DOE F 1323.8 (2-89)

1/12/93

United States Government

Department of Energy

memorandum

DATE: JAN 06 1993

REPLY TO ATTN OF: RW-3

SUBJECT: OCRWM Quality Assurance Audit (QA) Schedule for Fiscal Year (FY) 1993, Revision 1

TO: Director, Office of Civilian Radioactive Waste Management

Attached is FY 1993, Revision 1, of the OCRWM QA audit schedule for both internal and external audits planned for FY 1993. This schedule may be revised as required to reflect additional audits and any other changes that may occur.

The following changes have been made from Revision 0:

- HQ-93-02 Scope increased: Full Scope covering C1 & C2.
- HQ-93-07 cancelled: Scope increase of HQ-93-02.
- HQ-93-08 renumbered to HQ-93-07: old HQ-93-07 cancelled.
- YMP-93-06 Audit rescheduled: requested by REECo due to conflict with ASQC meeting.
- YMP-93-10 Audit rescheduled: requested by LANL due to conflict with High Level Radioactive Waste Management conference.
- YMP-93-15 Audit rescheduled and renumbered to YMP-93-18: based upon rescheduling audit YMP-93-17.
- YMP-93-16 Audit rescheduled and renumbered to YMP-93-19: requested by SNL due to conflict with High Level Radioactive Waste Management conference.
- YMP-93-17 Audit rescheduled: requested by YMPO due to conflict with Budget meeting.
- YMP-93-19 Audit rescheduled and renumbered to YMP-93-16: lack of ongoing quality-affecting work
- New YMP-93-12 Audit added: new supplier to the OCRWM project.
- Old YMP-93-12 renumbered to YMP-93-13: addition of new YMP-93-12
- Old YMP-93-13 renumbered to YMP-93-14: addition of new YMP-93-12
- Old YMP-93-14 renumbered to YMP-93-15: addition of new YMP-93-12

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- Old YMP-93-18 renumbered to YMP-93-20: addition of new YMP-93-12

Donald G. Horton, Director
Office of Quality Assurance

Attachment

cc:
T. Isaacs, RW-4
J. Saltzman, RW-5
S. Rousso, RW-10
C. Gertz, RW-22
S. Brocoum, RW-20
J. Roberts, RW-30
R. Milner, RW-40
S. Rousso, RW-50
S. Cowan, EM-30
J. Conway, EM-343
M. Meyer, CER
W. Booth, WESTON
K. Hooks, NRC
F. Mayes, EIA
R. Loux, NWPO, State of Nevada
S. Zimmerman, NWPO, State of Nevada
C. Schank, Churchill Co.
E. Teisenhausen, Clark Co.
L. Vaughn, Esmerelda Co.
P. Goicoechea, Eureka Co.
R. Cambell, Inyo Co.
T. Michener, Inyo Co.
G. Derby, Lander Co.
M. Baugnman, Lincoln Co.
C. Jackson, Mineral Co.
P. Niedzielski-Eichner, Nye Co.
F. Sperry, White Pine Co.
D. Spence, YMPO
T. Colandrea, EEI
T. Chaney, USGS, Denver, CO
L. Hayes, USGS, Denver, CO
S. Bolivar, LANL, Los Alamos, NM
J. Canepa, LANL, Los Alamos, NM
R. Richards, SNL, Albuquerque, NM
L. Shepard, SNL, Albuquerque, NM
W. Clarke, LLNL, Livermore, CA
D. Wolfe, LLNL, Livermore, CA
J. Harper, SAIC, Las Vegas, NV

M. Voegele, SAIC, Las Vegas, NV
R. Brackett, TRW, Vienna, VA
R. Robertson, TRW, Vienna, VA
W. Glasser, REECo, Las Vegas, NV
R. Pritchert, REECo, Las Vegas, NV
R. Bullock,, RSN, Las Vegas, NV
M. Regenda, RSN, Las Vegas, NV
M. Kreiter, PNL, Richland, WA
J. McGarrah, PNL, Richland, WA
L. Foust, TRW, Las Vegas, NV
J. Jackson, TRW, Las Vegas, NV
R. Pope, ORNL, Oakridge, TN
R. Collier, ORNL, Oakridge, TN
P. Zavattaro, EG&G, Las Vegas, NV

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
FY-93 QUALITY ASSURANCE AUDIT SCHEDULE
Revision 1

December 23, 1992

ORGANIZATION TO BE AUDITED	LOCATION	AUDIT #	AUDIT TEAM LEADER	DATE OF AUDIT	QA CRITERIA
USGS	Denver, CO	YMP-93-01	K. T. McFall	Completed	C2
LANL	Las Alamos, NM	YMP-93-02	F. J. Kratzinger	Completed	C2
OCRWM	Washington, DC Las Vegas, NV	HQ-93-01	R. D. Brown	Completed	C1
SNL	Albuquerque, NM	YMP-93-03	D. N. Harris	Completed	C1
EM-343	Germantown, MD	HQ-93-02	T. E. Rodgers	1/11-15/93	C1 & C2
LLNL	Livermore, CA	YMP-93-04	A. I. Arceo	1/11-15/93	C1
SAIC	Las Vegas, NV	YMP-93-05	R. B. Constable	2/1-5/93	C2
M&O	Vienna, VA Charlotte, NC	HQ-93-03	R. D. Brown	2/2-12/93	C1
REECo	Las Vegas, NV	YMP-93-06	R. H. Klemens	2/8-12/93	C1
M&O	Las Vegas, NV	YMP-93-07	R. E. Powe	3/1-5/93	C1
RSN	Las Vegas, NV	YMP-93-08	N. D. Cox	3/15-19/93	C2
YMPO	Las Vegas, NV	YMP-93-09	R. L. Maudlin	4/5-9/93	C1
EIA	Washington, DC	HQ-93-04	M. J. Donovan	4/19-23/92	C1&C2
LANL	Los Alamos, NM	YMP-93-10	T. J. Higgins	4/19-23/93	C1
OCRWM	Washington, DC Las Vegas, NV	HQ-93-05	F. H. Lentz	5/10-14/93	C2
USGS	Denver, CO	YMP-93-11	J. Heaney	5/17-21/93	C1

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
FY-93 QUALITY ASSURANCE AUDIT SCHEDULE
Revision 1

December 23, 1992

ORGANIZATION TO BE AUDITED	LOCATION	AUDIT #	AUDIT TEAM LEADER	DATE OF AUDIT	QA CRITERIA
EG&G	Las Vegas, NV	YMP-93-12	F. J. Kratzinger	5/24-28/93	C1 & C2
LLNL	Livermore, CA	YMP-93-13	R. L. Weeks	6/7-11/93	C2
ORNL	Oak Ridge, TN	HQ-93-06	F. Bearham	6/14-18/93	C1 & C2
REECo	Las Vegas, NV	YMP-93-14	T. J. Higgins	6/21-25/93	C2
RSN	Las Vegas, NV	YMP-93-15	J. S. Martin	7/12-16/93	C1
PNL	Richland, WA	YMP-93-16	R. L. Maudlin	7/26-30/93	C1 & C2
YMPO	Las Vegas, NV	YMP-93-17	F. J. Kratzinger	8/9-13/93	C2
M&O	Vienna, VA Charlotte, NC	HQ-93-07	W. E. Booth	8/16-20/93	C2
SAIC	Las Vegas, NV	YMP-93-18	A. E. Cocoros	8/23-27/93	C1
SNL	Albuquerque, NM	YMP-93-19	C. C. Warren	9/13-17/93	C2
M&O	Las Vegas, NV	YMP-93-20	S. R. Dana	9/27-10/1/93	C2

QA CRITERIA KEY:

C1= 1,2,5,6,9,12,13,16,17 & 18
C2= 3,4,7,8,10,11,14,15,19 & 20

Director, OQA

1/6/93
Date

OCRWM AUDIT CHECKLIST NO. YMP-93-05-02

1 ORGANIZATION

3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
T-1	SP 8.3.1.12.2.1, Rev. 0	Explain the rationale for citing the weather stations to meet the objectives of this study. Why were four stations added to the original five.			
T-2		Why is there no precipitation gauge installed at the new knothead Gap site? What are the parameters measured at the new sites?			

9 AUDITOR SIGNATURE

10 DATE

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T-3	Section 2.2	Explain why calculations of "precision" are not possible for the instrumentation. Is this not accomplished during calibration?			
T-4	WI-MET-007, Rev. 0	Have all data, collected before July 1, 1991, been processed?			

9 AUDITOR SIGNATURE

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T-5	WI-MET-007, Rev. 0 WI-MET-003, Rev. 3	Explain the difference in data processing procedures for data collected before and after July 1, 1991.			
T-6	WI-MET-002, Rev. 2	Have there been instances since May 15, 1992 where data have been lost due to equipment malfunction?			

9 AUDITOR SIGNATURE _____ 10 DATE _____

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T-7	General	Explain the reason for procedure WI-MET-009 for calibrating M&TE for the purpose of calibrating wind speed sensors. This seems to be unnecessary in light WI-MET-001 which states that wind equipment is sent to qualified outside vendor for calibration.			
T-8	WI-MET-002 WI-MET-003 WI-MET-006	Trace the data flow from the sensor to the final report, i.e., explain data processing from the field to the final data base.			

9 AUDITOR SIGNATURE

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T-9	SP 8.1.3.12.2.1, Rev. 0	Have any meteorological data sets been transferred to the radiation monitoring program?			
T-10	WI-MET-001, Rev. 2, Section 5.4.2	Verify that the atmosphere stability parameter, suitable for dispersion model input, has been generated from raw data. What data parameters are used in the calculation?			

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T-11	WI-MET-002, Rev. 3	How does the site technician verify that the sensors are giving reasonable results during site visits?			
T-12	SP 8.3.1.12.2., Rev. 0, Section 3.1.1	Explain the methodology used to determine proper instrument placement for wind speed and direction and for delta-T at: o Main Site o Remote Sites			

9 AUDITOR SIGNATURE 10 DATE

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T-13	WI-MET-002, Rev. 3	Explain how it is determined when delta-T is out-of-tolerance. Explain the calibration procedure for delta-T sensors.			
T-14	WI-MET-001, Rev. 2	Who is the vendor who calibrates the wind speed and direction sensors? What is the calibration frequency. When does the timeclock for recalibration begin. When the instruments are received form the vendor or when they are installed in the field.			

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T-15	WI-MET-003, Rev. 3	What software routines are used for data verification and to identify out-of-tolerance data?			
T-16		Demonstrate the generation of a wind rose for the main site.			

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T-17	WI-MET-006, Rev. 0	Explain the procedure for generating required reports. Verify the most recent reports to the State of Nevada and to the DOE.			
T-18	WI-MET-001, Rev. 2, Exhibit 6	Verify that the site technician performs PM at each site according to the schedule.			

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T-19	WI-MET-002, Rev. 2	Verify that the sites are checked at least once every nine days.			
T-20	WI-MET-002, Rev. 2, Section 5.2	Are all site visits documented using the Meteorological Site Routine Checklist (Form TMSS/110)? Is the operational status of each sensor determined?			

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T-21	WI-MET-001, Rev. 0, Section 5.5	Demonstrate the rain gauge field calibration procedure at a remote site.			
T-22	WI-MET-001, Rev. 2, Section 5.10	Demonstrate the procedure to conduct a performance check on the wind speed and direction sensors.			

9 AUDITOR SIGNATURE 10 DATE

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T-23	WI-MET-003, Rev. 3, Exhibit 1	How are data from the monitoring sites integrated into a common data base?			
T-24	WI-MET-001	Demonstrate a performance check on a data logger and a strip chart recorder.			

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T-25		Verify that all sensors currently in the field are within tolerance (review forms TMSS/259 and TMSS/285).			
T-26	WI-MET-002, Section 5.3.1	Demonstrate ODESSA data logger cartridge exchange.			

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