



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

May 29, 1985

MEMORANDUM FOR: Leonard I. Cobb, Chief  
Safeguards and Materials Programs Branch, IE

FROM: Alfred W. Grella, Senior Health Physicist  
(Transportation)  
Safeguards and Materials Programs Branch, IE

SUBJECT: ASSESSMENT OF REGION IV INSPECTION PROGRAM  
FOR TRANSPORTATION/LOW-LEVEL SOLID WASTE

This is the report of my recent assessment of the subject program. It is based on my routine review of Region IV inspection reports during the past year, as well as one accompaniment inspection with a Region IV inspector to the Arkansas One Nuclear Station during May 14-15, 1985, and discussions with Region IV staff members during my assessment visit there on May 17, 1985. A separate report on the accompaniment has been prepared.

Regional Visit

During May 17, 1985, I visited Region IV for discussions with the staff involved with the transportation/radwaste inspection program. These discussions followed my presentation during May 15-16 of the first of the 2-day courses on inspection of transportation/radwaste which I am currently conducting in each regional office. Prior to the 2-day course I accompanied a Region IV Facilities Radiation Protection Specialist during his May 13-14 routine annual inspection of transportation/radwaste activities of the Arkansas One Nuclear Station in Russellville, Arkansas.

During the Region IV visit, I contacted the following supervisory persons:

- R. Martin - Regional Administrator
- R. Bangart - Director, Division of Radiation Safety and Safeguards (DRSS)
- R. Hall, Chief, Emergency Preparedness and Radiation Protection Branch (EPRPB)
- B. Murray, Chief, Facilities Radiation Protection Section (FRPS)
- R. Everett, Acting Chief, Nuclear Materials Safety and Safeguards Branch (NMSSB)

The above titles are consistent with the existing RIV organization. -On April 17, 1985, a proposed RIV reorganization was announced. Although not yet approved, this reorganization would establish a Radiological Safety and Safeguards Branch (R. Hall) under the DRSS (R. Bangart), with the two Sections (Nuclear Materials Safety - R. J. Everett and Facilities Radiological Protection - B. Murray) under Mr. Hall. Copies of the current and proposed RIV organizations are attached.

In addition to the above discussions, I interviewed several inspectors individually - C. Hooker, C. Cain, and D. Chaney. During the conduct of the 2-day course, however, I had the opportunity for substantive interface with all of the other inspectors as well, since the regional inspection schedule had been established so as to allow the attendance of all of the radiation specialists. During the interviews and classroom discussions I was able to obtain the views of the inspectors and their management of the relevant inspection modules, experience during their use, as well as recommendations for any changes to the program or modules.

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### Organization of Program and Training of Inspectors

Within the DRSS, inspection of transportation/radwaste activities of licensees is done by inspectors from two sections, the NMSS within the NMSSB and the FRPS with the EPRPB. Within the NMSS there are 5 inspectors assigned (2 of whom do mainly licensing) who at one time or another inspect transportation/radwaste. One of these persons, C. Hooker, has completed the TTC Course and performs substantial inspections of transportation, particularly of radiographers and well loggers. Mr. Hooker has over the past several years developed in his inspections more violation items involving transportation than any other regional inspector in the Agency. (It was noted that he is transferring to Region V in June to become a facilities radiation protection inspector.)

Within the FRPS section, there are 5 inspectors assigned, 3 of whom have been routinely involved with inspecting transportation/radwaste activities at reactors. The two others have previously been involved with non-transportation aspects, such as independent measurements, although they recently have started to do some transportation/radwaste inspections. Prior to the 2-day course, only the Section Chief, B. Murray, had completed the 2-day course.

As of May 16, all of the Region IV inspectors had received the 2-day training course I conducted during May 15-16.

### INSPECTION PROGRAM

#### Materials/Fuel Cycle Facilities

Based on my review of the FY 84 staff hour data from the 766 system, substantive time is being charged to the Transportation Module 86740. 191 entries were noted, 120 of which were < 1 hours; 67 - 1 hour; and the other 4 ranging from 2 - 9 hours per inspection. For radwaste, however, no 766 entries were noted against Module 84850 for Part 30/40/70 licensees. I informed management of this fact and they indicated they would check it out, although they felt that not very many actual hours would be involved for Module 84850, due to the nature of most materials licensees in Region IV, i.e., their not being generators of waste subject to 10 CFR 61.

In the materials inspection program, Region IV uses four specific formats of field notes: Industrial/Academic, Medical, Radiography, and Medical/Teletherapy. Each of these appears to be well thought out and in my opinion are the best formats in regional use. The sections for transportation/radwaste information were noted to be identical to those recommended to the regions in July 1984 by IE. They were actually backfitted to conform to those recommendations, even though the ones which had been recommended by IE were based principally on those which were already in use by Region IV.

In terms of inspection coverage of materials licensees, particularly, radiographers and well loggers, Region IV, in the writer's opinion, has done an exemplary job. This is as evidenced by the numbers and types of violations of transportation regulations which are consistently detected by the staff, as well as the detail contained in the Notices-of-Violation.

Region IV management expressed the view that the typical transportation violations which they note by radiographer/well loggers are due to those licensees basic lack of familiarity with the regulatory requirements. They feel very strongly that the situation could be improved significantly by modification of the license application process and associated regulatory guidance for license applications. Such a modification would entail requiring the applicant to provide detail on his transportation/packaging procedures in his application. Region IV stated that they have had discussions with NMSS on the possibility of implementing this, however, NMSS has objected. (It is noted that current Regulatory Guide 10.6 Rev. 1 (Dec. 81) contains very little specificity on transport requirements. Proposed Rev. 2 of Regulatory Guide 10.8 does contain additional detail, however, it contains nothing regarding the use of NRC-certified transport packages, registration requirements thereof, and associated Q/A program requirements. These latter elements are very often the subject of radiographer's violations.) I indicated to Region IV that I was in basic agreement with their views on modification of the license application process and that I would attempt to get SMPB and NMSS to dialogue on the matter.

I raised with NMSSB Branch management the issue of severity level categorization of transportation violations of radiographers/well loggers. I noted that all of the violations are usually categorized as severity level 5 on the Notices-of-Violations or AEC-591 forms. I stated that for many of the typical violations, i.e., shipping papers, labeling, DOT 7A and special form documentation, Severity Level 5 is appropriate. However, for NRC Certificate-of-Compliance violations, such as failure to register as a user and failure to obtain an NRC-approved Q/A program, at least a Severity Level 4 should be assigned. (I also mentioned that no specific guidance on this matter has been given to the regions by Headquarters.)

Within the materials program, the NMSS Branch inspectors also cover inspections of one fuel facility - Kerr McGee - Sequoyah.

#### Reactor Inspection Program

In general the Region IV effort on inspection of transportation/radwaste activities at reactor facilities appears quite satisfactory. Review of FY 1984 data from the 766 system indicated the following:

<u>Module</u>	<u>No. Units</u>	<u>No. Hours</u>
86740	6	100
86721	3	14
84850	8	57
84722	5	25

It is apparent that Region IV charges time to both the minimum/basic modules (86721 or 84722) and supplemental modules (86740 or 84850). Region IV currently has under development and trial use a new checklist format for transportation/radwaste inspections of Part 50 licensees. A copy of this is enclosed. It is noted to include Module 65051 for the inspection of low-level waste storage facilities pursuant to 10 CFR 50.59. I am impressed with this checklist and will follow closely its final development and will make the other regions aware of it when finalized.

Region IV has done some reactive inspection effort on the inspection at origin of a spent fuel shipment by rail from Cooper Station to Morris, Ill in 1984. A specific checklist was developed and used for this type of inspection.

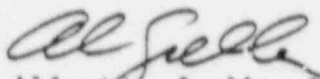
Based on my observations during the accompaniment inspection at Arkansas One, review of inspection report details, and interviews with the inspectors, I conclude that the principal Region IV inspectors who have been inspecting transportation/radwaste at reactors are sufficiently trained and doing a comprehensive effort in each area. A number of their facilities are in the construction or pre-startup mode.

#### Exit Summary

I exited my visit on May 17 with Mssrs. Martin, Bangart, and Hall, making the following comments:

- o The 2-day course given during the preceding 2 days appeared to go very well. 17 Region IV inspectors attended plus 1 USAF health physicist from Brooks AFB. The final exam scores ranged from 28 - 38 out of 40, with a median score of 34 and average of 33.9 attained. The written course critiques were in general very favorable.
- o My inspection accompaniment with a Region IV facilities radiation protection specialist to Arkansas One indicated a comprehensive and thorough inspection of transportation/radwaste activities at that facility, accomplishing all of the requirements of the relevant modules.
- o The Region IV program for inspection of transportation activities of materials licensees is exemplary, in that Region IV develops more violations of transport requirements against radiographers/well loggers than any other region. I noted that their use of a well developed field note format has been used as a model for recommended use to the other regions.
- o I noted two areas in the materials program which should be checked out:
  - No 766 system time is being charged to the 10 CFR 61 radwaste (84850) module for Parts 30/40/70 licensees.
  - Violations of transportation requirements for radiographers/well loggers are being reported on AEC-591's or formal reports as Severity Level 5. I noted that I would agree with this, except for NRC Certificate-of Compliance, certificate registrations, and associated Q/A program requirement violations, which in my view should be at least Severity Level 4. (I noted that no guidance has been given to the regions on this, however, and indicated that I would discuss it with the enforcement staff.)
- o I noted the staffs comments on the desirability of modifying the radiography/well logging license application process so as to include specific addressment of transportation procedures by applicants. I indicated that I would try to get SMPB and NMSS to discuss this matter.

- The Region IV program for inspection of transportation/radwaste activities of Part 50 licensees appears to be very thorough in both scope and quality. I commented favorably on the checklist format which is very developed on a trial basis and indicated that I would make the other regions aware of it when it is finalized. I also commented favorably on the inclusion of Module 65051 (50.59 low-level waste storage facilities) in the checklist.



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Enclosure:  
As stated