April 9, 2009

Dr. Leslie P. Tolbert, Vice President
for Research, Graduate Studies &
Economic Development
University of Arizona
P.O. Box 210066
Tucson, Arizona 85721-0066

SUBJECT: UNIVERSITY OF ARIZONA NUCLEAR REACTOR LABORATORY - NRC ROUTINE, ANNOUNCED INSPECTION REPORT NO. 50-113/2009-201

Dear Dr. Tolbert:

On March 9-12, 2009, the U.S. Nuclear Regulatory Commission (NRC, the Commission) conducted an inspection at the University of Arizona Nuclear Reactor Laboratory (Inspection Report No. 50-170/2009-201). The inspection included a review of activities authorized for your facility. The enclosed report presents the results of that inspection.

This inspection was an examination of activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations of activities in progress. Based on the results of this inspection, no safety concern or noncompliance with NRC requirements was identified. However, one inspector follow-up item from a previous inspection was discussed and closed. No response to this letter is required.

In accordance with Title 10 of the *Code of Federal Regulations* Part 2.390 a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (Agencywide Document Access and Management System (ADAMS)). ADAMS is accessible from the NRC Web site at (the Public Electronic Reading Room) http://www.nrc.gov/reading-rm/adams.html.

Should you have any questions concerning this inspection, please contact Greg Schoenebeck at 301-415-1019 or by electronic mail at Greg.Schoenebeck@nrc.gov.

Sincerely,

/RA/

Johnny H. Eads, Jr., Chief
Research and Test Reactors Branch B
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

Docket No. 50-113
License No. R-52

Enclosure: As stated
cc: See next page

cc:

Office of the Mayor
City of Tucson
City Hall, 10th Floor
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Tucson, AZ 85701

Arizona Radiation Regulatory Agency
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Test, Research and Training
Reactor Newsletter
202 Nuclear Sciences Center
University of Florida
Gainesville, FL 3261

Should you have any questions concerning this inspection, please contact Greg Schoenebeck at 301-415-1019 or by electronic mail at Greg.Schoenebeck@nrc.gov.

Sincerely,

/RA/

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U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION

Docket No:	50-113
License No:	R-52
Report No:	50-113/2009-201
Licensee:	The University of Arizona
Facility:	Nuclear Reactor Laboratory
Location:	Tucson, Arizona
Dates:	March 9-12, 2009
Inspectors:	Gregory M. Schoenebeck Patrick Isaac
Accompanied by:	Mike Morlang
Approved by:	Johnny Eads, Chief Research and Test Reactors Branch B Division of Policy and Rulemaking Office of Nuclear Reactor Regulation

EXECUTIVE SUMMARY

University of Arizona
Nuclear Reactor Laboratory
NRC Inspection Report No. 50-113/2009-201

The primary focus of this routine, announced inspection was the onsite review of selected aspects of the University of Arizona (the licensee) Class II research reactor facility safety programs including organization and staffing; operations logs and records; procedures; requalification training; surveillance and limiting condition of operation (LCO); experiments; committees, audits and reviews; emergency planning; maintenance logs and records; and fuel handling logs and records. The licensee's programs were acceptably directed toward the protection of public health and safety, and were in compliance with the U.S. Nuclear Regulatory Commission (NRC) requirements.

Organization and Staffing

- Organizational structure and responsibilities were consistent with Technical Specification requirements.
- Shift staffing met the minimum requirements for current operations.

Operations Logs and Records

- Operation logs and recordkeeping program conformed to Technical Specification requirements.

Procedures

- Procedure administrative review, revision, adherence to, and implementation satisfied Technical Specification requirements.

Requalification Training

- Operator requalification was conducted as required by the Requalification Program and 10 CFR Part 55.

Surveillance and LCO

- Limiting conditions for operation and surveillances required by Technical Specification were being properly implemented.

Experiments

- There were no new experiments in 2007 or 2008. Previous experiment review and approval was done in accordance with TS requirements, licensee procedures, and 10CFR 50.59 regulations.

Health Physics

- The radiation safety program is commensurate with 10 CFR 20 requirements, Technical Specifications, and Procedures.

Design Changes

- Design changes were made in accordance with 10CFR50.59 requirements, TS, and licensee procedures.

Committees, Audits, and Reviews

- The RC provided the oversight required by the Technical Specifications.

Emergency Planning

- The emergency preparedness program was conducted in accordance with the Emergency Plan and implementing procedures.

Maintenance Logs and Records

- Maintenance was performed and logs and records maintained consistent with Technical Specification and licensee procedure requirements.

Fuel Handling Logs and Records

- Fuel handling logs and activities satisfied the Technical Specification requirements and facility procedural requirements.

Transportation

- Due to the nature of the NRL operations, there was no shipment of reactor licensed radioactive material since the last inspection.

REPORT DETAILS

Summary of Facility Status

The University of Arizona's (the licensee's) 110 kilowatt Training Research Isotope Production General Atomics (TRIGA) Mark I research reactor has been operated in support of experiments, reactor operator training, and periodic equipment surveillances. During the performance based aspect of the inspection, the reactor was operated to support this area.

1. Organization and Staffing

a. Inspection Scope (Inspection Procedure [IP] 69001)

The inspectors reviewed the following to verify compliance with the organization and staffing requirements in Technical Specification (TS) Section 6.1:

- staffing requirements for the safe operation of the reactor
- organizational structure and staffing
- TS for The University of Arizona Research Reactor (UARR), Amendment No. 18, dated April 9, 2001
- Operating Logbook Number 48, dated from April 30, 2007 to present
- UARR Procedure, UARR 100, "Administrative and Operating Procedures," dated May 6, 1999

b. Observations and Findings

Current UARR staff consisted of the Facility Director (FD), Reactor Supervisor (RS), both of whom are licensed Senior Reactor Operators (SROs). Two new RO candidates were in training, preparing for license examinations in the future. There is also an electrical technician who is responsible for maintenance of reactor systems.

All positions were filled with qualified personnel and a review of the applicable records verified that staffing was as required by TS Section 6.1 and the licensee's procedures. The inspectors noted that the staffing at the facility was acceptable to support the ongoing activities.

c. Conclusions

The organization and staffing was consistent with TS requirements.

2. Operations Logs and Records

a. Inspection Scope (IP 69001)

The inspector reviewed selected aspects of the following to ensure that the operations program was being implemented as required in TS Sections 3, 4, and 6:

- Staffing for reactor operations
- Operating Logbook No. 48, from April 30, 2007, to present
- Annual Report for License R-52, Docket 50-113, August 21, 2008
- UARR 100, “Administrative and Operating Procedures,” May 6, 1999
- UARR 129, “Procedures for the Conduct of Operating Personnel in the Control Room and Reactor Room,” July 6, 1994
- UARR 147, “Instructions for Staff Members During Operation of the University of Arizona TRIGA Reactor,” November 3, 1998
- UARR 150, “Reactor Operational Rules,” September 6, 2000
- UARR 151, “Instructions for Daily Surveillance of Reactor Instrumentation, Safety Systems, Area Monitors, and Continuous Air Monitor,” December 7, 2000
- UARR 152, “Preliminary Checklist,” November 3, 1998
- UARR 153, “Critical Approach Checklist,” Rev. 1, December 11, 2006
- UARR 154, “Pulsing Checklist,” November 3, 1998
- Completed UARR 152 forms, from April 11, 2008, to present
- Completed UARR 153 forms, from April 11, 2008, to present
- Completed UARR 154 forms, from April 11, 2008, to present

b. Observations and Findings

Reactor operations were carried out following written procedures and TS requirements. The inspector observed the performance of the required checklists for operation of the reactor. Additionally, a reactor start-up to power and shutdown were observed. The inspector verified that reactor operating characteristics, and other TS and procedure required entries, were recorded on the appropriate forms and logs. A review of the forms and logs indicated that TS operational limits had not been exceeded. Operations records confirmed that shift staffing met the minimum requirements for duty personnel. The inspector determined that reactor operations were carried out following written procedures.

c. Conclusions

Operational activities were consistent with applicable TS and procedural requirements.

3. Procedures

a. Inspection Scope (IP 69001-02.03)

The inspectors reviewed the following to ensure that the requirements of TS Section 6.3.a, Operating Procedures, were being met concerning written procedures:

- UARR 100, “Administrative and Operating Procedures,” May 6, 1999
- UARR 101, “Emergency Procedures, March 11, 200

- UARR 101, “Emergency Procedure Implementing Appendix, December 9, 2004
- UARR 129, “Procedures for the Conduct of Operating Personnel in the Control Room and Reactor Room,” July 6, 1994
- UARR 147, “Instructions for Staff Members During Operation of the University of Arizona TRIGA Reactor,” November 3, 1998
- UARR 150, “Reactor Operational Rules,” September 6, 2000
- UARR 151, “Instructions for Daily Surveillance of Reactor Instrumentation, Safety Systems, Area Monitors, and Continuous Air Monitor,” December 7, 2000
- UARR 152, “Preliminary Checklist,” November 3, 1998
- UARR 153, “Critical Approach Checklist,” Rev. 1, December 11, 2006
- UARR 154, “Pulsing Checklist,” November 3, 1998

b. Observations and Findings

The inspectors reviewed the licensee’s written procedures and revisions to procedures. The control room procedure manual contained procedures that were not the latest revision. The completed procedure checklists for procedures that were not the latest revision were done on the current revised checklist. The control room procedure manual index was not updated to reflect the latest revisions.

c. Conclusions

Procedure administrative review, revision, adherence to, and implementation satisfied Technical Specification requirements.

4. Requalification Training

a. Inspection Scope (IP 69001)

The inspectors reviewed selected portions of the following to ensure that the NRC approved Requalification Program was being acceptably implemented:

- operator physical examination records
- qualified operator licenses and expiration dates
- Operating Logbook No. 48, dated from April 30, 2007 to present
- “Operator and Senior Operator Requalification Program for the University of Arizona Research Reactor,” Rev. 1, dated September 15, 1989
- UARR 129, “Procedures for the Conduct of Operating Personnel in the Control Room and Reactor Room,” dated July 6, 1994
- UARR Requalification Period 2008 – 2009
- 2006 – 2007 Biennial Comprehensive Written Requalification Examination

b. Observations and Findings

The licensee's requalification program included the regulatory requirement for an annual operating test and a biennial written examination. The inspectors verified that both examinations were administered at the specified frequency and that the level of difficulty was comparable to that of NRC-administered examinations.

The inspectors reviewed the files of the two NRC-licensed SROs, specifically checking NRC Form 396, Certification of Medical Examination by Facility Licensee. The inspectors verified that physical examinations of the operators were conducted biennially as required.

The inspectors reviewed documentation indicating that each of the SROs had performed the required number of reactor manipulations at the frequency specified in the requalification program. The inspectors confirmed that the requalification program was being administered in a manner that sufficiently maintains the effectiveness of all licensed operators.

c. Conclusions

Operator requalification was conducted as required by the Requalification Program and 10 CFR Part 55.

5. Surveillance and Limiting Conditions for Operation

a. Inspection Scope (IP 69001)

The inspector reviewed the following to ensure that the surveillance requirements and limiting conditions for operation (LCOs) specified in TS Section 4.0 were met:

- Periodic Maintenance Notebook containing the documentation of all maintenance scheduled for the facility
- Surveillance, calibration, and test data sheets and records
- Operating Logbook No. 48, from April 30, 2007, to present
- Annual Report for License R-52, Docket 50-113, August 25, 2007
- Console and Monitor Calibration Data Notebook, from January 10, 2008 to present
- Reactor Up-grade and Instrument Maintenance Log No. 5, from June 19, 2008 to present
- UARR 102, "Procedure for Semi-annual Visual Inspection of the Transient Rod Drive Cylinder and Air Supply System," November 4, 1998
- UARR 122, "Procedures for Measurement of Control Rod Drop Times," July 6, 1994
- UARR 125, "Procedures for Power Calibration of the University of Arizona TRIGA Reactor," October 22, 1997
- UARR 126, "Procedures for Control Rod Calibration", July 1994
- UARR 155, "Monthly Checklist," June 7, 1999
- UARR 156, "Annual Checklist," Rev. 9 , August 30, 2007
- Completed UARR 155 forms, from April 2008, to present

- Completed UARR 156 forms, from July 2007 to present

b. Observations and Findings

The inspector noted that daily, monthly, semi-annual and annual checks, tests, and/or calibrations for TS-required surveillance items were completed as required. The LCO verifications were completed on schedule and in accordance with licensee procedures. All of the recorded results were within the TS and procedurally prescribed parameters. The records and logs were noted to be complete and were being maintained as required. The procedures for the surveillances provided clear and concise direction and control of reactor operational tests and surveillances.

The inspector observed the licensee complete a daily checklist for TS required items on January 9, 2008. All of the items on the checklist were carried out appropriately and the personnel conducting the tests did so in a safe and knowledgeable manner. The inspector verified that all of the checks conducted were in compliance with TS required values and parameters.

c. Conclusions

The licensee's program for completing surveillance inspections satisfied Technical Specification and licensee administrative controls.

6. Experiments

a. Inspection Scope (IP 69001)

In order to verify that any modifications to the facility were consistent with TS requirements, UA procedures, and 10 CFR 50.59 regulations, the inspector reviewed selected aspects of:

- UARR 165, “Procedure of Review of Changes, Tests, and Experiments,” August 2004
- Technical Specifications for the University of Arizona TRIGA Research Reactor Facility License R-52
- Experiment 98-1: Control of the University of Arizona TRIGA Reactor by the Digitally Controlled, Motor Driven Reactivity Adjustment System: Rotary
- Checklist for Reactor Committee Review of Experiments, 98-1

b. Observations and Findings

The licensee had not implemented a new procedure requiring review and approval by the RC for 2007 or 2008. The inspector reviewed the last experiment reviewed and approved in 1998, and determined that the process was performed in accordance with procedures, TS, and 10CFR50.59 requirements.

c. Conclusions

There were no new experiments in 2007 or 2008. Previous experiment review and approval was done in accordance with TS requirements, licensee procedures, and 10CFR 50.59 regulations.

7. Health Physics

a. Inspection Scope (IP 69001)

The inspector reviewed the following to verify compliance with 10 CFR Part 20 requirements:

- The University of Arizona Nuclear Reactor Laboratory CY 2007 and 2008 Annual Review- Health Physics
- UARR-146, "Procedure for Performing a Wipe Survey," September 2009
- UARR 149, "Radiation Protection Instructions for the Nuclear Reactor Laboratory," July 2009
- UA Radiation Instrument Cal Program General Info, various for 2007 and 2008
- Radiation Control Program for the University of Arizona Nuclear Reactor Laboratory (T-103), September 1998
- Record of Radiation Safety Training, various for 2007 and 2008
- Annual Personal Radiation Exposure Report for University of Arizona Nuclear Reactor Laboratory, April 15, 2008
- CAM Count Rate Calibration, February 7, 2008
- Area Monitor Source Calibration, February 6, 2008
- Annual Report for License R-52, Docket 50-113, August 21, 2008

b. Observations and Findings

The inspectors reviewed dosimetry records, radiation protection procedures and determined that radiation worker dose was consistent with the ALARA principle. A review of calibration records determined that they were being sent to the calibration laboratory on their due date, in accordance with procedures. The inspectors met with the University of Arizona RSO and determined that radiation protection program measures are being reviewed, and implemented in accordance with the TS and procedures. One inspector conducted a performance based inspection of an NRL wipe survey by two radiation control officers. The survey was performed with the appropriate protective clothing and was completed satisfactorily in accordance with procedures.

The inspectors reviewed effluent discharge records and determined that radiological gaseous effluent releases to the environment were in accordance with 10 CFR 20. The facility did not discharge radiological effluent waste to the sewer system in 2008.

c. Conclusions

The inspectors determined that the licensee health physics program and operations were in compliance with 10 CFR 20 regulations, licensee procedures, and TS.

8. Design Changes

a. Inspection Scope (IP 69001)

The inspector reviewed the following to ensure that if design changes were made, they were reviewed and approved in accordance with 10CFR 50.59, the TS, and the licensee's administrative procedures:

- Reactor Committee Meeting Minutes, August 27, 2008
- Annual Report for License R-52, Docket 50-113
- UARR 165 Procedure for Review of Changes, Tests, and Experiments for the University of Arizona Research Reactor, Revision August 2004
- Memo to Reactor Committee, "Circulation Pump Replacement in August 2006", August 10, 2006
- NRL University of Arizona: Reactor Repair and Modification Work Record for Replacement of the Circulation Pump in the Water Purification System, August 2006

b. Observations and Findings

The licensee had not made any alterations to the facility that would have necessitated the review and approval by the Reactor Committee in accordance with 10 CFR 50.59, the TS, and procedures. However, the inspector reviewed documents regarding the circulation pump replacement in August 2006, and determined that the licensee performed the necessary review to ensure compliance with the requirements of 10CFR 50.59, and Section 4.5(b) of the TS using licensee procedures.

c. Conclusions

Design changes were made in accordance with 10CFR50.59 requirements, TS, and licensee procedures.

9. Committees, Audits, and Reviews

a. Inspection Scope (IP 69001)

The inspectors reviewed the following to ensure that the audits and reviews stipulated in TS Section 6.2 were being completed by the Reactor Committee (RC):

- RC meeting minutes for the May 8, 2008 meeting
- RC meeting minutes for the March 11, 2008 meeting
- The University of Arizona Reactor Committee Charter, dated April 4, 2003
- Appointment Letters for members of the RC, dated October 17, 2008
- Completed UARR 159, “Bimonthly Reactor Operations Audit,” for period July 2007 – April 2008
- Completed UARR 160, “Biennial Emergency Plan Audit,” dated February 5, 2009
- UARR 165, “Procedure for Review of Changes, Tests, and Experiments for the University of Arizona Research Reactor," dated August 31, 2004

b. Observations and Findings

TS Section 6.2, Review, defined the responsibility, composition, and frequency of meetings of the RC. The inspectors verified that the RC composition, meeting quorums, and meeting frequency were all in accordance with TS Section 6.2. The RC had quarterly meetings as required by TS 6.2.f and a quorum was always present as required. The inspectors also verified that audits required by TS 6.2.b were completed by individuals appointed by members of the RC. The inspectors noted that the licensee responded to audit findings and ensured that corrective actions were properly completed.

c. Conclusions

The RC provided the oversight required by the Technical Specifications.

10. Emergency Planning

a. Inspection Scope (IP 69001)

To verify that the licensee was implementing and complying with the Emergency Plan (E-Plan) requirements, the inspector reviewed selected aspects of:

- UARR-160: University of Arizona Research Reactor Biennial Emergency Plan Audit, February 5, 2009.
- Training records for emergency response personnel
- RC meeting minutes, May 8, 2008
- E-Plan for the University of Arizona Nuclear Reactor Laboratory, Rev. 9, May 2003
- Written documentation of Annual Emergency Drill conducted on March 19, 2008
- Letter of Agreement (LOA) between University of Arizona Police Department (UAPD) and UARR, January 30, 2008
- LOA between City of Tucson Fire Department and UARR, February 6, 2008
- LOA between University Medical Center (UMC) and UARR, January 29, 2008
- LOA between Ambulance Service and UARR, February 6, 2008

- LOA between University of Arizona Radiation Control Office and UARR, February 3, 2008
- UARR Emergency Notification List, January 18, 2008
- UARR 101, "Emergency Procedures," Rev. 5, December 9, 2004

b. Observations and Findings

The inspectors verified that the UARR E-Plan was being fully implemented to maintain the emergency preparedness of the reactor. The E-Plan was audited and reviewed as required. E-Plan Implementing Procedures were also reviewed and revised as needed to effectively execute the E-Plan. The licensee was in the process of concurrence on the Draft Emergency Plan Rev.10. The new draft incorporates the comments from the March 29, 2008, emergency drill. The Draft Revision 10 of the E-Plan will not be a decrease in effectiveness, as described in 10 CFR 50.54, as it enhances the emergency preparedness of local, state, and federal stakeholders with regards to the National Incident Management System.

Training for NRL operators, staff, and members of the RCO having emergency response duties complete an initial training program and annual review, in accordance with procedures.

The inspectors verified that a list of emergency personnel, management, and offsite agencies was distributed to all personnel as required by the E-Plan.

The documentation of the drill was reviewed. Emergency preparedness and response training was completed on an annual basis. Through drill scenario and record reviews, emergency responders were determined that key emergency response personnel can respond to an emergency condition as required. Emergency drills had been conducted annually as required by the E-Plan. Critiques were written following the drills to document the strengths and weaknesses identified during the exercise. Action items were developed to correct the deficiencies.

Letters of Agreement (LOAs) with offsite response organizations and support groups had been updated annually and maintained as required. Communication capabilities with these support groups were acceptable and had been tested as required.

The inspectors met with UAPD staff responsible for campus emergency preparedness and discussed the emergency readiness of the appropriate personnel at the UARR. The NRL simulated an alarm which was received by the UAPD dispatch center, where staff adequately described the actions that would occur upon receipt. The UAPD personnel and NRL staff have a working rapport and are cognizant of each others activities and roles with regards to emergency preparedness and response

c. Conclusions

The emergency preparedness program was conducted in accordance with the approved E-Plan and implementing procedures.

11. Maintenance Logs and Records

a. Inspection Scope (IP 69001)

To verify that the licensee was complying with the applicable regulations, the inspector reviewed selected aspects of:

- Operating Logbook No. 48, dated from April 30, 2007, to present
- Annual Report for License R-52, Docket 50-113, dated August 21, 2008
- Console and Monitor Calibration Data Notebook, January 10,2008 to present
- Reactor Up-grade and Instrument Maintenance Log No. 5, June19, 2008 to present
- Reactor Repair and Modification Work Record For Replacement of the Demineralizer Resins, dated November 28, 2007, conducted September 17, 2008
- UARR 108, “Procedures for Repair, Modification, Calibration, or Installation of Electronic Equipment in the Console and Control Rod Drive Systems,” dated March 7, 2001
- UARR 109, “General Procedures for the Repair, Modification, Calibration, or Installation of Equipment,” dated March 7, 2001
- UARR 111, “Procedure for the Inspection of the Demineralizer”, dated July 1994
- UARR 112, “Procedure for Replacement of Filter Cartridges and Resins”, dated July 1994
- UARR 159, “Bimonthly Reactor Operations Audit,” Rev. 2 dated December 10, 2007
- Completed UARR 159 forms, dated from September 2006 to present

b. Observations and Findings

The inspectors reviewed the maintenance records related to scheduled and unscheduled preventive and corrective maintenance activities that had occurred during the inspection period. Routine and preventive maintenance was controlled and documented in the appropriate logs. The inspectors reviewed the Work Record for the replacement of the demineralizer resins conducted September 17, 2008. These documents indicated that all maintenance activities were controlled and documented in accordance with the requirements in 10 CFR 50.59. All maintenance of reactor systems were reviewed and approved by the RS. The inspector verified that all maintenance was conducted in accordance with the requirements of TS section 4.5. After all maintenance items are completed, system operational checks are performed to ensure the affected systems function before returning them to service.

c. Conclusions

Maintenance logs, records, and performance satisfied TS and procedure requirements.

12. Fuel Handling Logs and Records

a. Inspection Scope (IP 69001)

The inspectors reviewed the following to verify compliance with requirements of TS Sections 4.1 and 6.3.

- Fuel Log Binder, a record of the movements of each fuel element
- UARR 105, "Procedure for Fuel Element Changing", dated July 1994
- Fuel Status Board in the Reactor Bay
- Operating Logbook No. 48, dated from April 30, 2007, to present

b. Observations and Findings

Procedures for refueling, fuel movement, and TS required fuel inspections and surveillances were reviewed and approved as required and were available to control operations. Fuel movement, log keeping, and data recording were being done as directed by procedures. Data recorded for fuel handling was clear and cross-referenced in the Fuel Log Binder, on the Fuel Status Board in the reactor bay, and in the Reactor Logbook. Log entries clearly identified that a licensed reactor operator was present for all fuel transfers.

c. Conclusions

Fuel handling and inspection activities were completed and documented as required by TS and facility procedures.

13. Transportation

a. Inspection Scope (IP 86740)

The inspectors interviewed licensee personnel and reviewed the following records to verify whether the licensee has established and is maintaining an effective management-controlled program, to ensure radiological and nuclear safety for shipping licensed radioactive material:

- Annual Report for License R-52, Docket 50-113, dated August 21, 2008

b. Observations and Findings

During the current inspection, it was determined that NRL did not ship material under the R-52 license. Low level waste was transferred to the University of Arizona materials license.

c. Conclusions

Due to the nature of the NRL operations, there was no shipment of reactor licensed radioactive material since the last inspection.

14. Exit Interview

The inspector presented the inspection results to licensee management at the conclusion of the inspection on March 12, 2009. The inspector described the areas inspected and discussed in detail the inspection observations. No dissenting comments were received from the licensee. The licensee acknowledged the observations presented and did not identify as proprietary any of the material provided to or reviewed by the inspector during the inspection.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

J. Williams, NRL Director
R. Offerle, Reactor Supervisor
W. Lohmeier, NRL Staff
D. Silvain, RCO Director
C. Blast, RCO Staff
J. Blythe RCO Staff

Other Personnel

Cmdr. K. Haywood, Cmdr. J. Alvarez UAPD

INSPECTION PROCEDURES USED

IP 69001	Class II Research and Test Reactors
IP 86740	Transportation

ITEMS OPENED, CLOSED, AND DISCUSSED

None

PARTIAL LIST OF ACRONYMS USED

10 CFR	Title 10 of the *Code of Federal Regulations*
ADAMS	Agencywide Document Access and Management System
ALARA	As Low As Reasonably Achievable
ECP	Estimated Critical Position
IP	Inspection Procedure
LCO	Limiting Condition of Operation
LOA	Letters of Agreement
NRC	Nuclear Regulatory Commission
NRP	Nuclear Reactor Program
PARS	Publicly Available Records
Rev.	Revision
RO	Reactor Operator
RC	Reactor Committee
RS	Reactor Supervisor
RSAC	Reactor Safety and Auditing Committee
SRO	Senior Reactor Operator
TS	Technical Specifications
IFI	Inspection Follow-up Item
UAPD	University of Arizona Police Department
URI	Unresolved Item