8
8.2	ATTACHMENT II - Readiness Review IOC, dated February 18, 1992 ...	9
8.3	ATTACHMENT III - Readiness Review Process Flowchart	10
8.4	ATTACHMENT IV - Task Matrix	11
8.5	ATTACHMENT V - Observer Question Form	12

1. INTRODUCTION AND OVERVIEW

This Review Plan has been prepared on behalf of the Chairperson, CRWMS M&O Readiness Review Board, in accordance with the criteria of QAP-2-6, Readiness Review. The Chairperson is acting under the authority of the General Manager, CRWMS M&O, to conduct this assessment of the readiness of the M&O Quality Assurance (QA) Program. This review is limited to quality affecting work (QAW) to be performed under the M&O QA program in accordance with tasking received from the Office of Civilian Radioactive Waste Management (OCRWM), Department of Energy (DOE). The M&O contract Statement of Work (SOW) defines a transition phase which covers a period of time of approximately 20 months from contract award to completion of phase-in of work from existing contractors. During the transition phase, the M&O is to organize, staff, develop/implement management control systems and a QA program, train personnel and complete the readiness process to begin technical work. The completion of the M&O management control system has been impacted by the OCRWM Management System Improvement Strategy (MSIS), in which the M&O has been a major participant. That strategy included a complete review of the hierarchy of management control documents and the relationship of Program and Project documents as well as the relationship of OCRWM and M&O documents. Closure on those issues was achieved on November 19, 1991, and will allow the M&O to complete its management control system. In order to proceed with the limited QAW directed by OCRWM for the M&O in FY92, which must be performed under the M&O QA program, the M&O proposed to the Director, M&O Management Division, OCRWM, on November 15, 1991, a three phased approach to allow the M&O to achieve readiness. Approval was received on November 22, 1991, to proceed with that approach. It consisted of a review of the M&O Nevada Site FY92 scope of work in December 1991, a review of the Monitored Retrievable Storage (MRS) design activities using M&O procedures in February 1992, and will conclude with this review of the readiness of the M&O to execute its full responsibilities, both in QA and management control, in April/May 1992. This review is limited to QA activities. The management control review will be conducted separately.

2. SCOPE

The scope of this review is to evaluate the readiness of the M&O contractor to execute its full responsibilities for the Design phase, including Procurement, of the M&O QA program as identified in the existing Scope of Work. Work scope is as assigned by OCRWM in accordance with DOE Order 5700.7b, Work Authorization System, and in support of the CRWM Program as outlined in the contract Statement of Work dated January 18, 1992. OCRWM approval will be facilitated by having observers with the Readiness Review Team and members on the Readiness Review Board.

This review will verify the readiness to perform the tasks which will be accomplished under the M&O QA program. These tasks are within the scope of the following NQA-1, Quality Assurance Requirements for Nuclear Facilities, and the OCRWM Quality Assurance Requirements Document (QARD) basic requirements:

- Requirement 1 - Organization
- Requirement 2 - Quality Assurance Program
- Requirement 3 - Design Control
- Requirement 4 - Procurement Document Control
- Requirement 5 - Instructions, Procedures and Drawings
- Requirement 6 - Document Control
- Requirement 7 - Control of Purchased Items & Services
- Requirement 16 - Corrective Action
- Requirement 17 - Quality Assurance Records
- Requirement 18 - Audits.
- Requirement 19 - Computer Software

The Attribute List for these areas will be based on the NQA-1 and the OCRWM QARD criteria.

2.1 TASK ASSIGNMENTS

The tasks assigned to the M&O are defined in accordance with the Program Work Breakdown Structure (WBS) (see Attachment I).

3. OBJECTIVES

The following objectives are established for this review:

- Verify readiness to accomplish the tasks to be performed under the M&O QA program considering the three readiness review criteria of the OCRWM QARD, paragraph 2.4:
 - Work activity prerequisites have been satisfied
 - Detailed technical and QA program administrative procedures appropriate for defined work are in place
 - Process for ensuring that personnel are suitably trained and qualified is in place.
- Hold points and open items identified from the Nevada Site and MRS Design Readiness Reviews will be reviewed for proper closure.

4. REFERENCE DOCUMENTS

The following references will provide the basis for this review:

- Contract Statement of Work, dated January 18,1991.
- Letter, John W. Bartlett, Director, OCRWM, to Roland L. Robertson, General Manager, M&O, dated September 30, 1991.
- Letter, Roland L. Robertson, General Manager, M&O, to Trudy Wood, Director, M&O Management Division, OCRWM, dated November 15, 1991.
- CRWMS M&O Ramp-up Plan, dated June 12,1991.
- ASME, NQA-1-1989 Edition, Quality Assurance Program Requirements for Nuclear Facilities.
- Quality Assurance Requirements Document for the Civilian Radioactive Waste Management Program, (QARD), DOE/RW-0214, Revision 4.
- CRWMS M&O Quality Assurance Program Description (QAPD), Revision 2.
- CRWMS M&O Quality Administrative Procedure, QAP-2-6, Readiness Review, Revision 0.
- DOE Order 4700.1, Project Management System.
- DOE Order 5700.B, Work Authorization System.
- M&O Quality Administrative Procedures and Implementing Line Procedures
- M&O Readiness Review Reports for M&O Nevada Site and MRS Design.

5. READINESS REVIEW GUIDELINES

The M&O General Manager directed this review on February 18, 1992, and provided the guidelines for conducting this review (see Attachment II). The review has been scheduled for April 8-10, 1992. As noted in his direction, the Readiness Reviews for M&O Nevada Site and MRS Design shall be considered in this Readiness Review. It is important for the review team to understand that this is a review of the entire M&O scope of work. The review will verify the readiness to perform those tasks.

6. READINESS REVIEW ASSUMPTIONS

The primary assumptions for this review are based on those management control alternatives proposed by the M&O and accepted by OCRWM in the absence of Program documents described in the Contract Statement of Work that were the subject of the task force on the hierarchy of documents. The following are the applicable baseline documents for this review:

- M&O QA Program
 - Current OCRWM QARD
 - M&O QAPD
 - QAP-2-3, Grading
 - Software Quality Assurance Plan (QAPD Section 19)
 - QAPs/ILPs required by the scope of work
- M&O Management Plan
- M&O Systems Engineering Management Plan (SEMP)
- M&O Configuration Management Plan (CMP).

7. READINESS REVIEW SCHEDULE, PARTICIPANTS AND PROCESS

7.1 SCHEDULE

The Readiness Review is structured around the following significant milestones:

- Develop Draft Readiness Review Plan - February 17, 1992
- Readiness Review Board Review Draft Plan - February 18, 1992
- Readiness Review Board Approve Plan - March 3, 1992
- Develop Attributes Lists and Conduct Review - March 4 - April 10, 1992
 - M&O Formal Review - April 8-10, 1992
- Develop Readiness Review Report - April 10-22, 1992
- Readiness Review Board Approve Report - April 22, 1992
- General Manager approve Report - April 24, 1992.

7.2 PARTICIPANTS

The key participants in the Review are the Readiness Review Board and the Readiness Review Team.

7.2.1 To provide an independent review of the determinations of the Readiness Review Team, the M&O General Manager has appointed a Review Board with membership external to the M&O that provides experience in large scale program management as well as nuclear quality assurance. The Board membership is as follows:

- Nat Trembath - Chairperson
- Steve Lukasik
- Paul Schwegler
- Lionel Skidmore
- Jim Wells
- Ram Murthy - DOE Member
- DOE Member
- NRC Observer.

As former and current senior executives at Group and Sector levels within TRW, the first four members bring an extensive management background in program management with particular emphasis on the systems engineering approach in support of government projects. Jim Wells has managed quality assurance programs in support of NRC projects; has extensive experience in a variety of roles within the nuclear industry; and is a member of the ASME Main Committee on Nuclear Quality Assurance. The M&O Board Members received orientation on the CRWMS program and received training on the OCRWM QARD and the M&O QAPD, and have been provided a copy of QAP-2-6, Readiness Review, for reading. This training has been documented in accordance with QAP-2-1, Indoctrination and Training. The DOE members have been provided a copy of the M&O QAPD and QAP-2-6 for reading.

7.2.2 The General Manager has appointed the Assistant General Manager, Operations, Ray Godman, as the Readiness Review Team Leader, who has, in turn, appointed the following Readiness Review Team with responsibilities appropriate for the scope of this review:

- Tom Faries - Team Secretary
- Dan Jennings - Records Management, Document Control
- Bob Morgan - Quality Assurance Program
- Bob Sandifer - Design Controls
- Pete West - Software
- Ron Ruth - Procurement
- DOE Observers
- NRC Observer.

The qualifications and training of the M&O team members are documented in accordance with QAP-2-1, Indoctrination and Training, and QAP-2-2, Verification of Personnel Qualifications.

- 7.2.3** OCRWM has designated members on the Readiness Review Board and observers of the Readiness Review Team to facilitate authorization for the M&O to commence work at the completion of the review; however, the responsibility for the adequacy of the Board and Team to fulfill the objectives of the Review and the requirements of QAP-2-6 remains with the M&O.

7.3 PROCESS

The review will be conducted in accordance with the process defined in QAP-2-6, Readiness Review, and using the flow chart in Attachment III.

- 7.3.1** Upon approval of this plan by the Readiness Review Board, the Readiness Review team will develop the Attribute List using the assumptions of this plan, the scope of work as defined by the Work Authorization System, and criteria of the NQA-1 and the OCRWM QARD.

- 7.3.2** The Readiness Review Team Leader will approve the Attribute List.

- 7.3.3** Prior to the formal beginning of the Review, individual members of the Review Team will complete the review of documents and procedures in support of the objectives of the review.

- 7.3.4** The review will formally begin with an introduction by the Readiness Review Team Leader. This presentation will address the following:

- Readiness requirements
- M&O readiness strategy
- Assumptions of the review
- Roles and responsibilities of the review participants.

- 7.3.5** The M&O Quality Assurance Manager will then present the following information:

- M&O QA organization
- Implementation of the M&O QA Program for the M&O work scope
- Scope of work
- List of QAW activities to be performed under M&O QA program

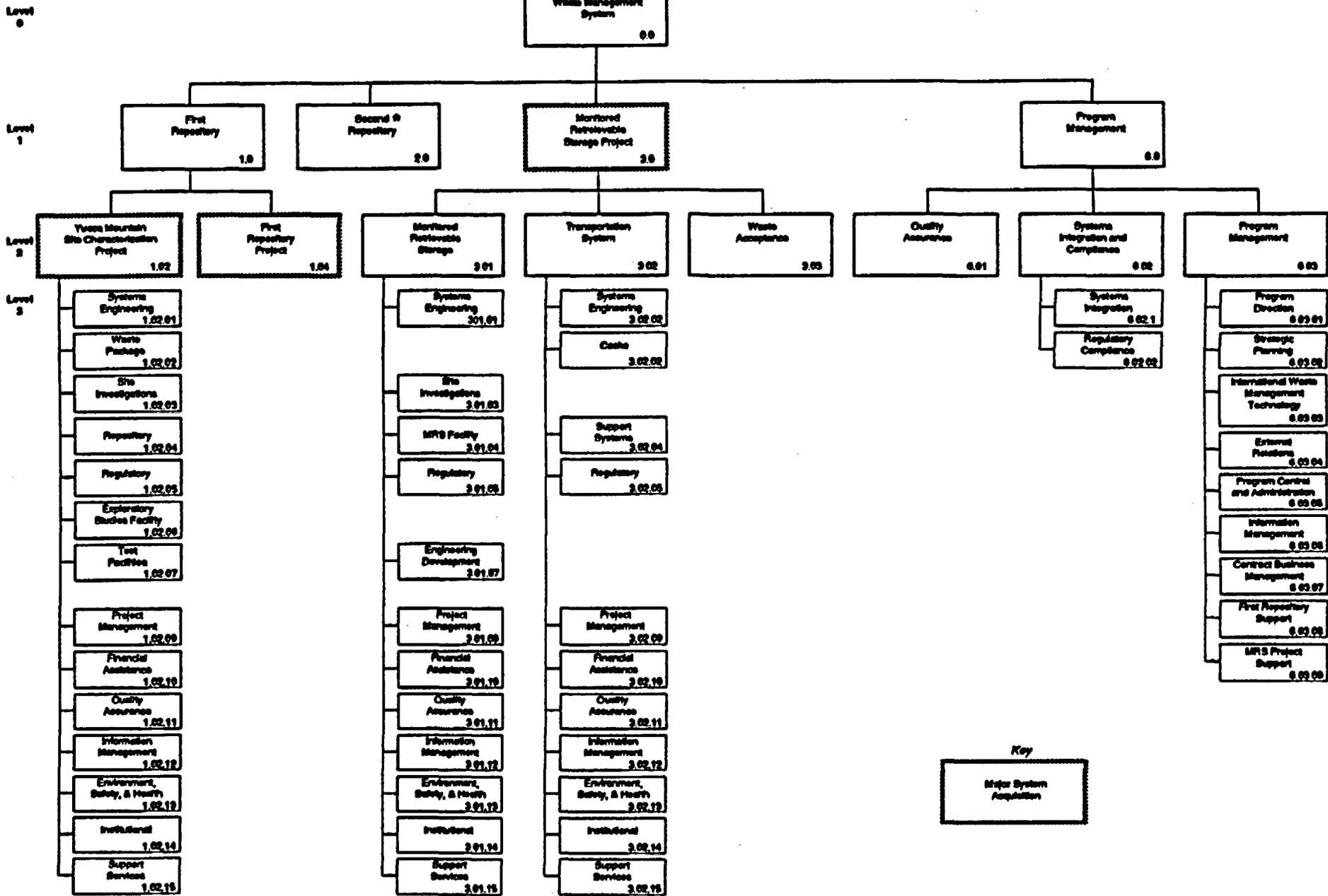
- Qualification of personnel and determination of staffing requirements
 - Process for identifying required procedures.
- 7.3.6** Upon the completion of the site presentation, the Review Team will conduct the Readiness Review and complete the Attribute Lists by referring to the presentation, referring to previously reviewed documents and records and by individual or group discussions with site personnel. The sample matrix in Attachment IV will be completed to identify the tasks to be performed under the M&O QA program and to verify the QA prerequisites for these tasks.
- 7.3.7** Observers shall only interact with members of the Readiness Review Team. Any questions, other than minor clarifications, shall be presented to a team member using the form in Attachment V. Documents, files and procedures may be reviewed in conjunction with a team member during the review; however copies will not be provided.
- 7.3.8** Upon completion of the Attribute List the Review Team will prepare a report and a summary presentation for delivery by the Readiness Review Team Leader to the Readiness Review Board on April 22, 1992. The report will include a review of any Open Item Reports generated during the review; actions required to close the Open Item Report and its impact on readiness. Any recommended hold points as a result of Open Item Reports will be clearly identified. The report to the Board will conclude with an overall recommendation for the Board's consideration regarding readiness to proceed with the defined scope of work.
- 7.3.9** The Readiness Review Board will accept the report as written or direct changes to incorporate the Board's determination of the adequacy of the Review and their recommendation to the General Manager regarding readiness. A summary of the Board's recommendations will be provided to the General Manager.
- 7.3.10** The General Manager will consider the report of the Readiness Review Board and announce his determination to OCRWM by April 24, 1992.

8. ATTACHMENTS

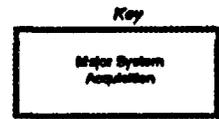
- 8.1 ATTACHMENT I - Program Work Breakdown Structure**
- 8.2 ATTACHMENT II - Readiness Review IOC, dated February 18, 1992**
- 8.3 ATTACHMENT III - Readiness Review Process Flowchart**
- 8.4 ATTACHMENT IV - Task Matrix**
- 8.5 ATTACHMENT V - Observer Question Form**

ATTACHMENT I
PROGRAM WORK BREAKDOWN STRUCTURE

Readiness Review



① Inactive Future Element



**ATTACHMENT II
READINESS REVIEW IOC
(Dated February 18, 1992)**

INTEROFFICE CORRESPONDENCE
TRW Environmental Safety Systems Inc.



Subject
Readiness Review

Date
February 18, 1992

From
R. Robertson

To
J. Brackett
D. Foust
R. Godman
A. Greenberg
R. White
G. Vawter

cc

Location/Phone
TES1/8588
204-8564

In accordance with the CRWMS M&O QAPD, dated June 14, 1991, and QAP 2-6, Readiness Review, dated November 18, 1991, I am directing a Readiness Review of the M&O Quality Assurance Program. The review will address all activities necessary to execute our Quality Affecting Work responsibilities and will complete the three phased review of the M&O QA Program. I have appointed Nat Trembath to serve as Chairperson of the Readiness Review Board and Ray Godman as the Review Team Leader. Enclosed is a list of the review participants.

This review will verify satisfaction of all M&O work activity prerequisites; verify appropriate procedures are in place; and verify personnel are trained and qualified. Readiness Reviews of the Nevada Site and the MRS Design, along with QA program audits are to be reviewed and evaluated as part of this review.

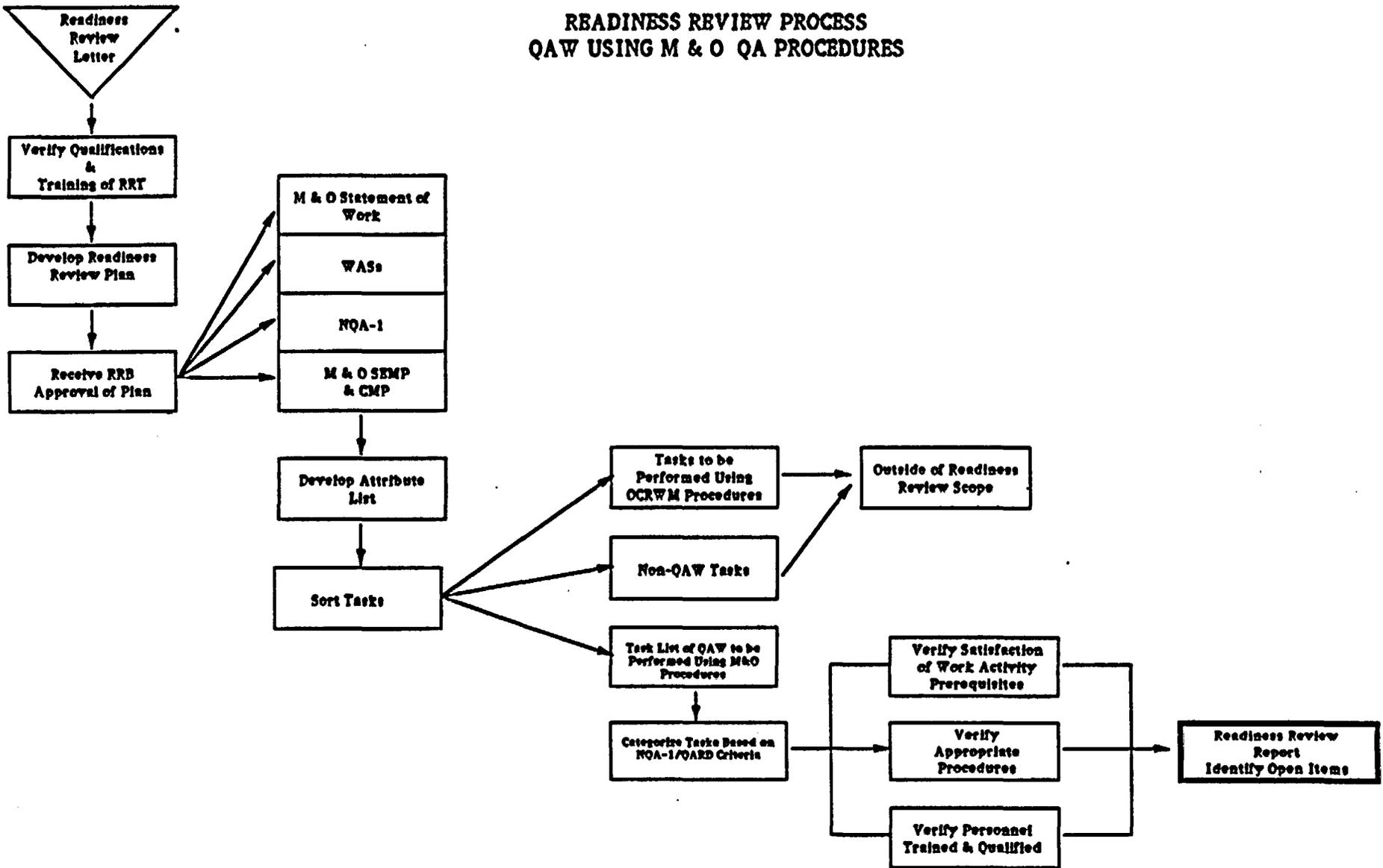
The Readiness Review Team Leader is responsible for determining the prerequisites for Readiness in accordance with QAP-2-6 and consistent with the defined scope of work.

Enclosures: Readiness Review Participants
Readiness Review Schedule

RLR:agc

**ATTACHMENT III
READINESS REVIEW PROCESS FLOWCHART**

READINESS REVIEW PROCESS QAW USING M & O QA PROCEDURES



**ATTACHMENT IV
TASK MATRIX**

**ATTACHMENT V
OBSERVER QUESTION FORM**

Readiness Review

Observer Question

Observer Name

Agency Represented

Question (Please be as specific as possible, citing reference if available)

Readiness Review Team Reply

Approved:

Readiness Review Team Leader

OBSERVER QUESTION FORM

Readiness Review

Observer Question

Observer Name

Agency Represented

Sam Horton

DOE

Question (Please be as specific as possible, citing reference if available)

It was the observer's understanding that the M&O Computer Software & Design Control activities (Sect.19-QAPD) will proceed at risk (barring no major Readiness Review problems). If this assumption is correct, please explain how the last sentence of Section 19 of the M&O's QAPD can be waived, i.e. - the CSQAP shall beapproved by OCRWM prior to any QAW being performed under the plan.
Readiness Review Team Reply _____

The assumption is inaccurate. OCRWM acceptance of the CSQAP is required prior to M&O development, review or approval of software V&V documentation.

Jan X. Di
for RLB

Approved:

RWB

Readiness Review Team Leader

OBSERVER QUESTION FORM

Readiness Review

Observer Question

Observer Name

Agency Represented

Sam Horton

DOE

Question (Please be as specific as possible, citing reference if available)

The QARD, Rev 4, Sect. 2, para 2.7 requires provisions be established through a matrix system that each of the applicable QARD requirements is properly documented and covered by the respective QAPD implementing procedures and instructions.

The observer would like to verify this requirement has been met.

Readiness Review Team Reply The requirement has been met. The Systems QA Manager is responsible for maintaining the matrix system. It is available for inspection.

Ken Z. Ding
Col RAS

Approved:

[Signature]
Readiness Review Team Leader

OBSERVER QUESTION FORM

Readiness Review

Observer Question

Observer Name

Agency Represented

Sam Horton

DOE

Question (Please be as specific as possible, citing reference if available)

QAP-16-1 is used to document non-conforming items. Please reconcile why the requirements of NQA-1, Supplement 15S-1 are not included in QAP-16-1 in order to ensure the identification, segregation and disposition of the items is addressed.

Readiness Review Team Reply QAPD, Section 15 addresses the reporting of non-conformances as described in Section 16 of the QAPD. As 1997 approaches when the first items are received one of two alternatives will be selected; either QAP-16-1 will be revised to address the requirements of QAPD, Section 15 and NQA-1 requirements, or a separate procedure will be developed.

Approved:

Jan X. Ding
An RSB

RWEda
Readiness Review Team Leader

OBSERVER QUESTION FORM

Readiness Review

Observer Question

Observer Name

Agency Represented

Sam Horton

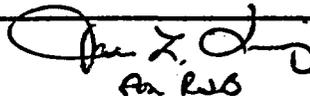
OCRWM QA

Question (Please be as specific as possible, citing reference if available)

When work is initiated by the M&O in one location that requires action by the M&O in other geographic locations, what controls does the M&O have in place to ensure internal M&O interfaces & changes thereto are defined to adequately control the work? (Reference - NQA-1, Supp IS-1, para 3.2)

Readiness Review Team Reply Organizational interfaces are covered in QAPD, Section 1.3 and QAPs where the appropriate interfacing managers are charged with action/concurrence approvals.

Approved:


Sam Horton



Readiness Review Team Leader

OBSERVER QUESTION FORM

Readiness Review

Observer Question

Observer Name

Agency Represented

C. Nye

DOE

Question (Please be as specific as possible, citing reference if available)

The scope of the QAPD, Rev 2 Section 17, covers the M&O Records Management System only. Does the revision in progress cover the expanded scope of the M&O to include the entire OCRWM Records System, including CRF operations?

Readiness Review Team Reply Rev 3 to the M&O QAPD will include a description of the OCRWM QA Program and the CRF to the M&O Program as well as addressing LRC and CRF handling of the M&O records.

John Z. Dig

for R&B

Approved:

RW/so

Readiness Review Team Leader

OBSERVER QUESTION FORM

Readiness Review

Observer Question

Observer Name

Agency Represented

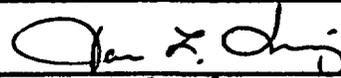
C. Nye

DOE

Question (Please be as specific as possible, citing reference if available)

Do the M&O procedures being prepared reflect an increased level of controls necessary to account for the transfer of the CRF from Forrestal to the M&O facility in Vienna? Includes control of records transferred for processing (prevention from loss, damage, etc.) and retrieval of records (how available to DOE personnel at Forrestal?)

Readiness Review Team Reply Requirements for proper handling of program records while in transit are included in SRP-17-4. A photocopy of all QA records is maintained at the LRC per 17-4. Retrieval activity is appropriately outlined in SRP-17-5 (dialo copy generated for appropriate LRC) and in 17-7 for RIS index.


An RJB

Approved:



Readiness Review Team Leader

OBSERVER QUESTION FORM

Readiness Review

Observer Question

Observer Name

Agency Represented

Sam Horton

DOE

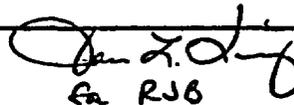
Question (Please be as specific as possible, citing reference if available)

Both the OCRWM QARD & the M&O QAPD address the requirement to perform management assessments to determine implementation and effectiveness of the M&O QA Program.

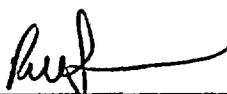
Since this activity is part of the QA Program, please explain why this attribute is not included on the Attribute List for Section 2 and identify what OAP exists to address management assessments.

Readiness Review Team Reply Management assessments are not required to be performed until a year after the M&O starts work to the QA Program that has been accepted by OCRWM; activity which does not fall within the M&O FY92 schedule.

QAP-2-7 has been drafted to cover this activity, however, and should be approved and issued well in advance of the requirement.


for RJB

Approved:


Readiness Review Team Leader

1. PURPOSE

This procedure establishes the responsibilities and methods for conducting readiness reviews.

2. SCOPE

This procedure applies to reviews conducted by the Nuclear Waste Management System Management and Operating (NWMS M&O) Contractor to verify that specific prerequisites and programmatic requirements have been satisfied prior to the start or continuation of a design phase, process, or other Contractor activity.

3. APPLICABLE DOCUMENTS/DEFINITIONS

3.1 APPLICABLE DOCUMENTS

3.1.1 "Quality Assurance Requirements for the Civilian Radioactive Waste Management Program," (QARD), DOE/RW-0214.

3.1.2 "The Nuclear Waste Management System, Management & Operating Contractor Quality Assurance Program Description Document," (QAPD).

3.2 DEFINITIONS

3.2.1 The definitions of other quality assurance related terms are found in the Glossary contained in paragraph 3.1.1.

3.2.2 Attribute List - The list of prerequisites to be verified during the Readiness Review.

3.2.3 Hold point - An identified point beyond which work cannot proceed until authorized by the General Manager.

4. RESPONSIBILITIES

4.1 GENERAL MANAGER

4.1.1 Review and approve this procedure.

Nuclear Waste Management System

Management & Operating Contractor

- 4.1.2 Determine if and when a readiness review should be performed.
- 4.1.3 Determine the scope of the readiness review.
- 4.1.4 Appoint the chairperson and members of the Readiness Review Board.
- 4.1.5 Appoint the team leader of the Readiness Review Team.
- 4.1.6 Approve the Readiness Review Report.
- 4.1.7 Authorize the start or continuation of work following completion of the readiness review.

4.2 READINESS REVIEW BOARD CHAIRPERSON

- 4.2.1 Approve the Readiness Review Plan.
- 4.2.2 Approve the Readiness Review Report prior to forwarding to the General Manager for his final action.

4.3 READINESS REVIEW BOARD

The Readiness Review Board is responsible for advising the Readiness Review Board Chairperson.

4.4 READINESS REVIEW TEAM LEADER

- 4.4.1 Establish the qualifications and select Readiness Review Team members.
- 4.4.2 Prepare the Readiness Review Plan.
- 4.4.3 Prepare the Attribute List prior to the start of the review.
- 4.4.4 Approve the Attribute List.
- 4.4.5 Direct team members during the conduct of the review.
- 4.4.6 Prepare and approve the Readiness Review Report.
- 4.4.7 Track open items and document closure.
- 4.4.8 Submit Quality Assurance (QA) records to the M&O Local Records Center.

Nuclear Waste Management System

Management & Operating Contractor

4.5 READINESS REVIEW TEAM

- 4.5.1 Support the Readiness Review Team Leader (RRTL) in the development of the Readiness Review Plan.**
- 4.5.2 Support the RRTL in the development the Readiness Review Attribute List.**
- 4.5.3 Complete assigned sections of the Attribute List and prepare Open Item Reports during the readiness review.**
- 4.5.4 Provide input and recommendations for the Readiness Review Report.**

4.6 QUALITY ASSURANCE MANAGER

- 4.6.1 Prepare and maintain this procedure.**
- 4.6.2 Review and approve this procedure.**
- 4.6.3 Provide resources and assistance in the performance of readiness reviews, as requested.**

5. PROCEDURE

5.1 GUIDELINES FOR READINESS REVIEWS

Guidelines for the performance of readiness reviews should include: location of the review (site or office); details of the design phase, process, or other Program activity to be reviewed (such as technical documents or procedures); items requiring special attention such as potential problem areas, items that impact schedule or items requiring specialized technical expertise; results of applicable management assessments, peer reviews, design reviews, technical document reviews, and readiness reviews; appropriate acceptance criteria to be used during the readiness review; and identification of personnel assigned to assist the reviewers.

5.2 READINESS REVIEW TEAM

- 5.2.1 Readiness Review Team members will usually be M&O personnel unless particular outside expertise is required.**
- 5.2.2 Team members shall have, at a minimum, experience in the disciplines undergoing readiness review. Team members shall be trained on this procedure and other appropriate procedures as assigned by the RRTL.**

5.3 READINESS REVIEW BOARD

A Readiness Review Board will be selected by the General Manager from outside the M&O to provide an independent review of the determinations of the Readiness Review Team. The Board membership will provide a range of experience that includes large scale program management and nuclear quality assurance.

5.4 INITIATING READINESS REVIEW

- 5.4.1** Determination of the need for a readiness review shall be made by the M&O General Manager. He will document the need for the readiness review and identify the specific point at which the readiness review will be performed.
- 5.4.2** The Assistant General Managers and other line managers shall notify the General Manager when a design phase, process, or other Program activity has progressed to the point where a readiness review is needed.
- 5.4.3** Upon notification that a readiness review is required, the General Manager shall define the scope of the review, establish guidelines in accordance with paragraph 5.1 for performing the review, and appoint the Readiness Review Board Chairperson, the Readiness Review Board, and the Readiness Review Team Leader.
- 5.4.4** Based upon the scope of the readiness review, the RRTL shall select team members for the Readiness Review Team and assign any needed training.
- 5.4.5** The Readiness Review Team shall prepare the Readiness Review Plan using the guidelines provided by the General Manager. The Plan shall include the following, as appropriate:
 - A.** Introduction and overview
 - B.** Scope and areas to be covered
 - C.** Objectives to be determined
 - D.** Reference procedures to be used
 - E.** Readiness review guidelines
 - F.** Readiness review assumptions

G. Readiness review schedule, indicating significant milestones and due dates for reports

H. Identification of RRT members and their area of responsibility

I. Approval of the RRTL.

5.4.6 The RRTL will review the Plan with the Readiness Review Board and obtain the approval of the Board Chairperson.

5.4.7 Following approval of the plan, the RRT shall develop the Attribute List (Attachment I). The Attribute List identifies the prerequisites to be verified during the readiness review. Examples of readiness review attributes are included in Attachment II.

5.4.8 The RRTL shall review and approve the Attribute List.

5.5 READINESS REVIEW

5.5.1 The RRT shall use the approved Attribute List as directed by the RRTL to conduct the readiness review and ensure that each identified prerequisite is evaluated. Team members shall initial and date each attribute when it is verified that the prerequisite has been satisfied or identify the Open Item Number for attributes that are not closed.

5.5.2 Team members shall document any attribute remaining open on an Open Item Report (Attachment III). The Open Item Report shall identify:

A. The Attribute and Open Item Numbers

B. Descriptions of the prerequisites and the open item

C. Required actions, and the responsibility and estimated completion date for each action

D. Signature and date of the preparer

E. Identification of any hold points that are established if work is permitted to start or resume prior to closure of the open item.

5.5.3 The RRTL may prepare an Open Items List (Attachment IV) for tracking of open items.

5.5.4 The RRTL shall coordinate the preparation of the Readiness Review Report, ensuring that all items on the Attribute List have been closed or have been incorporated on Open Item Reports, as appropriate. The report shall include a list of team members and any recommendations regarding readiness to start or continue the activity undergoing review. The RRTL shall attach any Open Item Reports, sign and date the Readiness Review Report, and submit the report to the Readiness Review Board for their approval.

5.5.5 The RRTL shall present the Readiness Review Report to the Readiness Review Board for their consideration. The RRTL and team shall respond to any questions from the board and provide any necessary clarification.

5.5.6 The Readiness Review Board will consider the RRTL presentation and the Readiness Review Report. The board will advise the Chairperson as to the disposition of the report. The board may accept the report or direct changes to reflect the decisions of the board. The Chairperson will sign the final report approved by the board and forward it to the General Manager for approval.

5.6 ACTION SUBSEQUENT TO REVIEW

5.6.1 When the General Manager has reviewed and approved the Readiness Review Report, the report and attached Open Item Reports shall be distributed to affected organizations.

5.6.2 The RRTL shall track open items and document closure on the Open Item Reports as appropriate. The RRTL shall notify the General Manager when all actions required prior to the start or continuation of work have been completed.

5.6.3 Following the approval of the Readiness Review Report or the notification described in paragraph 5.6.2, as necessary, the General Manager may authorize the start or continuation of the design phase, process, or Program activity. The RRTL shall continue to track remaining open items, documenting closure on the Open Item Report when actions are completed. Work shall not proceed beyond any hold point established on the Open Item Report until the closure of the item is approved by the General Manager.

5.6.4 The RRTL shall assemble the quality assurance records generated as a result of this procedure for submittal to the M&O local records center in accordance with paragraph 6.

5.6.5 Readiness Review Boards and teams will be disbanded upon the completion of the recommendations by the Board to the General Manager. Individual team members may be assigned to assist the team leader in tracking open items and assembling quality assurance records.

Nuclear Waste Management System

Management & Operating Contractor

6. RECORDS

The Readiness Review Plan, Attribute List, Open Item Reports, Readiness Review Team Report, final Readiness Review Report signed by the Readiness Review Board Chairperson, and the General Manager's authorization to start or continue work are QA records that shall be collected and maintained in accordance with QAP-17-1, QA Records Management.

7. ATTACHMENTS

7.1 ATTACHMENT I - Readiness Review Attribute List (Example).

7.2 ATTACHMENT II - Examples of Readiness Review Attributes.

7.3 ATTACHMENT III - Readiness Review Open Report List (Example).

7.4 ATTACHMENT IV - Readiness Review Open Items List (Example).

ATTACHMENT II
EXAMPLES OF READINESS REVIEW ATTRIBUTES

1. Do management plans exist?
2. Do activity plans exist?
3. Are staffing requirements adequately addressed?
4. Are there means to answer questions from the public?
5. Has the M&O approved the plans?
6. Has training been provided?
7. Has policy been established by the M&O?
8. Are contracts in place?
9. Have technical specifications been developed and approved?
10. Have quality assurance programmatic requirements been defined for the activities under review?
11. Have quality levels, inspection points, hold points, and QA reviews been established, reviewed, and approved?
12. Have organizational and physical interfaces been defined and documented?
13. Are documents in place to ensure that regulatory requirements have been addressed including local, state, or federal permits?
14. Has the proper level of authority been delegated to the activity?
15. Are logical interfaces between network activities established?
16. Are implementing procedures in place, adequate, and approved?
17. Have facilities been acquired and are they operational?
18. Are funds available to do the work?

ATTACHMENT II (Continued)
EXAMPLES OF READINESS REVIEW ATTRIBUTES

19. Has handling of data, information, and records been addressed?
20. Have safety and health measures been identified?
21. Have security requirements, including computer access, been addressed?
22. Has Acquisition Executive approval been received for applicable key decisions required by DOE Project Management System?
23. Do schedules exist and are they adequate?

ATTACHMENT III
READINESS REVIEW OPEN ITEM REPORT - (EXAMPLE)

Nuclear Waste Management System Management & Operating Contractor		Page _____ of _____ QA
READINESS REVIEW OPEN-ITEM REPORT		
READINESS REVIEW	ATTRIBUTE NO.	OPEN ITEM NO.
DESCRIPTION OF PREREQUISITE		
DESCRIPTION OF OPEN ITEM		
ACTIONS REQUIRED TO CLOSE	RESPONSIBILITY	ESTIMATED COMPLETION DATE
HOLD POINT REQUIRED? YES ___ NO ___		
PREPARED BY		
_____ Name		_____ Date
ASSIGNMENT OF HOLD POINTS:		
ACTIONS COMPLETED DATE:	VERIFIED BY:	
CLOSURE APPROVED BY		
_____ M&O GENERAL MANAGER		_____ Date
FTX-A045 REV. 0		QAP-2-6 F-20

