



**Department of Energy**

Washington, DC 20585

QA: QA

**APR 11 2007**

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**YUCCA MOUNTAIN PROJECT FISCAL YEAR (FY) 2007 INTEGRATED INTERNAL  
AUDIT SCHEDULE, APRIL 2007**

The FY 2007 Integrated Internal Audit Schedule, dated April 2007, is enclosed. This is the first integrated schedule to be jointly developed and approved by the U.S. Department of Energy, Bechtel SAIC Company, LLC, and the Office of Civilian Radioactive Waste Management Lead Lab. Based on the nuclear industry's recommendations, the Yucca Mountain Project's quality organizations are working together to improve our audit process effectiveness and efficiency.

If you have any questions, please contact Elver D. Robbins III at (702) 821-8448.

Larry Newman, Director  
Office of Quality Assurance

OQA:EDR-0858

Enclosure:  
FY 2007 Integrated Internal  
Audit Schedule



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**Fiscal Year 2007 Integrated Internal Audit Schedule**  
**April 2007**

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<b>Planned/ Status</b>	<b>Audited Organization</b>	<b>Audit Number</b>	<b>Audit Description</b>	<b>Quality Program Elements to be Evaluated</b>	<b>Audit Status / Scope</b>
October 2006	BSC	OQA-BSC-07-01	Engineering and Design	2, 3, 5 & Supp I	Complete. Report issued December 5, 2006. Review the adequacy, implementation, and effectiveness of the QA program applicable to the Design Engineering organization's scope of work. Requirements flow down and Basis of Design processes will also be reviewed. The elements to be evaluated are those necessary for the organization to implement the latest applicable revision of DOE/RW-0333P, and applicable sections of the current BSC QMD.
November 2006	All BSC Organizations	BQA-BSC-07-01	Flow-down of Requirements and Control of Implementing Documents	2, 5, 6 & 17	Complete. Report issued January 18, 2007. Perform a vertical slice of Source Document Requirements/Implementing Documents to ensure adequacy of flow-down and processing.
November 2006	LL	LLQA-IA-07-001	Requirements Flowdown and Document Control	2, 5, 6 & 23	Complete. Report issued December 7, 2006. Review requirements flow-down from QARD to LL implementing procedures.
November 2006	SNL	OQA-SNL-07-02	SNL	1, 2, 4, 5, 6, 7, 12, 16, 17, 18, Supp I, II, III, V & AQAP	Complete. Report issued January 16, 2007.
December 2006	All BSC Organizations, Las Vegas, NV	BQA-BSC-07-03	Interfaces with SNL/OCRWM on Products	1, 2, 3, 16 & 17	Complete. Report issued January 15, 2007. Evaluate BSC interface control with SNL and OCRWM on deliverables and products.
December 2006	BSC, SNL & OCRWM	OQA-OCRWM-07-03	Assessment Activities, the Corrective Action Program and Trending	2, 5, 16, 17, Supp I & AQAP	Complete. Report issued January 16, 2007. The audit examined assessment activities, corrective actions, and trending programs in relation to the OCRWM's QARD and AQAP, the BSC QMD, the Project Lead Laboratory's QAPD, and implementing procedures as applicable to each organization.
February 2007	Facility Operations, Yucca Mountain Site	BQA-BSC-07-04	BSC Site Activities	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17	Complete. Report issued March 29, 2007. Evaluate BSC Yucca Mountain Site activities for effective implementation of the QMD requirements, as set forth in applicable implementing procedures.

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March 2007	LANL	OQA-LANL-07-08	LANL	1, 2, 4, 5, 6, 7, 12, 16, 17, Supp I, II, III, V and AQAP	Complete. Report to be issued April, 2007. Review implementation of procedures for all QARD, including AQAP, sections applicable to LANL.
March 2007	OCRWM/ BSC/SNL	OQA-OCRWM-07-19	Technical Data Management System	5, 6, 17, Supp I & III	Complete. Report to be issued April, 2007 Audit added to schedule at the request of the Office of the Chief Engineer. Review the processes that address the submission, control and use of the data maintained in the Technical Data Management System.
April 2007	OCRWM/HQ	OQA-OCRWM-07-09	OCRWM East	1, 2, 4, 5, 6, 7, 16, 17 and AQAP	Audit of those activities performed by OCRWM/HQ for the YMP including the Waste Management, Logistics Management and Government Services Offices for both the QARD and AQAP.
April 2007	BSC RPM (Engineering), Licensing and Nuclear Safety, Procurement and Property	BQA-BSC-07-09	Procurement Control Process	3.1, 4, 7, 17	Evaluate the development of Statements of Work, processing of procurement documents, and acceptance process.
May 2007	LL	OQA-LBNL-07-11	Lead Lab Activities at LBNL & LLNL	1, 2, 5, 6, 12, 16, 17, Supp I, II, III, V and AQAP	Review implementation of procedures for all QARD and AQAP sections applicable to Lead Lab activities at LBNL and LLNL.
May 2007	LL	LLQA-IA-07-006	AQAP Implementation	1, 2, 4, 5, 12 & 16	AQAP Implementation.
May 2007	LL	LLQA-IA-07-007	Systems Integration	1, 5, 6, 16, 19, 21 & 23	Evaluate Management & Integration between postclosure science & supporting Management assessment, configuration management, databases, and computational platforms.
May/June 2007	RPM (Engineering)	BQA-BSC-07-07	Subsurface Design Process	2, 3.1, 17	Perform a vertical slice of Subsurface Basis of Design, Calculations, Drawings, and Specifications for product adequacy and effectiveness of development.
June 2007	BSC	OQA-BSC-07-05	BSC	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, Supp I, II, III, IV & V	Audit rescheduled to give BSC opportunity to implement corrective actions to address CAQs identified during BSC QA audit BQA-BSC-07-01. Qualification audit of BSC in Las Vegas and HQ to address the contractors' transition to their QMD and associated implementing procedures. Evaluate <u>all</u> applicable QARD and AQAP elements, including BSC QA activities.

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June 2007	All BSC Organizations	BQA-BSC-07-08	BSC Corrective Actions	16, 17	Evaluate the adequacy and effectiveness of Corrective Actions to resolve problems.
June 2007	LL	LLQA-IA-07-008	Engineered Systems	2, 4, 5, 6, 7, 12, 16, 17, 19, 21 & 23	Audit Scope to be determined from Waste Package Degradation, Mechanical Disruption, and Neutronics.
June 2007	LL	OQA-SNL-07-06	Infiltration Model AMR	2, 12, 16, 17, Supp I, II, III & V	Audit postponed to June 2007 due to status of model and concerns with the review of pre-decisional documents. A review of the processes and products associated with the new infiltration model.
June 2007	USGS	OQA-USGS-07-04	USGS	1, 2, 4, 5, 6, 7, 12, 16, 17, Supp I, II, III, V & AQAP	Based on recommendation from the Office of the Chief Scientist, this audit was postponed to June 2007, and will be combined with the OQA Supplier Audit OQA-SE-07-16, scheduled for the same timeframe. Review activities associated with work performed by USGS including implementation of applicable QARD and AQAP requirements – evaluating effectiveness of processes and adequacy of products, as appropriate.
July 2007	BSC West Operations	BQA-BSC-07-06	BSC West	1, 2, 3, 5, 6, 15, 16, 17 & 18	Verify BSC West effective implementation of the QMD requirements, as set forth in applicable implementing procedures.
July 2007	LL	LLQA-IA-07-009	EBS Performance	2, 4, 5, 6, 7, 12, 16, 17, 19, 21 & 23	Audit Scope Input to be determined from Dust, Near-Field Management, Thermohydrology, In-Drift C & C, Modeling, Thermodynamics.
July 2007	LL	OQA-SNL-07-20	Lead Lab Implementation of the QARD & AQAP	1, 2, 4, 5, 6, 7, 12, 16, 17, 18, Supp I, II, III, V & AQAP	Audit added to allow OQA to verify effectiveness of the Lead Lab's quality program implementation and assess their performance. Evaluate those quality affecting products developed and activities performed by the OCRWM Lead Lab that have not been addressed in earlier FY07 audits & surveillances for both the QARD and AQAP.
August 2007	Licensing & Nuclear Safety, Las Vegas, NV	BQA-BSC-07-10	Adequacy of Preclosure Products	2, 3, 4, 5, 6, 7, 16 & 17	Perform a vertical slice of selected BSC Preclosure documents for product adequacy and effectiveness of development. (Recommend combining BSC Audit BQA-BSC-07-10 with OQA Audit OQA-BSC-07-17)
August 2007	LL	LLQA-IA-07-010	Performance Assessment	2, 4, 5, 6, 7, 12, 16, 17, 19, 21 & 23	Total System Performance Assessment.

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August 2007	OCRWM	OQA-OCRWM-07-15	OCRWM Implementation of the QARD & AQAP	1, 2, 4, 7, 17, Supp II, V & AQAP	Evaluate those quality affecting activities performed by OCRWM that have not been addressed in earlier FY07 audits & surveillances for both the QARD and AQAP.
August 2007	OQA	OQA-OQA-07-16	Independent Audit of the Office of Quality Assurance	1, 2, 4, 5, 6, 7, 16, 17 & 18	Independent Audit of activities performed by the OQA and implementation of procedures associated with applicable elements of the QARD.
September 2007	BSC RPM (Engineering)	BQA-BSC-07-12	Nuclear Facilities Design Process	2, 3, 4, 5, 6, 7, 16 & 17	Perform a vertical slice of Nuclear Facilities Basis of Design, Calculations, Drawings, and Specifications for product adequacy and effectiveness of development.
September 2007	LL	LLQA-IA-07-011	Disruptive Events	2, 4, 5, 6, 7, 12, 16, 17, 19, 20, 21 & 23	Audit Scope Inputs to be determined from Seismic Ground Motion, Volcanism & Igneous, & Drift Degradation.
September 2007	BSC	OQA-BSC-07-17	Technical Documents associated with Pre-Closure	2, 13, 17 & Supp I	Evaluate the adequacy of products that have been revised during the last year and determine the implementation and effectiveness of processes supporting pre-closure activities. (Recommend combining OQA Audit OQA-BSC-07-17 with BSC Audit BQA- BSC-07-10)
September 2007	BSC	OQA-BSC-07-18	Technical Documents associated with License Application	2, Supp I, III & AQAP	Review those analysis model reports (AMRs), revised over the past 12-18 months, that support the YMP License Application.
January 2007	LL	LLQA-IA-07-002	Software Control	5, 6 & 19	Audit Cancelled. Audit reconfigured into 9 software surveillances. Evaluate LL's implementation of QAPD and implementing procedures
February 2007	LL	LLQA-IA-07-003	Natural Systems	2, 4, 5, 6, 7, 12, 16, 17, 19, 21, & 23	Cancelled. Planned as performance based audit, but there were no products to look at in February. Review documentation, analysis, and model validation for the Total System Performance Assessment modeling efforts. AUDIT SCOPE INPUT TO BE DETERMINED from UZ Flow & Transport, Ground Water Concentration & Biosphere, and Climate and Infiltration.

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February 2007	BSC & OCRWM	OQA-OCRWM-07-07	Design Interface and Change Control Processes	2, 3, 7, 17 & Supp I	Audit Cancelled. Contract awarded for the independent review of the OCRWM and BSC Engineering and Design programs, and audit cancelled at managements' request. Evaluate the adequacy of the BSC and OCRWM design interface, review and change control processes under both the QARD and AQAP.
March 2007	LL	LLQA-IA-07-004	Quality Assurance	1, 2, 5, 6, 7, 16 & 18	Audit Cancelled. Activities & criteria addressed by OQA Audit OQA-SNL-07-02. Independent Audit of the Quality Assurance Organization for the Lead Laboratory.
April 2007	BSC East Operations, Washington, DC	BQA-BSC-07-05	BSC East	1, 2, 3, 4, 5, 6, 7, 16, 17 & 18	Audit Cancelled. Audit scope to be addressed as part of OQA Audit OQA-OCRWM-07-09 with BSC participating on the audit team.
April 2007	BSC	OQA-BSC-07-10	Procurement	4, 7, 16 and AQAP	Audit Cancelled. Audit scope to be addressed as part of BSC Audit BQA-BSC-07-09 with OQA participating on the audit team.
April 2007	BSC CIO, RPM, Licensing & Nuclear Safety	BQA-BSC-07-02	Adequacy of BSC Software Control	3.1, 3.2 & 17	Audit Cancelled. Software to be evaluated as part of the BSC West Audit. Evaluate BSC use of software within applicable products. This includes the running of software to determine that results are as described in the product.
June 2007	BSC	OQA-BSC-07-12	YMP Site	1, 2, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17, Supp II, III, IV, V & AQAP	Audit Cancelled. Due to curtailment of Site operations, this audit has been cancelled. Criteria not audited in other OQA audits will be reviewed during OQA Audit OQA-BSC-07-05. Ongoing Site activities will be reviewed under the OQA Surveillance program. Audit the implementation of YMP Site activities applicable to QARD and AQAP requirements.
July 2007	BSC	OQA-BSC-07-14	Technical Documents associated with Pre-Closure	2, 6, 17 & Supp I	Audit Cancelled. These activities will be addressed in Audit OQA-BSC-07-17.

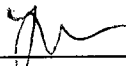
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July 2007	OCRWM	OQA-OCRWM-07-13	OCRWM Implementing Documents and Document Control	2, 5, 6 & AQAP	Audit Cancelled. The criteria to be reviewed will be addressed during the next audit of OCRWM activities, OQA-OCRWM-07-14.
August 2007	BSC	BQA-BSC-07-11	Document and Records Management Control	5, 6 & 17	Audit Cancelled. Evaluate the control of documents and records management activities.

Approved by:

  
Larry Newman, Director  
Office of Quality Assurance, OCRWM

Date:

4/10/07

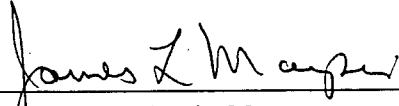
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4/10/07

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