



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

January 17, 2002

MEMORANDUM TO: Ellis W. Merschoff, Regional Administrator

FROM: D. Blair Spitzberg, Radiation Safety Officer *DB Spitzberg*

THROUGH: Region IV Radiation Safety Committee

SUBJECT: REGION IV RADIATION SAFETY PROGRAM STATUS FOR 2001 AND PROGRAM GOALS FOR 2002

Pursuant to Region IV Policy Guide, PG 4001.7, "RIV Radiation Protection Manual," Section 2.6, this memorandum provides the annual report of the overall status of the radiation safety program and program goals for 2002.

The Region IV radiation safety program has continued to meet the program requirements identified in Management Directive 10.131, "Protection of NRC Employees Against Ionizing Radiation," and PG 4001.7. The radiation safety committee has been active and has held quarterly meetings as required by the policy guide. An annual internal audit of the Region IV program was performed during December 2001. The audit report memorandum dated, December 21, 2001, is attached to this memorandum. There were no negative findings identified in the audit report. The audit report further captured the open item tracking system and the efficiency with which the items were identified and resolved through the activities of the radiation safety committee. Additionally, during November 2001, the radiation safety officer (RSO) attended the RSO counterpart meeting where the Region IV radiation safety program appeared to be one of the most active and well supported within the NRC.

Program initiatives undertaken during 2001 included:

- Initiating the Region IV Exposure Performance Indicators (ALARA Metrics);
- Updating the regional policy guides, PG 4000, "Personnel Dosimetry Program," and PG 4001, "Radiation Protection Manual," with guidance for the ALARA metrics and new forms for a declared radiation worker and a new radiation worker;
- Incorporating the radiation worker training program into PG 7003, "Training Certification Program," which is under the auspices of the Division of Resource Management and Administration (DRMA);
- Streamlining the exposure data entry into one database;
- Providing important input and comments to headquarters concerning the NRCs proposed use of bioassay sampling kits for NRC employees.

The Region IV exposure performance indicators were developed to maintain occupational exposures ALARA and to facilitate employee and supervisor exposure awareness. The radiation worker site access training program was updated to allow the employee to take the

computer based training and test on the honor system at the designated computer located in the Region IV library. The employee subsequently provides the test date/score to DRMA for update to the good guy letter which is provided to the licensees. The site access training program changes resulted in improved efficiency by eliminating the involvement of the alternate RSO or dosimetrist in administering the test.

The Region implemented the use of the REMIT database beginning with the first quarter 2001. As a result of using the database, the end of the year reports for all radiation workers will be automatically generated. This has saved approximately one week of work for the dosimetrist at the end of the year. The exposure database allows for querying the data to generate the quarterly ALARA matrices and pie-charts. The IT staff has assisted with generating the ACCESS database query reports for the ALARA matrices and pie-charts. This effort will result in an estimated time savings of approximately 2 days of dosimetrist work each quarter. There has been a significant cost savings associated with entering the exposure data into the REMIT database and using the associated ACCESS database software.

A special meeting of the radiation safety committee was held during July 2001 to discuss Region IV concerns with NRC's proposed program for using bioassay sampling kits. The Region's concerns were provided to NMSS/IMNS.

Program goals for 2002 include continued effective implementation of the radiation safety program and to continue to explore possible improvements in efficiency in the radiation dosimetry area. Region IV submitted a proposal to the other NRC RSO's and during the 2001 counterpart meeting to increase the exposure monitoring period from quarterly to a 6-month period. If implemented, an estimated cost savings within the region of \$10,000 could be realized including a 50 percent reduction in staff resources to implement the program. This proposal was taken as an action item from the counterpart meeting for program office consideration. In 2002, we plan to install a barcode software system to allow for tracking the shipment and assignment of dosimeters in and out of the region. This should alleviate the conflicting information by the contractor that some of the dosimeters never show up at their facility for processing. Another 2002 goal is to clean, organize and inventory the radiation laboratory.

The second attachment contains the status of action items opened during 2001.

Should you have any questions concerning this report, I would be pleased to discuss it with you.

Attachments: As stated

cc w/o attachments:

James T. Wiggins, DRA, RI
Loren R. Plisco, Acting DRA, RII
James L. Caldwell, DRA, RIII
Ken E. Brockman, Director, DRP
Dwight D. Chamberlain, Director, DNMS
Kathleen J. Hamill, Director, DRMA
Arthur T. Howell, Director, DRS

Ellis W. Merschoff

-3-

bcc w/attachments:

TPGwynn
DBSpitzberg
GMGood
JSDodson
RSCarr
LSCooley
THAndrews
GLGuerra
ADGaines
BDBaca

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<i>RSCarr</i>			<i>w/ comment</i>
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UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

December 21, 2001

MEMORANDUM TO: D. Blair Spitzberg, Chief
Radiation Safety Officer
Fuel Cycle Decommissioning Branch
Division of Nuclear Materials Safety

THRU: Gail M. Good, Chief
Plant Support Branch
Division of Reactor Safety

FROM: J. Blair Nicholas, Senior Health Physicist
Plant Support Branch
Division of Reactor Safety

SUBJECT: RADIATION SAFETY COMMITTEE 2001 ANNUAL AUDIT OF
SELECTED AREAS OF THE RIV RADIATION SAFETY PROGRAM

Scope of Audit:

Per Region IV ROPG 4001.7, "RIV Radiation Protection Manual," Paragraph 2.5, the Radiation Safety Committee is required to perform an annual audit of selected portions of the Region IV Radiation Safety Program, such that every 3 years the entire program will be reviewed. In response to Open Item RSC-091901-05, an audit of the Radiation Safety Program areas contained in Sections 2.5.1.5, 2.5.1.7, 2.5.1.8, and 2.5.1.9 was performed in December 2001. The following discussion is the results of that audit.

Observations and Findings:

Section 2.5.1.5

Implementation of the Instrumentation Calibration Program

Instruments in the Region IV laboratory are calibrated on an annual frequency in accordance with recommendations presented in ANSI N323-1978, "American National Standard Protection Instrumentation Test and Calibration." The instruments are rotated for calibration by instrument type and model so that there is a sufficient number of calibrated instruments of various types in the Region IV laboratory at all times to meet the needs of the Region IV inspection staff. The instruments are controlled using a check-out/check-in process from the Region IV laboratory with provided assistance by the laboratory manager. Calibrated instruments are stored in the laboratory on shelves clearly marked as calibrated instruments. Each calibrated instrument is labeled with a calibration sticker indicating the date of calibration and the calibration due date.

Instruments requiring repair and/or calibration are stored in the laboratory on shelves clearly marked as instruments needing repair and/or calibration. The calibrated instruments are physically segregated from the instruments not currently calibrated for use. The location of each instrument is documented in the instrument control logbook located at the entrance to the laboratory, and it is the responsibility of each individual checking out an instrument from the laboratory to document the instrument's location and the responsible person in the instrument control logbook. A review of the instrument control logbook identified no discrepancies.

An instrument inventory performed on December 6, 2001, determined that the following calibrated instruments were available in the laboratory for check-out and use. The number in parentheses following the instrument description indicates the number of calibrated instruments of that make and model that were available.

- Ludlum Model 19 (3)
- Eberline RO-20 Ion Chamber (9)
- Technical Associates TPM-35 (6)
- Ludlum Model 2401-EC2 (1)
- Victoreen Model 190 (2)
- Eberline E520 (1)
- Alarming Dosimeters (10)
- Dosimeter Corporation of America DCA-3500 (12)
- Ludlum Model 12 with associated detectors (2)
- Ludlum Model 3 with associated detectors (2)
- Ludlum Model 14C with associated detectors (1)

The Region IV instrument calibration program was properly implemented. No negative findings were identified.

Section 2.5.1.7

Adequacy of regional corrective actions taken within the past 3 years on matters associated with the region's radiation safety program

A review of open items generated during Radiation Safety Committee meetings from April 1999 through September 2001 indicated the following tabulated results.

Open Item Number	Date Opened	Date Closed	Topic
RSC-042799-01	04/27/99	03/22/00	Draft sealed source inventory and control policy and procedures.
RSC-042799-02	04/27/99	07/15/99	Canvas the staff who are assigned dosimetry and determine if they have received 10 CFR Part 19 training. Determine if any individuals require additional 10 CFR Part 19 training.
RSC-042799-03	04/27/99	07/15/99	Request the Region IV senior union representative to formally appoint a representative to serve on the Region IV Radiation Safety Committee.
RSC-071599-01	07/15/99	11/23/99	Discuss the training and dosimetry needs of the OI staff and send a memo to Division Directors requesting action to train or cancel dosimetry as appropriate for the other Region IV employees.
RSC-071599-02	07/15/99	03/22/00	Request an onsite peer review audit of the Region IV radiation safety program.
RSC-071599-03	07/15/99	06/15/00	Explore the use of contract data processing personnel to support the development, input, and maintenance of a Region IV employee exposure database.
RSC-112399-01	11/23/99	03/22/00	Rewrite the read-and-sign training material to be more applicable for the radiation safety training of X-ray machine operators.
RSC-032200-01	03/22/00	09/20/00	Provide training to mail room personnel concerning receipt of radioactive material.
RSC-032200-02	03/22/00	06/15/00	Place Radiation Safety Committee minutes into ADAMS.
RSC-092000-01	09/20/00	12/19/00	Notify Branch Chiefs to re-emphasize NRC's administrative limit, as documented in PG-4001.
RSC-092000-02	09/20/00	03/01/01	Draft performance indicators for personnel exposures in Region IV to address ALARA considerations.

Open Item Number	Date Opened	Date Closed	Topic
RSC-121900-01	12/19/00	05/31/01	Request input on whether the Emergency Response Coordinator should be informed in the event a declared pregnant woman is in an emergency response position or whether notification to their supervisor is sufficient. Generate a form for declaration and include guidance in PG 4001.
RSC-121900-02	12/19/00	03/01/01	Incorporate PG 7002 into PG 7003 and delete PG 7002 so Region IV will have only one training policy guide.
RSC-121900-03	12/19/00	03/01/01	Invite Mr. Ramsey to the next Radiation Safety Committee meeting.
RSC-030101-01	03/01/01	05/31/01	Draft and forward a memo to Mr. Ramsey expressing Region IV concerns regarding bioassay sampling kits.
RSC-030101-02	03/01/01	05/31/01	Provide a sample presentation of the region's exposure data to the Branch Chiefs and request feedback.
RSC-053101-01	05/31/01	Pending	(A) Develop a presentation method for personnel exposure performance indicators and areas to post the divisional exposure performance indicators. (B) Develop text for tracking and trending the data and to incorporate management's and branch chief's comments on the performance indicators, specifically tracking by divisions. (C) Develop policy guide for Region IV expectations for the personnel exposure performance indicators.
RSC-053101-02	05/31/01	09/19/01	Update the Radiation Safety Committee designation letter and recommend to the Regional Administrator that he appoint the ARSO as Mr. Jim Dodson and the Dosimetrist as Ms. Rachel Carr, as stated in PG 4001.
RSC-091901-01	09/19/01	Pending	(A) Resolve with the vendor the losing or not processing of dosimetry badges. (B) Resolve with the vendor the three individual exposures which should have been zero.
RSC-091901-02	09/19/01	Pending	Resolve EEDS computer access problems for selected RSC members.

Open Item Number	Date Opened	Date Closed	Topic
RSC-091901-03	09/19/01	Pending	Contact Entergy regarding their administrative requirements for the read-and-sign program and determine the most efficient method for inspectors to complete a once per year read-and-sign for Entergy sites in conjunction with their annual site access training.
RSC-091901-04	09/19/01	Pending	Conduct and document a survey of the Region IV laboratory facility before the end of the 2001 calendar year. The survey is to be submitted to the RSO or ARSO.
RSC-091901-05	09/19/01	Pending	Sponsor and document an audit in accordance with PG 4001, Section 2.5, which includes the Radiation Safety Program elements contained in Sections 2.5.1.5, 2.5.1.7, 2.5.1.8, and 2.5.1.9. The audit report is to be submitted to the RSO or ARSO before the end of the 2001 calendar year.
RSC-091901-06	09/19/01	Pending	Clarify the concern that our current dosimetry program did not have the ability to monitor and track emergency exposures and perhaps additional dosimetry would be required in the IRC. Submit the clarification with the requirement and basis to the Radiation Safety Committee.
RSC-091901-07	09/19/01	Pending	Submit a proposal via e-mail to Radiation Safety Committee members which includes the recommendation for replacement of the current DRS representative before the next Radiation Safety Committee meeting.

The review of Radiation Safety Committee meeting minutes indicated 25 concerns were introduced as open items for regional corrective actions during the time period April 1999 through September 2001. These items covered a wide range of radiation safety concerns. All open items were addressed, discussed, and closed in a timely manner following implementation of appropriate corrective actions, as documented in the Radiation Safety Committee meeting minutes. At the time of the review, eight open items were pending closure. Open Item RSC-053101-01 was discussed during the September 19, 2001, Radiation Safety Committee meeting and still remains open pending the issuance of revised policy guides PG 4000 and PG 4001. The remaining seven items opened during the September 19, 2001, Radiation Safety Committee meeting are currently in the process of resolution prior to the next Radiation Safety Committee meeting scheduled for January 3, 2002.

No negative findings were identified.

Section 2.5.1.8

Radioactive material control and accountability of Region IV controlled material

All Region IV controlled radioactive material (radioactive sources) is stored in a locked steel cabinet in the Region IV laboratory. Key issuance to the storage cabinet padlock is controlled by the Region IV property manager. It was determined that the Region IV laboratory manager and the radiation safety officer are the only personnel with a key to the radioactive material storage cabinet. An inventory of the controlled radioactive material was performed on November 27, 2001, by the laboratory manager and the assistant radiation safety officer. The results of that inventory are attached as Attachment 1.

A source accountability log is maintained in the Region IV laboratory. A review of entries in the source accountability log indicated that the last time a radioactive source was checked out and checked back in was February 27, 2001. According to the source accountability log and the above documented inventory, all Region IV controlled radioactive material (radioactive sources) is secured and controlled.

The Region IV radioactive material was properly controlled and maintained. No negative findings were identified.

Section 2.5.1.9

Compliance with US Department of Transportation requirements

A review of radioactive material shipment records indicated that the only shipment of radioactive material from Region IV during the past 3 years was made to Region III for material disposal purposes on June 9, 1999. Based on the review of that shipment record, it was determined that all appropriate Department of Transportation shipping requirements were met.

In addition, it was determined that DNMS inspectors periodically ship inspection related soil, water, and smear samples to the Region III analytical laboratory and the Oak Ridge Institute for Science and Education (ORISE) analytical laboratory for radiochemical analyses. These samples are generally shipped to the respective laboratories directly from the licensees' sites. A copy of the instructions to the inspectors for sample collection and shipment is attached as Attachment 2. A review of shipment inventory records for the second half of calendar year 2000 indicated that 13 sample shipments were made to Region III for analysis. A review of shipment records for the calendar year 2001 indicated that six sample shipments were made to Region III and six sample shipments were made to ORISE for analysis. All shipments of inspection related samples were performed in accordance with Department of Transportation regulations.

No negative findings were identified.

Attachment 1

REGION IV RADIOACTIVE SOURCE INVENTORY

November 27, 2001

ACTIVE SOURCE INVENTORY

<u>Nuclide</u>	<u>Serial Number</u>	<u>NRC Number</u>	<u>Activity*</u>	<u>Date</u>
Pu-239	8608	009474	381 cpm	-
Pu-239	8609	"	4702 "	-
Pu-239	8610	"	36242 "	-
Pu-239	8611	"	287398 "	-
Pu-239	bar on Alpha Det.	-	-	-
Sr-90	273	011682	1.5 mCi	10/21/81
Sr-90	274	009562	1.5 mCi	10/22/81
Cs-137	267-234	-	10 µCi	10/13/81
Cs-137	4	-	8 µCi	-
Cs-137	28	-	8 µCi	03/92
Am-241	in NaI Detector	008952	.03 µCi	-
Am-241	in NaI Detector	014408	.025 µCi	12/21/83

North American Scientific

Point Sources

Ra-226	A4341	-	325.5 kBq	5/1/96
Cs-137	A4343	-	3.407 MBq	5/1/96
Cs-137	A4342	-	306.5 kBq	5/1/96

Alpha Set

Am-241	D661	-	830.7 Bq	5/1/96
Th-230	D663	-	869.7 Bq	5/1/96
Pu-239	D667	-	841.9 Bq	5/1/96

Beta Set

C-14	D668	-	4.655 kBq	6/1/96
Tc-99	D669	-	1.002 kBq	6/1/96
Cl-36	D670	-	1.109 kBq	6/1/96
Pm-147	D671	-	1.028 kBq	6/1/96
Sr-90	D672	-	1.018 kBq	6/1/96

Gamma Set

Ba-133	D673	-	3.257 kBq	6/1/96
Co-60	D674	-	1.580 kBq	6/1/96
Cs-137	D675	-	1.091 kBq	6/1/96
Na-22	D676	-	2.332 kBq	6/1/96
Cd-109	D677	-	1.670 kBq	6/1/96

The Source Inc.

Case 11

Pu-238	96PU5001701	-	0.0246 uCi	8/29/96
Pu-239	96PU5001705	-	0.0391 uCi	8/29/96
Th-230	96TH5001709	-	0.0281 uCi	8/5/96
U-234/235	96U50001713	-	0.0279 uCi	8/30/96
Am-241	96AM5001717	-	0.0331 uCi	8/29/96
Tc-99	96TC5001721	-	0.0236 uCi	9/3/96
Ni-63	96NI5001725	-	0.0381 uCi	9/3/96
Cs-137	96CS5001729	-	0.0304 uCi	9/1/96
Pu-239	96PU5001733	-	0.00419 uCi	8/5/96
Th-230	96TH5001737	-	0.00337 uCi	8/5/96
Tc-99	96TC5001741	-	0.00340 uCi	8/2/96
Ni-63	96NI5001745	-	0.00342 uCi	9/4/96
Cs-137	96CS5001749	-	0.0031 uCi	9/1/96
Tc-99	96TC1001753	-	0.0307 uCi	9/4/96
Ni-63	96NI1001757	-	0.0355 uCi	9/4/96
U-234/235	96U10001761	-	0.0325 uCi	9/5/96
Tl-204	96TL1001765	-	0.0451 uCi	9/11/96
Cs-137	96CS1001769	-	0.0248 uCi	9/1/96
Sr-90	96SR1001773	-	0.0299 uCi	9/4/96

Case 22

Pu-238	96PU5001700	-	0.0246 uCi	8/29/96
Pu-239	96PU5001704	-	0.0337 uCi	8/29/96
Th-230	96TH5001708	-	0.0270 uCi	8/29/96
U-234/235	96U50001712	-	0.0327 uCi	8/30/96
Am-241	96AM5001716	-	0.0337 uCi	8/29/96
Tc-99	96TC5001720	-	0.0317 uCi	8/1/96
Ni-63	96NI5001724	-	0.0398 uCi	9/3/96
Cs-137	96CS5001728	-	0.0283 uCi	9/1/96
Pu-239	96PU5001732	-	0.00318 uCi	8/5/96
Th-230	96TH5001736	-	0.00428 uCi	8/5/96
Tc-99	96TC5001740	-	0.00336 uCi	9/3/96
Ni-63	96NI5001744	-	0.00342 uCi	9/3/96
Cs-137	96CS5001748	-	0.0027 uCi	9/1/96
Tc-99	96TC1001752	-	0.0297 uCi	9/4/96

Ni-63	96NI1001756	-	0.0450 uCi	9/4/96
U-234/235	96U10001760	-	0.0236 uCi	9/5/96
Tl-204	96TL1001764	-	0.0231 uCi	9/11/96
Cs-137	96CS1001768	-	0.0453 uCi	9/1/96
Sr-90	96SR1001772	-	0.0225 uCi	9/4/96

Case 33

Pu-238	96PU5001702	-	0.0353 uCi	8/29/96
Pu-239	96PU5001706	-	0.0318 uCi	8/5/96
Th-230	96TH5001710	-	0.0256 uCi	8/5/96
U-234/235	96U50001714	-	0.0251 uCi	8/30/96
Am-241	96AM5001718	-	0.0448 uCi	8/29/96
Tc-99	96TC5001722	-	0.0292 uCi	8/1/96
Ni-63	96NI5001726	-	0.0353 uCi	9/3/96
Cs-137	96CS5001730	-	0.0249 uCi	9/1/96
Pu-239	96PU5001734	-	0.00277 uCi	8/5/96
Th-230	96TH5001738	-	0.00451 uCi	8/5/96
Tc-99	96TC5001742	-	0.00341 uCi	8/2/96
Ni-63	96NI5001746	-	0.00297 uCi	9/4/96
Cs-137	96CS5001750	-	0.0031 uCi	9/1/96
Tc-99	96TC1001754	-	0.0369 uCi	9/4/96
Ni-63	96NI1001758	-	0.0428 uCi	9/9/96
U-234/235	96U10001762	-	0.0279 uCi	9/5/96
Tl-204	96TL1001766	-	0.0257 uCi	9/11/96
Cs-137	96CS1001770	-	0.0451 uCi	9/1/96
Sr-90	96SR1001774	-	0.0373 uCi	9/4/96

Case 44

Pu-238	96PU5001703	-	0.0369 uCi	08/29/96
Pu-239	96PU5001707	-	0.0379 uCi	08/05/96
Th-230	96TH5001711	-	0.0335 uCi	08/05/96
U-234/235	96U50001715	-	0.0321 uCi	08/30/96
Am-241	96AM5001719	-	0.0283 uCi	08/29/96
Tc-99	96TC5001723	-	0.0279 uCi	08/01/96
Ni-63	96NI5001727	-	0.0411 uCi	09/03/96
Cs-137	96CS5001731	-	0.0286 uCi	09/01/96
Pu-239	96PU5001735	-	0.00300 uCi	08/05/96
Th-230	96TH5001739	-	0.00303 uCi	08/05/96
Tc-99	96TC5001743	-	0.00267 uCi	08/02/96
Ni-63	96NI5001747	-	0.00311 uCi	09/04/96
Cs-137	96CS5001751	-	0.0033 uCi	09/01/96
Tc-99	96TC1001755	-	0.0351 uCi	09/04/96
Ni-63	96NI1001759	-	0.0304 uCi	09/04/96
U-234/235	96U10001763	-	0.0258 uCi	09/05/96
Tl-204	96TL1001767	-	0.0290 uCi	09/11/96
Cs-137	96CS1001771	-	0.0322 uCi	09/01/96
Sr-90	96SR1001775	-	0.0252 uCi	09/04/96

Performed by: Tony Gaines and Jim Dodson

Attachment 2

CONFIRMATORY SAMPLING NOTES For RIV Inspectors

December 12, 2001

The NRC has issued an umbrella Request for Technical Assistance (RFTA) for costs associated with analyzing samples by ORISE. The number is RFTA-02-001 (until 12/31/01).

The headquarters contact for the RFTA is Gary Purdy, ORISE Contract Manager; HQ number: 301-415-7897, fax 301-415-5397.

It is recommended that you contact ORISE in advance before collecting samples to coordinate and discuss sample type and required sample analysis (e.g., gamma or alpha spec., required LLDs, gross alpha or beta, etc.) The ORISE point of contacts are Dale Condra: 865-241-3242 and Wade Ivey: 865-576-9184. The fax number for Dale and Wade is 865-241-3497.

Water Samples - Have samples collected in 1L sample water containers. ORISE recommends narrow mouth plastic bottles. Glass is not recommended to prevent adsorption on the walls. Tape the seal of the bottle caps to help prevent leakage. Sample acidification/filtration should be discussed with ORISE/licensee before sample collection. Acidification is not necessary with many radionuclides. Be sure to fill the 1L bottle to the top to ensure a full liter of sample volume.

Soil Samples - Dry soil samples can be shipped to ORISE in double gallon size plastic bags or the preferred polyethylene containers. ORISE will count 700-800 grams of soil sample, therefore we should provide them with approximately 1kg (2.2 lbs) of soil.

All samples should be listed on the Sample Record continuation form (**NRC Form 303A**). Complete the Request for Analysis and Chain of Custody **NRC Form 303**. In the remarks section, include your e-mail address, the report number, whether the sample costs are fee recoverable or not, and licensee's address for return of the sample (reduces sampling costs tremendously). You **MUST** fax a copy of the Form 303/303A to Gary Purdy so he is aware of the number and type of samples being shipped to ORISE.

After packing samples, place the original **NRC Form 303/303A**, Request for Analysis and Chain of Custody Form and Sample Continuation Form in the shipping container. Also, place **NRC Form 643**, Excepted Package-Limited Quantity of Material, inside the package. If you are shipping liquid samples, include an absorbent such as shredded paper in the box just in case of seal leakage. Also, if possible, use "this side up" (preferably double arrows pointing up) labels if available.

Remember to take a radiation survey and smears on all surfaces of each shipping container to confirm exposure rate of < 0.5 mr/hr and removable contamination < 2200 dpm/100cm² beta/gamma (< 220 dpm/100cm² alpha).

Place FEDEX label on the package(s) with a mailing address to:

ORISE Radioanalytical Lab
230 Warehouse Rd.
Oak Ridge, TN 37831

The NRC's FedEx account number is 100294664 (FedEx priority overnight) and labels can be obtained from RIV mail department.

Attachment 2

Open Action Item (mmddy-##)	2001 Action Item Summary	Date Closed
092000-02	Proposed draft of performance indicators of personal exposures in Region IV to address ALARA considerations.	RSC Meeting March 1, 2001
121900-01	Contact Steve McGuire for input on whether ERC should be contacted in the event the declared radiation worker is in an emergency response position or whether notification to the supervisor is sufficient. Generate a form for declaration and included guidance in the ROPG that the individual may use a licensee's form or the newly generated form. Update guidance in ROPG 4001 for a declared pregnant worker and laboratory surveys. A draft of recommended changes to ROPG 4001 will be brought before the committee during the next meeting.	RSC Meeting May 31, 2001
121900-02	Incorporate ROPG 7002 into ROPG 7003 and delete ROPG 7002; thereby Region IV will have one training procedure.	RSC Meeting March 1, 2001
121900-03	Invite Mr. Ramsey (NMSS RSO) to next RSC meeting ~ for discussion on the bioassay sampling kits.	RSC Meeting March 1, 2001
030101-01	Initiate a memo stipulating the concerns which Region IV expressed pertaining to the bioassay sampling kits. The memo should be forwarded to Kevin Ramsey. The RSC members should be on concurrence.	RSC Meeting May 31, 2001
030101-02	Provide a sample presentation of the region exposure data to the Branch Chiefs and request feedback. The feedback requested should include what information tool would be beneficial for management to adequately review the exposure data and trends in the region. The mechanism for displaying the information should be evaluated. The feedback and display mechanism should be presented at a subsequent RSC meeting.	RSC Meeting May 31, 2001

Open Action Item (mmddyy-##)	2001 Action Item Summary	Date Closed
053101-01	<p>A) Develop presentation method for personnel exposure performance indicators and areas to post the divisional exposure performance indicators.</p> <p>B) Develop text for tracking and trending the data and to incorporate management's and branch chief's comments on the performance indicators, specifically tracking by division.</p> <p>C) Develop policy guide for Region IV expectations for the personnel exposure performance indicators.</p>	RSC Meeting Jan. 3, 2002
053101-02	Update the Radiation Safety Committee designation letter and appoint the ARSO as Mr. Jim Dodson and the Dosimetrist as Ms. Rachel Carr in a letter, as stated in ROPG 4001.	RSC Meeting Sept. 19, 2001
091901-01	Resolve with the vendor the losing or not processing of dosimetry. Resolve with the vendor the three individual exposures which should have been zero.	RSC Meeting Jan. 3, 2002
091901-02	Resolve the computer access problem with EEDS.	RSC Meeting Jan. 3, 2002
091901-03	Contact Entergy regarding their administrative requirements for the read & sign problems; determine an efficient method for inspectors to complete a once per year read & sign for Entergy sites in conjunction with their annual site access training.	<i>Open</i>
091901-04	Conduct and document a survey of the Region IV Lab facility before the end of the calendar year. The survey is to be submitted to the RSO or ARSO.	RSC Meeting Jan. 3, 2002
091901-05	Sponsor and document an audit in accordance with PG 4001, Section 2.5, which includes the Radiation Safety Program elements contained in Section 2.5.1.5, 2.5.1.7, 2.5.1.8, and 2.5.19. The audit report is to be submitted to the RSO or ARSO before the end of the calendar year.	RSC Meeting Jan. 3, 2002
091901-06	Clarify concern that our current dosimetry program did not have the ability to monitor and track emergency exposures and perhaps additional dosimetry would be required in the IRC. Submit the clarification with the requirement and basis to the RSC.	RSC Meeting Jan. 3, 2002
091901-07	Submit a proposal via email to the RSC members, which includes the recommendation for replacement of the current DRS representative before the next RSC meeting.	RSC Meeting Jan. 3, 2002