

MAY 06 1989

MEMORANDUM FOR: Charles E. Norelius, Acting Deputy
Regional Administrator, Region III

FROM: Carl J. Paperiello, Acting Deputy Director
Office of Nuclear Material Safety
and Safeguards

SUBJECT: DRAFT NMSS NATIONAL PROGRAM REVIEW REPORT

The NMSS National Program Review report is enclosed in draft form for Regional comment. The report provides the results of the Office of Nuclear Material Safety and Safeguards' review of 1988 programs under the Headquarters' responsibility as related to your Region. The Headquarters' teams participating in the review were comprised of individuals from each of the four elements of NMSS that are involved in Regional activities. The National Program Review Manual dated December 11, 1987, was the basis for the review. The National Program Review is based not only on the visit to the Region, but on the collective Regional/Headquarters interfaces throughout the year, through review of licensing casework, inspection reports, accompaniment of Regional inspectors, review of casework, and inspection statistics, technical assistance and coordination, and coordination and Regional responses to an NMSS questionnaire.

The report is intended to provide a review of the effectiveness of both the Regions and NMSS activities insofar as they relate to Regional activities. The emphasis relates to achieving two elements; the numerical goals for casework and inspections as well as the quality of the efforts, on the basis that both elements contribute towards assuring the safety of operations involving NRC licensed activities.

I would appreciate your review of the draft report and any comments relating to the way it portrays Regional efforts. We would appreciate your comments as a marked-up copy, as appropriate. Please provide Regional response by May 23, 1989. Following incorporation of Regional comments, the final report will be transmitted to the Regions by the NMSS Director.

5/

Carl J. Paperiello, Acting Deputy Director
Office of Nuclear Material Safety
and Safeguards

Enclosure: As stated

Charles E. Norelius

- 2 -

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REPORT OF NMSS 1989 NATIONAL PROGRAM REVIEW
AT NRC REGION III, GLEN ELLYN, MARCH 7-8, 1989

1. BACKGROUND AND PURPOSE

This report provides the results of the Office of Nuclear Materials Safety and Safeguards review of 1988 programs under the Headquarters responsibility of NMSS as related to Region III (Glen Ellyn) and under the responsibility of NRC Region III. The Headquarters Team participating in this review was comprised of individuals from each of the four elements of NMSS that are involved in Regional activities and a representative from Region I. The NMSS team is shown on Attachment 1. The principal Regional activities are primarily under the responsibility of the Region III Division of Radiation Safety and Safeguards (DRSS). The DRSS Division organization chart is shown on Attachment 2. The National Program Review Manual dated December 11, 1987, was the basis for the review. Region III's responses to an information questionnaire are in Attachment 3.

The National Program Review is based not only on the visit to the Region but on the collective Regional/Headquarters interfaces throughout the year, through review of some licensing casework, inspection reports, accompaniment of Region based inspectors, review of casework and inspection statistics, resource utilization, technical assistance and coordination, and the questionnaire. It is intended to provide a review of effectiveness of both the Region and Headquarters activities insofar as they relate to Region III activities and to identify suggestions for improving the effectiveness of the joint efforts of NMSS and Region III. The emphasis relates to achieving two elements: the numerical goals for casework and inspections as well as the quality of the efforts, on the basis that both elements contribute towards assuring the safety of operations involving NRC licensed activities.

The report is organized so as to present an integrated summary in each of the following areas:

1. Background and Purpose
2. Licensing
3. Inspections
4. Training
5. Initiatives
6. Interfaces of Region/NMSS
7. Resource Utilization
8. Recommendations/Suggestions

2. LICENSING

a. Materials Safety

Headquarters staff reviews about 20 percent of completed actions. Licensing actions are in accordance with standard review plans and other guidance documents. Region III staff has sought guidance via telephone or Technical Assistance Requests on matters that are technically complex and/or may have policy implications. Interviews during the NPR visit included a roundtable discussion involving 60 percent of the reviewers in the Materials Licensing Section. Following is a summary of the topic areas discussed:

- i. Interactions with Inspectors. The license reviewers typically interact with the inspectors when the inspection history of a licensee is deemed to be important for license renewal or amendment, and when there is an issue on how to cite a licensee. These interactions generally appear to be consistent with Headquarters directives. The licensing reviewers are frequently called upon to assist in or to prepare enforcement packages and any desired license amendments. However, from time-to-time, the reviewers feel such tasking is done late in the enforcement process. Concern was expressed that there may be licensing issues involved at the out-set, that if appropriately coordinated, would save resources in the long-term.
- ii. Licensing Site Visits. The Section Leader decides when licensing site visits are to be performed. If the licensing action involves

a Broad Scope License, an unusual case or a totally new activity or license (e.g., a new radiography business), then the Region conducts a pre-license site visit in accordance with NMSS Policy and Guidance Directives.

- iii. Casework Assignments. For the complex program code cases, Senior Reviewers are given the assignments such as applications for research or Broad Scope. The Section Leader makes prompt assignments for cases involving amendments and new applications. Now that there are also licensing goals for renewals, the reviewers know what is expected of them and they work to those goals. This system has helped to diminish the backlogged cases.
- iiii. Adequacy of Headquarters Guidance. Interest was expressed for revisions to some IMNS Policy and Guidance Directives and Regulatory Guides. Region III agreed to prepare and to submit to IMNS a list of those which should be revised within the next year or two with relative priorities and rationales.
- v. Timeliness. The licensing section has been able to meet or exceed the licensing goals established on December 1, 1988, and will be able to continue to do so with the resources allotted. However, the receipts of applications have been greater than projected (by about 9 percent) in the budget, which potentially compromises the plan to meet the goals. The Branch separates the licensing staff from the inspection staff in that the former are in one section while the latter are in two other sections. The Branch believes this works best, given their experience and personnel. To assist in bringing new reviewers on-board, new hires spend a minimum of 4 to 6 weeks in an inspection section to obtain that perspective. The review process, organization and training appear to contribute to the meeting of the timeliness goals. However, the license reviewers are called upon from time-to-time to spend significant amounts of time performing inspections because of the backlog in that function, which in the past has resulted in a large backlog of licensing actions.

- vi. Enforcement During Licensing. The Licensing Section noted several cases wherein, through vigorous pursuit of licensing inquiries, on-going violations have been identified resulting in enforcement actions without the need for an immediate inspection (inspections are to be scheduled as soon as practical). The Region is to be commended for this effort.
- vii. Quality of Effort. Based on Headquarters review of licensing actions, routine interactions with Region III, and the interviews during the NRP visit, Region III is to be commended on the quality of its licensing reviews.

b. Fuel Cycle Licensing

Because all significant licensing actions in this area are either performed by NMSS or directed by NMSS, fuel cycle facility licensing is an inconsequential part of Region III workload. The Region has provided input to NMSS in licensing actions.

3. INSPECTIONS

a. Materials Inspections

In FY88 Region III completed 830 inspections and closeouts vs. an operating plan target goal of 743 (118 percent). Through December 1988 the Region has completed 231 inspections. This is somewhat below the operating plan target of 323 inspections during this time period. In addition, Region III has a significant number (approximately 170) of overdue inspections. Region III was confident, however, that the Region would increase its effort and reach its goals for inspections in FY89.

There were no apparent problems noted in the technical adequacy, accuracy, or quality of inspections or inspection documentation. Some minor items associated with report quality control (i.e. typos, missing boilerplate wording, etc.) were noted and discussed with

Regional staff. Because of the possibility that the effort to increase the number of inspections might have an adverse affect on the quality of inspections, Region III attention is being given to assure that the quality and scope of the inspections will not diminish.

An accompaniment of a Region III materials inspector revealed a professional, thorough inspection effort with some time devoted to education of the licensees. The accompanied inspector was a senior inspector and demonstrated an authoritative knowledge of the licenses being inspected.

Region III averaged 18.7 days from inspection to transmittal of inspection documentation. This is an excellent record for which the Region is commended.

Region III has incorporated the revised inspection frequencies for medical licensees as directed in Temporary Instruction TI 2800/16. The Region revised the inspections' due date on a quarterly prorated basis. This results in a rather large number of inspections coming due in March and June. It is suggested that a month-by-month apportionment might ease the additional burden of due inspections by spreading the impact of the revised frequencies throughout the year.

Region III has continued its leadership in implementing Temporary Instruction 2800/15, Performance Evaluation Factors, in a manner similar to the system already in place from the initial program from FY88. PEF sheets are reviewed by both the Section Chief and the Technical Assistant to the Division Director. Twelve licensees were identified with a factor indicating potential problems. The Region's policy is to take some action to prevent degradation of licensee performance, such as revising the inspection frequency or adding a paragraph addressing concerns in the letter to the licensee.

b. Fuel Facility Inspections

In FY88, Region III gave its fuel cycle facilities an adequate amount of inspection. The inspections of these facilities have been thorough and competently performed, as evidenced by the inspection reports produced, by inspection accompaniment reports, and by feedback from other NRC staff who have been present.

The inspection reports are well written and of consistent high quality, with many observations documented, and with open items well tracked. The inspection modules covered are enumerated, and the activities conducted are described. The reports were generally issued within the timeliness goal of 21 days; and the exceptions were not greatly delayed.

The inspector with primary responsibility for the fuel cycle facility inspections was accompanied on an inspection of Region III's largest and most complex fuel cycle facility by two staff members of the Fuel Cycle Safety Branch, NMSS. Their inspection accompaniment report indicates that the inspector was well supported by his home office, that he conducted the inspection well, and that he maintains a proper relationship with the licensee.

c. Transportation Inspections

During FY88, Region III performed the inspection of transportation activities using module 86740 at materials licenses and fuel facilities. All five fuel facilities were inspected at least once. The number of inspections of materials licenses appeared commensurate with the number of materials licenses in the region and overall number of inspections performed in the 2800 program. Section chiefs accompanied most of the inspectors at least once during the year. Inspection reports and NOV's were reviewed by NMSS on an on-going basis and found to be thorough and complete in all 3 program areas. Additionally, about 12 completed field notes in the Region III files were audited and found to be complete, using the formats recommended in the inspection manual.

During FY 1988 the former FRPS completed inspections of the basic transportation module 86721 at 18 of the 20 Part 50 sites (23 of 27 units). The units not so inspected were under special reduced inspection programs, i.e. SALP-1.

Since late in FY88, reactor inspections of transportation have been against CIP 83750. The RIII master plan for reactor inspections calls for budgeted time for additional inspection initiatives, based on performance, to SALP 2 & 3 plants. "Good" SALP-2 units will have no regional initiative added. "Poor" SALP-2's will have "significant" additional initiative added.

NMSS accompanied the Region III Fuels Facility inspector during an inspection of transportation activities (SNM 70-36, CE at Hemstite, MO). The performance of the requirements of Module 86740 was noted to be thorough and of high quality.

d. Low Level Waste Inspections

A review of the Region III FY-88 LLW inspection program for all program areas (for materials, fuel cycle and reactors, was conducted by evaluating information from: 1) the Regional files; 2) the 766 data system; 3) inspection reports containing solid radwaste inspection findings; and 4) discussions with Regional staff.

Examination of Regional files indicates complete field notes which address Part 61 waste generator requirements. Updated information from the Regional files also show that LLW inspections were conducted for most reactor plants under Region III auspices. The New Core Inspection Program is being implemented in the Region and although the immediate impact cannot yet be thoroughly evaluated, resources for low-level waste inspections, in addition to the basic program, are determined by Regional initiatives after considering SALP designations for each plant.

Materials inspections in the waste area have been conducted in keeping with guidance provided in NRC Manual Chapters and applicable inspection procedures.

Fuel Cycle inspections in the area of LLW have been completed for all fuel facilities in the Region, and the inspection reports for these facilities are well written and reflect inspector field note observations and final inspection conclusions for areas in applicable low-level waste modules. NMSS accompanied the Region on an inspection in FY88 that involved waste classification of activated metals.

There is no operating low-level waste disposal facility in Region III.

4. TRAINING

The management and control of inspector qualification and training is very well done. The centralization of oversight and control as described in Regional Procedure 0209 provides for efficient management of training resources and assurance that inspector training and qualification requirements are met in a timely manner. The following attributes of the Region's program were judged outstanding:

- (a) The establishment of a Regional Training Council to assess the effectiveness of the training program, and oversee and manage training resources;
- (b) The direct involvement of Chief of Personnel Staff and the implementation and maintenance of personnel training;
- (c) The immediate establishment of an Individual Development Program and training plan for new hires;
- (d) The establishment of systems to annually project personnel training needs, and prioritize such needs to assure the best expenditure of resources; and

- (e) The development of an Inspector Qualification Journal designed to specifically address the special training and qualification needs of materials inspectors.

While the training program for inspection personnel is well established, a similar program for license reviewers does not yet exist. Though such program is being considered, it is recommended that action be initiated to establish, implement and maintain a training and qualification program for license reviewers designed to maintain further the competency and technical capability of personnel, and verify their ability to perform.

The Region has about five positions that should be designated for training in the area of low level waste and transportation inspection. Two of these positions are located in the Emergency Preparedness and Effluents Section and they should be given top priority for this training course, if they are assigned to these areas.

5. REGION III INITIATIVES

Region III has recently brought about a significant reduction in its licensing casework backlog. During a concerted effort over a two week period, for cases having some combinations of involving: they could be done quickly, there is a good inspection history, the application is unchanged, the licensee is a known commodity, no significant policy changes; then each license reviewer was assigned to complete 10 licensing actions per week. For those remaining, reviewers were given goals of completing four (some were given 5) cases to complete each week. This action lead to a substantial reduction in the backlog.

Region III has made several commendable initiatives in the past year with regard to fuel cycle facilities and previous source material users. One is the quarterly report on facilities in decommissioning which provides a good status report on these long-term activities. This provided useful input to an overall NRC listing of contaminated sites. Another, more recent initiative is the preparation of Master Activities Plans for fuel facilities, first furnished NMSS by memorandum of January 12, 1989. The Master Activities Plan provides a good status summary, an evaluation of the licensee, and proposed dates for inspection with areas of emphasis to be included. Training of a second fuel facility inspector is also a notable Regional initiative.

The Region took the initiative to establish an allegations board chaired by DRSS to oversee the allegations program. This has achieved improvement though not to the complete satisfaction of management and staff. As a suggestion for further improvement of this process, Region III may want to place responsibility for materials related allegation decisions in DRSS.

The region's efforts to identify the need for waste classification guidance for activated metals is appreciated.

The materials inspection staff has recently initiated a weekly meeting of inspectors from both inspection sections to discuss potential problem areas, issues that have been identified, and areas of inconsistency. This effort continued as a valuable means for increasing communication among the inspectors. As a further enhancement, the Regional Section leaders' participation would increase the flow of information between management and staff, ~~and~~ would provide an opportunity for management guidance on interpretation and ~~resolution~~ of emerging issues, and results of monthly conference calls with NMSS.

6. HQ/REGIONAL INTERACTION

Interaction between Headquarters and Region III counterparts has been extensive and considered excellent.

Region III staff suggested that NMSS issue additional guidance on the use of the medical questionnaire once OMB clearance is obtained.

NMSS staff suggested that Region III evaluate the existing NMSS licensing guidance and identify guidance that needs to be revised and a prioritization that would best meet Region III needs.

7. RESOURCE UTILIZATION

The attached table shows FTE allocations and expenditures for the review period. Region III has no program support funds in the NMSS mission areas.

The Regional materials licensing staffing aligns with the budget; however, the Region is recruiting an additional materials licensing reviewer per the EDO's direction to allocate an additional position. Currently, there are vacancies in the materials inspection area. The Region has hired several new inspectors and is in the process of hiring a few more. They are hoping to be staffed at the budgeted materials inspection level around April. Fuel facility inspection staffing approximates the budget considering that 1 FTE is planned to be expended for fuel facility inspections by Reactor Safety personnel.

Overall Regional expenditures for FY88 were in line with projections; however, fuel facility inspection expenditures and safeguards expenditures were below budget in FY88 and the trend is continuing in FY89. Regarding fuel facility inspections, the Region has developed an inspection operating plan for FY89 which includes inspections by Reactor Safety personnel. They believe they will effectively utilize the budgeted FTE provided in FY89. Region III has assigned an additional inspector within the Nuclear Materials Safety branch to perform fuel facilities inspections. This enhances their program by providing backup capability. Safeguards expenditures were below budget ~~for~~ FY88 and the first quarter of FY89. The Region is still reviewing the small number of licensing cases received and conducting inspections. They are also providing assistance to Headquarters in the threat assessment area.

Limited decommissioning resources are being expended for training on the new rule; however, no substantive cases have been received for processing to date.

Region III completed 830 materials inspections in FY88 vs. a goal of 743 (118 percent) with less than budgeted resources. During the first quarter of FY89, Region III completed 231 materials inspections vs. a goal of 323 (72 percent). This was due to the fact that they started the fiscal year four staff under the materials inspection budget. Management attention has been increased in this area and the number of inspections completed each month has progressively increased.

They completed 2107 materials licensing cases in FY88 vs. a goal of 1786 (118 percent) with slightly less than the budgeted resources. During the first five months of FY89, Region III completed 975 materials licensing cases vs. a goal of 723 (135 percent). During this period Region III has achieved a significant reduction in pending materials licensing cases; this is partially due to expenditures in excess of the budget and Region III's implementation of management efficiencies.

Effective October 1, 1988, the Division of Radiation Safety and Safeguards was reorganized to place essentially all staff and responsibilities related to NMSS functions in the Nuclear Materials Safety Branch. They also increased and combined materials licensing and inspection administrative support staff with the goal of achieving a cross-trained pool of resources. These changes have significantly benefitted the Region's productivity; the administrative support staff was able to effectively process the unusually high number of materials renewals completed in January and February 1989.

The materials licensing staff thought they may benefit from having access to additional personal computers. We recommend that the Division of Radiation Safety and Safeguards work with the Division of Resource Management and Administration in conjunction with the FY89 mid-year financial review to address this request.

REGION III RESOURCE UTILIZATION

PROGRAM ACTIVITY	FY 88			FY89			
	BUDGET	EXPENDED ^{1/}	%	ANNUAL BUDGET	BUDGET	EXPENDED ^{2/}	%
				BUDGET	OCT-DEC	OCT-DEC	
Fuel Facility Lic.	0.0 ^{3/}	0.06	200	0.04	0.01	0.10	1000
Fuel Facility Insp.	2.03	1.1	55	2.4 ^{3/}	0.60	0.36	60
Materials Licensing	7.8	7.4	95	7.5 ^{4/}	1.88	2.16	115
Materials Insp.	13.23	12.0	91	16.0 ^{3/}	4.00	2.78	70
Event Evaluation	0	0.4		1.4	0.35	0.76	217
NMS Section Super.	1.5	2.7	180	3.2	0.80	0.88	110
NMS Subtotal	24.53	23.66	96	30.54	7.64	7.04	92
SG Fuel Facility Lic.	0.2	0.04	20	0.2	.05	0	0
SG Fuel Facility Insp.	0.3	0.1	33	0.1	.03	0	0
SG Transp. Insp.	0.24	0.05	21	0.24	.06	0	0
SG Section Super.	0.2	0.02	10	0.2	.05	0	0
SG Subtotal	0.94	0.21	22	0.74	.19	0 ^{6/}	0
LLW Inspection	0 ^{5/}	0.01	0	0.25	.06	0	0
Reactor Decomm.	0	0	0	0.1	.03	0	0
Materials Decomm.	0	0	0	0.5	.13	0	0
LLW Subtotal	0	0.01		0.85	.22	0 ^{6/}	0
NMSS Total	25.47	23.88	94	32.13	8.05	7.04	87

^{1/}FY88 expenditures from Regional input provided in response to FYP/Green Book update in 12/88.

^{2/}FY89 expenditures from FY89 RITS RWAT report (as of 12/31/88).

^{3/}0.9 FTE for fuel facility and materials team assessments originally budgeted under fuel facility inspection category has been moved to materials inspection category in FY88 and FY89.

^{4/}Revised to reflect the EDO's 12/88 decision to allocate an additional position.

^{5/}LLW inspection resources are included in materials, fuel facility and transportation inspections.

^{6/}Expenditures under 0.1 FTE.

8. RECOMMENDATIONS

- a. Consider assigning the inspections associated with TI 2800/16 on a monthly rather than quarterly basis to spread the workload.
- b. Consider expanding the meetings of the inspection sections to include section chiefs and branch chiefs to pass on information from monthly conference calls and identify generic issues that may require management involvement.
- c. Consider changing the Regional Allegation Program to place responsibility for allegation decisions related to materials in the Division of Radiation Safety and Safeguards.
- d. Involve materials licensing staff earlier during enforcement cases, as appropriate.
- e. Obtain additional personal computers when available, and as appropriate, to improve staff efficiency.
- f. Identify areas where licensing and inspection staff feels additional or updated NMSS guidance would be useful, in order of Regional priority.
- g. Training in transportation and low level waste should be provided to the approximately five staff assigned to do inspections in these areas.

1989 Region III Program Review - Team Members
Glen Ellyn - March 7-8, 1989

Glen Sjoblom, Division of Industrial and Medical Nuclear Safety, Team Leader

John Austin, Division of Industrial and Medical Nuclear Safety,

Jerry Swift, Division of Industrial and Medical Nuclear Safety

Donald Cool, Division of Industrial and Medical Nuclear Safety

John White, NRC Region I

Al Grella, Division of Safeguards and Transportation

Leroy Person, Division of Low Level Waste Management and Decommissioning

Claudia Seelig, Program Management, Policy Development and Analysis Staff

January 1989

DIVISION OF RADIATION SAFETY
AND SAFEGUARDS

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Tech. Asst (Temp) RJ Caniano
Secretary M. Meenan

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Secretary	A. Padlo
Radiological Controls & Chemistry Section	
MC Schumacher, Chief	
KE Andre	
R Bocanegra	
WB Grant	
RB Holtzman	
JE House	
AC Januska	
MA Kunowski	
DE Miller	
RA Paul	
VACANT	
Emergency Preparedness & Effluents Section	
WG Snell, Chief	
JE Foster**	
CF Gill	
RL LaFreniere	
JP Patterson	
TJ Ploski	
CL Shear	
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MJ Smith	
Safeguards Section	
JR Creed, Chief	
JL Belanger	
CM Christoffer	
DE Funk	
JR Kniceley	
TJ Madeda	
GL Pirtle	

Nuclear Materials Safety Branch	
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Secretary	JE Loser
Materials Lic Section	
GH McCann, Chief	
WJ Adam	
IP Detloff	
CF Frazier	
DE Hersey	
LJ Hueter	
JR Hadera	
ER Hatson	
KC Hull	
TE Olge	
PJ Pelke	
DJ Thorpe	
PJ Vacherton	
Nuclear Materials Safety Section 1	
DG Wiedeman, Chief	
W. J. Slawinski	
N. Soeurt	
JC Lynch	
JR Mullauer	
DA Parker	
JW Patterson	
VACANT	
Nuclear Materials Safety Section 2	
DJ Sreniawski, Chief	
RJ Caniano**	
CC Casey	
CM France	
SR Lasuk	
SH Mulay	
RH Pankratz	
WP Reichhold	
TI Simmons	

- * Detailed to position
- ** Obligated
- *** Rotational assignment to Headquarters

MEMORANDUM FOR: Richard E. Cunningham, Director, Division of Industrial
and Medical Nuclear Safety, NMSS

FROM: Charles E. Norelius, Director, Division of Radiation Safety
and Safeguards, Region III

SUBJECT: 1989 NATIONAL PROGRAM REVIEW QUESTIONNAIRE

In response to your February 6, 1989 memorandum to me, we have compiled the enclosed responses to the questionnaire for your use.

The responses are numbered to correspond with the questions in the questionnaire.

Charles E. Norelius, Director
Division of Radiation Safety
and Safeguards

Enclosure: As stated

cc w/enclosure:
C. J. Paperiello
S. D. Ebnetter, RI
D. M. Collins, RII
R. L. Bangart, RIV
R. A. Scarano, RV

RIII

RIII

RIII

Caniano/pd
03/ /89

Mallett

Norelius

ENCLOSURE

1. Question:

Using the current version of your regional staffing plan related to the NMSS program, specify the approximate percentage of time that each individual spends on the following activities: fuel cycle licensing, fuel cycle inspection, materials licensing, materials inspection, safeguards activities, and inspections of decommissioned facilities and reactors.

Response:

Attachment 1 is an organizational chart of the Division in which the fuel cycle and material safety programs are conducted. As indicated to you earlier this year the Division reorganized, effective October 1, 1988, to place essentially all staff and responsibilities related to NMSS functions in the Nuclear Materials Safety Branch (exceptions are inspection of safeguards issues at fuel facilities and H.P. and E.P. FTE for fuel facilities.) This has been an effective tool in eliminating NMSS staff having to deal with more than one Branch in the Division. Two other key changes we have made this year are:

- a. Increasing the administrative support staff directly assigned to the materials program from 2.5 to 3.5 FTEs. These have been placed under the Materials Licensing Section Chief, but support both licensing and inspection activities. This was stated last year as one of our goals.
- b. Assigning a dedicated inspector to perform fuel facility inspections in Region III.

The following is a list of individuals in the staffing plan for fuel cycle and materials and the percentage of time they spend on each activity.

<u>Name</u>	<u>Title</u>	<u>Grade</u>	<u>Percentage of Time on Activities</u>
C. E. Norelius	Director, DRSS	SES	50% Materials and Fuel Cycle
R. J. Caniano	Tech. Assist. to Director	14	10% Materials Inspection 25% Actions Items Related to Materials
B. S. Mallett	Chief, NMS Branch	15	75% Materials Inspection 25% Materials Licensing
G. M. McCann	Chief, Materials Licensing Section	15	5% Materials Inspection 5% Decommissioning Licensing 90% Materials Licensing

<u>Name</u>	<u>Title</u>	<u>Grade</u>	<u>Percentage of Time on Activities</u>
P. J. Pelke	Senior Reviewer	14	5% Materials Inspection 95% Materials Licensing
J. R. Madera	Senior Reviewer	14	5% Materials Inspection 90% Materials Licensing 5% Decommissioning Licensing
E. R. Matson	Reviewer	13	20% Materials Inspection 80% Materials Licensing
C. F. Frazier	Reviewer	13	100% Materials Licensing
L. J. Hueter	Reviewer	13	5% Materials Inspection (some backup also on fuel shipment inspections in FY 89) 95% Materials Licensing
W. J. Adam	Reviewer	13	100% Materials Licensing (as of October 1988)
K. G. Null	Reviewer	11	100% Materials Licensing (some backup also on fuel shipment inspections in FY 89)
P. M. Vacherlon	Reviewer	11	100% Materials Licensing
Vacant	Reviewer	7-13	100% Materials Licensing
D. G. Wiedeman	Chief, NMS Section 1	15	100% Materials Inspection
Vacant	Senior Inspector	14	100% Materials Inspection (vacant due to departure of R. E. Burgin as of January 13, 1989)
J. L. Lynch	Inspector	13	100% Materials Inspection
J. R. Mullauer	Inspector	13	100% Materials Inspection
J. W. Patterson	Inspector	13	100% Materials Inspection

<u>Name</u>	<u>Title</u>	<u>Grade</u>	<u>Percentage of Time on Activities</u>
Wayne Slawinski	Inspector	13	100% Materials Inspection as of February 1, 1989 (part of transfer plan to Materials from Reactor Health Physics Program)
Bryan Parker	Inspector	5	100% Materials Inspection (new hire as of January, 1989)
Nancy Soeurt	Inspector	7	100% Materials Inspection (new hire to begin end of March, 1989)
Vacant	Inspector	7-13	100% Materials Inspection (new hire posted - hope to hire by end of March, 1989)
D. J. Sreniawski	Chief, NMS Section 2	15	75% Materials Inspection 20% Fuel Cycle Inspection 5% Decommissioning Sites
S. R. Lasuk	Senior Inspector	14	100% Materials Inspection
T. L. Simmons	Inspector	13	100% Materials Inspection
C. L. Casey	Inspector	13	100% Materials Inspection (will rotate for about 10% in Materials Licensing during FY 89)
W. P. Reichhold	Inspector	13	100% Materials Inspection
S. Mulay	Inspector	11	100% Materials Inspection (new hire as part of medical improvement program as of October 1988)
D. R. Gibbons	Inspector	13	45-70% Materials Inspection (25-50% fuel facility inspection as backup and 5% decommissioning sites as of February, 1989)
G. M. France	Inspector	13	90% Fuel Facility Inspections 5% Fuel Facility Licensing 5% Decommissioning Sites

<u>Name</u>	<u>Title</u>	<u>Grade</u>	<u>Percentage of Time on Activities</u>
S. Ross	(Summer Intern	5	Summer of FY 88, spent most of time in Materials Inspection
<u>From Other Groups Outside Branch</u>			
M. J. Smith	Inspector	11	Less than 5% on Emergency Plans for fuel facilities and materials team inspections in FY 88
J. P. Patterson	Inspector	13	Less than 2% on Emergency Plans for materials team inspections in FY 88.
R. Bocanegra	Inspector	12	Less than 2% on effluent monitoring for materials team inspections in FY 88
Individuals Reactor Safety under L. R. Greger	Inspectors		Equivalent of 1 FTE for from FY 89 in areas of fuel Branch facility health physics chemistry, and safeguards
<u>Administrative Support</u>			
M. M. Meenan	Division Secretary	8	10% on items related to Materials Program
J. E. Loser	NMS Branch Secretary	6	75% Materials Inspection 20% Materials Licensing 5% fuel facilities and decommissioning sites
I. P. Detloff	Office Assistant	6	100% Materials Licensing and inspection (emphasis on typing licenses)
I. E. Ogle	Office Assistant	6	100% Materials Licensing and Inspection (emphasis on processing license applications)
B. J. Thorpe	Office Assistant	6	100% Materials Licensing and Inspection, Decommissioning Sites, and Fuel Facilities Inspection (emphasis on inspection)
D. A. Hersey	Office Assistant	5	50% on Materials Licensing and Inspection

S. Negron	LMS Contractor ~		Materials Licensing and Inspection Data entry into LMS.
L. M. Kerlin	Mail and File Clerk		Office Services Section to maintain files on fuel facility and materials licenses
A. S. Pudlo	Reactor Programs Branch Secretary	6	Less than 2% as backup for NMS Branch Secretary

2. Question:

Provide a summary of actual expenditures and accomplishments as compared to operating plan/budgeted expenditures and accomplishments, for FY88 and FY89 to date.

Response:

Attachment 2 contains the requested information for FY88. In total, NMSS provided the Region approximately 20.7 FTEs and the Region expended 21.8 FTEs.

For Fiscal Year 89, the materials licensing program has expended 2.7 versus 2.2 budgeted FTEs total through the first quarter. For this same period, the materials inspection program has expended 2.6 versus 3.6 budgeted FTEs. This deficit is due to starting the fiscal year needing 4 additional inspectors. As explained further in the response to question 3, the region is aggressively pursuing the additional staff and expects to complete the operating plan goals for inspection completions. In addition to pursuing the additional inspectors, the region has transferred an experienced inspector from the reactor health physics program for a 3 month period in FY 89 to aid in materials inspection.

The expenditures of staff for fuel facilities and decommissioning sites is specified in Attachment 3. The mandays expended through the first quarter of FY89 represent about 30% of those budgeted for this same time frame. However, the region has mapped out expenditures for the rest of the year and plans to meet or exceed budgeted accomplishments.

Attachment 4 contains tables and graphs depicting the Region's accomplishments toward achieving operating plan goals for the materials, fuel facility, and decommissioning program for FY 89.

Some of the most noteworthy of the Operating Plan accomplishments thus far this year are:

- a. Completion of 116% of the casework budgeted for materials licensing. In addition, this included completion of significantly more casework than received. Thus, the backlog of cases to review has been significantly reduced.
- b. Maintaining all the pending casework for new and amendment actions at less than 90 days in-house, since this goal was established on November 1, 1988.
- c. Completion of over 78% of the materials inspections budgeted with 4 inspectors less than budget until January 1989, i.e., only 11 out of 15 inspectors or 73% of the resources budgeted. Progress toward bringing additional resources onboard is discussed further in the response to question 3.

The region has a plan to complete budgeted inspections, reduce overdue inspections and complete new medical initiatives by the end of FY89. The region has shown significant progress toward this plan during the months of January and February.

- d. Issuance of inspection reports for materials inspections at an average of 18 days for FY 89 through January 1989. This value is significantly less than the goal of 30 days in the manual chapter.
- e. Completion of closeout actions on an average of 36 days versus a goal of 180 days.
- f. Establishing a Master Activities Plan for each fuel facility in Region III. The plan enables managers in NMSS and the Region to preplan inspection efforts for fuel facilities for the entire year to take into account budgeted resources and to emphasize inspection areas of past poor performance.
- g. Significant reduction in the allegation cases over 90 days old in-house, due to establishment of a tracking system and changes in the process for planning allegations and reviewing reports.
- h. In regard to the TI on Performance Evaluation Factors, regional inspectors have completed performance evaluation factor assessments for all materials facilities inspected since June 26, 1988. Each form is reviewed by the Section Chief and followup actions determined. Significant cases have been flagged to upper management. Action in this area has resulted in identification of over 26 factors at 12 different licensed facilities which should minimize future health and safety problems.
- i. The region has designated and is in the process of fully training (per MC 1245) a back-up fuel facility inspector.
- j. The Materials Licensing Section performed a special review of renewal applications during January 1989 to reduce total renewals pending in-house. The end result will be a significant reduction of pending renewals by approximately 200 cases.

3. Question:

Are there any changes needed in the estimate of workload projection (licensing actions and inspections conducted) for the current fiscal year? If so, please provide your suggested changes with justification. Are there any foreseeable barriers to completing inspection modules in accordance with Manual Chapters 2600 and 2800?

Response:

In the inspection area the region started FY89 needing 4 additional FTE's. We have already been pursuing these additional staff. Since October two staff members have been hired and are on board and it is anticipated that two more will be hired in March. Recognizing it takes time to bring people on board and to train, we will not meet FTE expenditures by end of FY89. However, the region does not propose reducing its projected inspection completions or new medical initiatives since it has a plan to complete these even in view of the staff deficit. Over the next few months the region will reevaluate this situation and coordinate any changes with NMSS.

In the licensing area it appears budgeted resources are sufficient for new and amendments. However, given the backlog of pending renewals prior to October 31, 1988 additional resources will be needed to meet timeliness goals for these cases. We plan on monitoring this very closely and will keep NMSS apprised.

4. Question:

Are regional administrative support functions performed in a timely manner? Are changes needed in the manner in which these support functions are performed? If so, please be prepared to discuss the changes needed which would result in optimal administrative support for the programs.

Response:

The regional administrative support functions for the materials and fuel facilities programs are performed in a timely manner. As an example, typing of new and amendment licensing actions average less than 2 days and typing of renewals averages 1 week. Distribution of completed license documents averages less than 2 days. Processing of incoming licensing actions are done, in general, on the same day of receipt. Materials inspection reports are issued on an average of 20 days from date of completion and are usually typed within 5 days on the average. Achievement of these turnaround times has not been without cost, however, and the region has expended significant efforts in this area to achieve high standards.

Region III made an innovative change regarding its administrative support staff. As of January 1, 1989, all administrative staff were formed into a single unit under the Materials Licensing Section Chief. This unit is responsible for all administrative work for both materials licensing and inspection sections, except for the typing of most inspection reports and escalated enforcement correspondence. This administrative support arrangement provides a multi-talented resource pool which should minimize the need for obtaining outside administrative support (which the Materials program has had to rely upon heavily for the last seven years). The new arrangement should also provide more uniform support since each administrative person is being cross-trained in all positions.

One suggested change to ease the administrative burden would be to reduce the number of milestones entered into the LMS. The region currently employs a contractor to enter all the milestone data. Much of the data, however, is not necessary for tracking casework and often causes needless effort to rectify the computer or find an action.

5. Question:

Please provide your comments on the programs for interaction of Headquarters with your Region. Please include your comments on the usefulness of the conference calls, licensing workshops, executive management seminars, inspection accompaniments, telephone calls on case reviews, technical assistance provided on a day-to-day basis, standard review plans, guides, etc. Include in your comments your suggestions and recommendations for modifications, changes, improvements, etc., in the interaction programs.

Response:

Headquarters interaction with the Region remains strong. The monthly conference calls have been worthwhile but could be improved if the agenda was received earlier. Currently, agendas reach the region on the day the conference calls are held. We do, however, realize that the Regions need to be more timely in getting suggested topics to NMSS. Region III will work with NMSS in this area.

The licensing workshops were useful, and consideration should be given to holding them whenever common areas of interest warrant meeting.

Inspection accompaniments are especially useful when headquarters staff actively participate, such as during team inspections and fuel facility inspections.

Technical assistance on a day-to-day basis has permitted NMSS and Region III to resolve many issues in a short turnaround time. NMSS is very good at providing verbal response to aid in speeding the process. We realize this method also aids NMSS in reducing paperwork in cases where a written response is not needed. We recommend NMSS review whether a written response should be provided to any case which may have generic value and distribute copies to all regions. A recent example where this would be effective is in the response to the "lightning rod" issue.

In addition to the above, there is also good communications between the Region and Headquarters as evidenced in the following:

- ° There are periodic (at least weekly) communications between Regional and NMSS Section Chiefs usually on the topic of status updates.
- ° The Region III Nuclear Materials Branch Chief has been sending the Regions' major issues track to the NMSS Branch Chief on a monthly basis.

The following are examples of cases where regional and NMSS staff have worked well together to resolve problems.

<u>Item</u>	<u>Problem/Issue</u>
Team Inspections at 3M, Mallinckrodt, Dow Chemical and fuel facilities	Inspection of broadscope licenses

<u>Item</u>	<u>Problem/Issue</u>
Advanced Medical Systems	Decommissioning of "cave" facility
Lightning Rods	Request for assistance
Marion Steel Incident	Information Notice
RSI	Potential for Leaking cesium-137 sources
Syncor	QA/QC and Multiple Diagnostic Misadministrations
Meeting with NMSS representatives and Wisconsin Waste Generators	To resolve issues related to long term storage of waste

Three recommendations which may improve the interaction program are as follows:

- a. Provide more lead time for comment on modifications to or the creation of new regulatory guides. We recommend establishing a schedule for guides to be revised at the beginning of the fiscal year.
- b. Provide a separate system for tracking licensing case reviews involving technical assistance. Since these cases tend to be resolved only after a significant number of days, their TAT can significantly affect the overall TAT for the Region on routine cases. A separate tracking system will alleviate the problem of these cases skewing the TAT to a higher value than it really is.
- c. Provide a document periodically (at least annually) to the staff providing answers to the most significant questions raised throughout the year during the informal telephone interactions between the Regions and NMSS. This feedback will serve to document these answers for future reference and alleviate "repeat questions".

6. Question:

Summarize regional initiatives to improve the quality of inspections and license reviews, particularly those aimed toward preventing licensee safety problems, or those aimed at licensees performing their transportation activities in a safe manner.

Response:

Region III's materials and fuel facility inspections and materials licensing programs have achieved a high standard of quality. Over the past year, the region has initiated several programs to ensure this continues. In this regard, the region initiated a Materials Upgrade Program. This included special audits of inspection reports for Severity Level IV and V violations, training sessions, and materials licensing section chief reviews of actions for consistency and quality. A copy of this program was forwarded to NMSS earlier this fiscal year.

Some examples of specific areas where regional initiatives have improved quality and/or safety are as follows:

- a. As a result of the review of misadministration reports, the region uncovered basic problems at the Syncor nuclear pharmacy in Blue Ash, Ohio. Followup inspections resulted in the identification of deficiencies in the licensee's QA/QC program. Through an aggressive pursuit with CALs and an Order, the region caused Syncor to assess its program nationwide. This resulted in a much greater level of corporate oversight at all Syncor facilities, and the incorporation of a quality assurance program into the licenses of all Syncor facilities in Region III.

To scope this problem and a possible "regulatory gap" in the area of QA and misadministration reporting for nuclear pharmacies, the Region initiated, through NMSS, a quick inspection of facilities in all the regions for similar problems. Region III will be holding a workshop in May 1989 for all nuclear pharmacies and interested medical users.

- b. Region III completed four team assessments at three materials licensees during the summer of 1988. As a result of these inspections, the region has uncovered areas that were not examined during previous inspections and license reviews (for example, evaluation of QA programs for products distributed and review of problems identified with their use in the field).
- c. The region utilized experiences such as the response to Marion Steel to train inspectors for future ones. As a result, the Region was better able to respond effectively to subsequent events, such as the fire at AmerEco Environmental Services.
- d. On several occasions, the Region has limited licensees' programs to prevent future health and safety problems that were predicted as a result of routine inspections. For example, the Region requested (via CAL) Quality Testing, Inc. (a radiographer) to divest their material when it was determined that they had "too sloppy" a radiation protection program.

CALs and get well programs were also issued for Schoolcraft Hospital, St. Joseph's Hospital, Dr. Mikros, Dr. Gunabalin, and Certainteed Corporation.

- e. In response to the event at RSI in Decatur, Georgia, Region III initiated several actions at a similar RSI site in Ohio. Actions included shutting down the facility until adequate equipment and controls were in place and working with DOE to ship WESF sources back to Hanford. Regional action was directed toward preventing a similar occurrence at the Ohio facility.
- f. The Region initiated MAPs for fuel facilities which should aid coordination between NMSS and the Region in regulating these licensees. These help to focus on significant safety issues at these sites.
- g. The Region coordinated the Agency response to the 3M incident with NMSS and other regions. Regional efforts are driving many long-standing open items to closure.
- h. As followup to WPAFB, the region inspected all significant Air Force sites in Region III to look for any similar problems. No significant problems were found.
- i. The Region initiated a review of the status of the program for self-shielded irradiators containing cesium-137 at research facilities to note whether the irradiators are in storage and not being used. As a result, the Region uncovered units that were in storage, not being used, and worked with the licensee for disposal so as to prevent problems similar to the Brazilian incident.
- j. Aggressive pursuit by licensing reviewers has "flagged" cases resulting in the early detection of performance problems. An example of this was for Ellis Fischel Hospital where the licensee did not have a qualified RSO. This may have circumvented problems similar to those the Region uncovered last year at Case Western Reserve University. Another example is an application for a radiography license where the application was denied due to submittal of false training qualifications.
- k. The Region has aggressively pursued the use of Performance Evaluation Factors. As a result, materials inspectors have identified concerns at 12 licensees which resulted in either reassignment of inspection frequencies, scheduling of management meetings, and/or strong areas of concerns addressed in transmittal letters to the licensee. Some of the more common factors identified were:
 - 1) Inadequate staff;
 - 2) RSO unable to perform his/her duties due to their responsibilities;
 - 3) Inadequate audits.
- l. As far as transportation activities are concerned the Region has implemented the following initiations aimed at licensees performing transportation activities.

1. The region has conducted inspections of significant shipments of radioactive materials from material licensees. The most noteworthy of the inspections conducted are as follows:
 - a) During FY88 a considerable amount of effort was expended conducting transportation related inspections at Wright Patterson Air Force Base. This included contracting with Battelle Columbus to provide us expertise in rail shipments.
 - b) During February 1989, representatives from the Materials Licensing Section were on-site during packaging and shipment of cesium-137 sources from the RSI facility in Westerville, Ohio.
2. Region III is continuing to use the transportation check-list attached to draft inspection reports to assure that all transportation areas are covered during inspections.
3. As a training initiative, the Region has been trying to use different staff members to conduct fuel shipment inspections. Two materials licensing reviewers have also been used for this task as cross-training.

7. Question:

Summarize the total number of inspections of Transportation activities at MC 2800 licensed program facilities (Procedure 86740) including average staff-hours per inspection and a brief summary of the most typically observed violations. Summarize (Regions II and V) referrals to other regions of state identified violations on shipments by NRC licensees to commercial burial sites. Summarize the completion status of inspections of transportation activities at 2600 (#86740) and 2500 (#86740) and (#86721) program facilities. Please provide early observations on the impact of the Core Inspection Procedure #83750 on the inspection of transportation activities at 2500 program facilities.

Response:

The following provides a list of the number of inspections conducted in Region III since October 1988 and the type of violations identified:

a. Materials (2800 Program)

Total No. of Inspections - 90

Total No. of Staff Hours - 86+

Total No. of Violations - 7 (2 Severity Level IV, 5 Severity Level V)

Summary of Violations

4 associated with Shipping Papers

3 associated with failure to maintain certifications and performance test results documentation

Special initiatives in this area are described in the response to Question 6.

b. Reactor Programs (2500 Program)

Of the 27 units and 20 sites in Region III, no inspection effort was credited to modules 86721 or 86740 in FY89; however, beginning in FY89, these modules are deployed for the Regional Initiative program only.

Core Module 83750 is currently used for both shipping/transportation and Occupational Exposure. This module has been reviewed and completed at four ~~power~~ reactor sites in FY89 to date. Four violations were identified at one facility; the Severity Levels have not been determined but all appear to be Level IV.

While the impact of the core inspection program (83750) on the inspection of transportation activities cannot be completely determined at this early stage, it appears thus far to have resulted in a reduction of inspection effort in this area.

c. Fuel Facilities (2600 Program)

Of the five major fuel cycle facilities in Region III, three have been inspected against the transportation module 86740 during the first quarter of FY89. One additional facility is currently undergoing an inspection that includes the transportation module. The Master Activities Plan schedules some activity in this area at all active facilities in Region III for FY89.

The region has also inspected 100% of the 5 fuel shipments to the GE Morris, Illinois site during FY89.

Two Severity Level IV violations were identified at one facility.

Attachments:

1. Organizational Chart
2. Memo dtd 12/6/88, RECunningham
to CENorelius
3. FTE Expenditures
4. FY89 Accomplishments

A. Fuel Facilities

1. Inspection Activities (Manpower mandays)*

<u>Allied Signal</u>			<u>Battelle Columbus</u>		
Unit	Planned	Actual	Unit	Planned	Actual
Projects	5	0.0	Projects	0	0.0
Reac Engr	10	0.0	Reac Engr	0	0.0
Rad Sfty	15	0.0	Rad Sfty	5	0.0
Emer Prep	10	1.4	Emer Prep	0	0.0
Sfgds	0	0.0	Sfgds	0	0.0
Matls	35	8.5	Matls	10	0.0
Site Total	75	9.9	Site Total	15	0.0

Combustion Engineering

Unit	Planned	Actual
Projects	0	0.0
Reac Engr	0	0.0
Rad Sfty	20	2.1
Emer Prep	10	3.0
Sfgds	41.6	0.0
Matls	45	3.9
Site Total	116.6	9.0

GE-Morris

Unit	Planned	Actual
Projects	0	0.0
Reac Engr	0	0.0
Rad Sfty	0	0.6
Emer Prep	0	0.0
Sfgds	0	0.0
Matls	15	0.8
Site Total	15	1.4
Other		1.3
Total		2.7

Kerr-McGee/Cimarron

Unit	Planned	Actual
Projects	0	0.0
Reac Engr	0	0.0
Rad Sfty	0	0.07
Emer Prep	0	0.0
Sfgds	0	0.0
Matls	0	0.0
Site Total	0	0.07

Contaminated Sites

Unit	Planned	Actual
Projects	0	0.0
Reac Engr	0	0.0
Rad Sfty	36.6	2.0
Emer Prep	0	0.0
Sfgds	0	0.0
Matls	61.6	1.7
Site Total	98.2	3.7

* Planned represents entire year. Actual represents only first quarter.