

NMSS Action Plan

August 8, 1979

by

F. Fisher

G. Kligfield

F. Lomax

*ad*  
7910020581

1071 336

# NMSS ACTION PLAN FOR EMERGENCY PREPAREDNESS

## I. INTRODUCTION

NMSS has been planning an emergency preparedness program for some time and has recently begun implementation of that program with the formation of the Environmental Radiation and Emergency Support Section (ERESS) in the Uranium Fuel Licensing Branch of the Division of Fuel Cycle and Material Safety. The activities of the ERESS include development and implementation of an emergency preparedness program which redresses, among other things, those deficiencies identified as "program topics" by the NRC Task Force on Emergency Planning with its Working Group, and for which NMSS was designated as the lead office or as sharing lead office responsibilities. This Action Plan describes NMSS's preliminary plans for addressing each of those "problem topics".

## II. SUMMARY AND CONCLUSIONS

A plan for a Radiological Emergency Preparedness Program has been developed by NMSS and has been partially implemented with the formation of the Environmental Radiation and Emergency Support Section (ERESS) in the Uranium Fuel Licensing Branch of the Division of Fuel Cycle and Material Safety. ERESS will, in the short term, greatly augment NMSS capability in discharging its radiological incident management responsibilities, primarily through the assembly and organization of information on activities of its licensees, and will initiate rule changes and development of guides, review criteria, etc. suitable for emergency planning programs appropriate for NMSS and selected fuel cycle and byproduct material licensees. In the long term, NMSS will extend the requirements for approved emergency plans to all pertinent NMSS licensees through rule making and will develop and promulgate appropriate licensee guidance. An appropriate regulatory capability will be installed that includes staff, staff training, emergency plan review and acceptance criteria, information resources, and necessary analytical tools.

## III. NMSS RESPONSIBILITIES RELATIVE TO EMERGENCY PREPAREDNESS

NMSS has the general responsibility for the protection of health and safety, the environment, and property from adverse effects due to the activities of fuel cycle and byproduct material licensees.

## IV. CURRENT NMSS PROGRAM AND CAPABILITIES

NMSS had at the time of the TMI-2 incident only a limited radiological contingency planning program. All 10 CFR Part 50 licensees and some Part 70 activities, i.e., processing and fuel fabrication, scrap recovery, and conversion of uranium hexafluoride, are required to have approved emergency plans. In addition, a few Part 30 and Part 40 licensees have emergency plans and procedures incorporated by reference into their license conditions. In general, the scope

of accidents and other emergencies which those plans address include only the design basis accidents not usually expected to result in large offsite consequences. Some of those existing licensee emergency procedures need review and upgrading.

The programmatic activities of the newly formed NMSS Environmental Review and Emergency Response Section (ERESS) are as follows:

- Review all existing licensee emergency plans and procedures.
- Formulate a basis for the requirement of emergency plans.
- Provide NMSS management with necessary tools to respond to a radiological incident.
- Prepare needed NRC guides, regulations for the formulation of emergency plans and criteria for NMSS reviews and approvals.
- Provide IE with the information needed for materials, procedures, aerial mapping, etc., and take steps to bring the Incident Response Center reference room up to date.

#### V. NMSS REQUIREMENTS AND NEEDS

In order for NMSS to assure that adequate emergency plans and procedures are provided by its licensees and in order for NMSS to participate effectively in incident management activities, certain personnel and material resources and institutions are required. Those include:

- A cadre of knowledgeable persons, which NMSS largely has in the individual licensing program managers and various technical specialists.
- Means to promptly and effectively bring them into action.
- An arranged-in-advance institutional framework of criteria, staff guidelines, regulations and guides unambiguously defining the functions and responsibilities of all the various incident management participants.
- Readily retrievable information resources, including licensee-specific emergency plans and details of licensee facilities, processes, and environs.

- Pre-analyzed consequence scenarios and the hardware and the software tools adequate to perform rapid, proximate additional analyses of consequences for specific circumstances.
- The physical and communications facilities of the IE Incident Response Center.

The recently organized Environmental Radiation and Emergency Support Section (ERESS) of the Uranium Fuel Licensing Branch is charged with guiding and supporting the organization, development, and maintenance of those resources within NMSS.

## VI. NMSS EMERGENCY PLANNING ACTION PLAN

NMSS is taking steps to significantly upgrade and formalize staff guidelines regarding radiological contingency planning for itself and necessary rule changes for its licensees and to improve its capabilities for effectively responding to incidents involving NMSS licensed facilities and activities.

The NMSS action plan will be conducted in two phases aimed at establishing, as quickly as possible, an improved NMSS capability with regard to incident response management and establishing, in the long term, an adequate radiological emergency planning and incident response capability for specific licensees, for NMSS, and for other participants having responsibilities involving NMSS licensees.

### Immediate Action Plan

The complexity of the operations of the various Fuel Cycle licensee activities, their great variety and their large number are such that the development, complete technical assessment, implementation of new emergency plans, and the upgrading of existing emergency response plans could require approximately 3 years' effort of the ERESS staff, with support from the licensing program managers and their support organizations.

In order to avoid that implied delay in general improvement of the NMSS response capability and to effect an immediate improvement in response capability through improved availability of data, the ERESS will, with the licensing program managers, develop data along the lines indicated on the questionnaire on the next pages. Probably all Fuel Cycle licensees and those small quantities materials licensees judged by the Material Licensing Branch reviewers to be the more significant cases, those exhibiting greater hazards potentials by virtue of larger inventories of dispersible radioisotopes or populous environs or other characteristics, will be so surveyed. The information gathered will be organized for quick recall for incident management purposes and will be used to formulate criteria for selection of those licensees which should have emergency plans.



SAMPLE  
(cont'd)

POOR ORIGINAL

4. Owner Name \_\_\_\_\_

Operator Name \_\_\_\_\_

5. Plant or Facility Responsible Safety Engineer:

Name \_\_\_\_\_

Phone \_\_\_\_\_

Alternate:

Name \_\_\_\_\_

Phone \_\_\_\_\_

6. General Site Characteristic - Urban , Suburban   
, Remote

7. Local State Safety Rep. \_\_\_\_\_ Phone \_\_\_\_\_

8. Local Fire Dept. Rep. \_\_\_\_\_ Phone \_\_\_\_\_

9.	<u>SS</u>	<u>IE. H.</u>	<u>IE. F.</u>
Existing Emergency Plans Available at	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plant Dwg and Site Plans Available at	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Site Aerial Photos Available at	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. NRC Specialists Familiar with Licensee Safety

Criticality \_\_\_\_\_ Phone \_\_\_\_\_

Fire Protection \_\_\_\_\_ Phone \_\_\_\_\_

Ventilation Sys. \_\_\_\_\_ Phone \_\_\_\_\_

Environmental and/or H.Ph. \_\_\_\_\_ Phone \_\_\_\_\_

Chemical Processes \_\_\_\_\_ Phone \_\_\_\_\_

Long-Range Action Plan

NMSS will, in its long-range efforts, develop and install a regulatory framework for radiological emergency planning appropriate for those non-reactor nuclear activities within its purview.

The Radiological Emergency Planning Program will use, to the extent practicable, an analysis methodology patterned after that used in the NMSS Safeguards Contingency Planning Program. That methodology contains the following elements:

- Identify initiating events
- For each initiating event, determine specific objectives
- Accomplish objectives by application of
  - Preconceived series of decisions and actions to achieve objective
  - Identification of data, criteria, procedures, mechanisms
  - Specification of responsibilities

Where feasible in determining events which result in detrimental impacts on health and safety of the public, fault tree risk analysis techniques will be applied.

Discussion of Specific Problem Topics

A-4 - Radiological Emergency Response Planning for transportation accidents is inadequate.

Resolution: Long term  
Lead: NMSS  
Support: IE/SP/SD

A. Details of Problem

Because of the split and overlap of authority of the NRC and other agencies that regulate inter- and intrastate transport of licensed nuclear materials, there is no clear designation of responsibility for emergency preparedness functions. This situation is complicated by the fact that shipments involve licensed shippers and receivers, government shippers and receivers, and unlicensed carriers. This subject has been discussed in detail in a 1979 GAO draft report, "Nuclear Materials Transportation: Federal Actions Are Needed to Improve Safety and Security." That report recommends that FEMA assume responsibility for making policy and coordinating radiological emergency response planning for nuclear transportation accidents.

POOR ORIGINAL

B. Planning Base for Action

DOT has the authority and responsibility to require various actions of carriers and shippers. NRC can impose some requirements on shippers only. NRC has an ongoing effort in NMSS and SD related to the Joint NRC/DOT Task Force. NRC is pressing DOT to do rulemaking to install the necessary regulations for augmenting transportation safety, including emergency planning by both carriers and shipper.

NRC (NMSS) has no need for resources additional to those already being expended on this problem topic.

C. Action Plan

NRC will continue the Task Force effort and continue urging USDOT to implement the recommendations of the Joint Study Group. Should that effort come to naught, the NRC should seek legislative authority to effect those recommendations. The joint USNRC/USDOT study group, in NUREG-0535, "Review and Assessment of Package Requirements (Yellowcake) and Emergency Response to Transportation Accidents," March 1979, recommended that:

1. State and local agencies, such as emergency crews, police, health and environmental departments, should have emergency plans to both advise and assist the carrier and to take appropriate control actions at the scene to protect public health and safety. The NRC and the DOT should foster development of these plans.
2. Carriers of radioactive material should be required by the DOT regulations to prepare, maintain, and execute an emergency response plan for promptly notifying the shipper and government authorities, controlling the spread of radioactive material in the cargo, segregating the radioactive material from the populace, and cleaning up any spilled radioactive material. This recommendation essentially augments existing regulations, guidance, and environmental impact statements on transportation of radioactive materials.
3. Shippers of radioactive materials should be required in regulations to prepare and maintain an emergency plan for promptly conveying hazards information about the shipment to the carrier and government authorities. The information in this plan should be available at all times that the shipper has a shipment in transit so shipper personnel can respond

1071 343



knowledgeably and promptly when they receive notice of an accident and are asked for advice. This recommendation essentially augments existing regulations, guidance, and environmental impact statements on transportation of radioactive materials.

4. Shippers of radioactive materials should be required in the DOT regulations to show an emergency telephone number on shipping papers and should be encouraged by both DOT and NRC policies to voluntarily include emergency instructions with shipping papers, especially on bulk shipments.
5. Carriers of radioactive materials should be prepared to assume initial costs for their responsibilities and State and local agencies should be prepared to assume initial costs for protective actions involving radioactive material as with other emergencies where protection of public health and safety is involved.
6. The NRC and DOT should initiate discussions with States on the merits of advance notice requirements for shipments of radioactive material. If an advance notice requirement is judged necessary, a national requirement is preferred over a conglomeration of State requirements. Precaution against requirements for advance notice of shipments of quantities and types of special nuclear material protected in accordance with NRC regulations or DOE directives should be taken, however, because such requirements may conflict with certain Federal restrictions related to controlling sensitive information pertaining to such protected shipments.
7. Efforts of the NRC and the DOT to cooperate with the States in the surveillance program to evaluate compliance with the Federal regulations for safe transportation of radioactive materials should be expanded to include more States as monetary constraints allow.
8. Since several Federal agencies must evaluate the environmental impacts of transportation of radioactive materials from time to time and since complete survey information is essential to such evaluations, the NRC should at selected times update its shipment survey, in consultation with the DOT and the Environmental Protection Agency.

POOR ORIGINAL

NRC will urge the DOT to pursue the recommendations of the Joint USNRC/USDOT Study Group and cooperate with them in that effort. Should FEMA assume responsibility for policy and coordination of nuclear transportation accidents, as proposed by GAO, NRC is prepared to serve as technical lead agency in that effort.

A-6 - The licensee's responsibility exceeds his authority with respect to offsite emergency planning.

Resolution: Short term  
Lead: NRR/NMSS  
Support: IE/SP

A. Details of Problem

NRC requires the licensee's plans to provide reasonable assurance that appropriate protective measures can and will be taken to protect the public health and safety. Because neither NRC nor the licensee has authority over offsite resources (even though the licensee may donate equipment and training), the planning process between the licensee and Federal/State/local agencies is voluntary, unenforceable by NRC or the licensee on Federal, State, and local agencies and difficult to validate.

B. Planning Base for Action

Inasmuch as this problem would require legislative fixes which are considered to be quite unlikely to occur, involving, as they would, intractable issues such as states' rights, NMSS will make the best that can be made of the available planning process where the only real enforcement tools are those of refusal of a license or termination of a licensed activity.

NMSS must seek reasonable assurance that agencies supporting the licensee in radiological incident responses will, in fact, perform as planned and that those plans are adequate.

NMSS currently reviews the emergency plans of some Part 70 licensees and in doing so, assesses, to some extent (with IE and SP), the emergency response plans and capabilities of those supporting agencies identified in the licensee's emergency plans. NMSS has no formal program for easing the licensee's burden for arranging adequate support and support planning from agencies over which he has no formal authority.

1071 345

C. Action Plan

1. NMSS must continue to exact through its licensees the necessary arrangements for supporting activities of State and local agencies having emergency response roles.
2. Assessments of the adequacy of State and local support agency planning and validation of capabilities will continue to apply on a voluntary, unenforceable basis, largely arranged for by the licensee.
3. The only incentive available is the refusal to grant a license or termination of an existing license.

Schedule

No efforts additional to NMSS's presently scheduled efforts in emergency preparedness on the part of the ERESS and the various licensing groups will be required to also address this problem topic.

Verifications of State and local emergency response capabilities for existing fuel cycle licensees could be completed in the next 6 months. Verification of the State and local emergency response capabilities for selected priority byproduct material licensees could be completed within 12-14 months.

B-3 - The licensee's planning is based on accidents of severity up to and including the most serious design basis accidents.

Resolution: Short and long term  
Lead: NRR/NMSS  
Support: IE/SP/SD

A. Details of Problem

Prior to TMI there was no explicit recognition given to Class 9 accidents in the emergency planning process. TMI highlighted the question whether NRC should require emergency planning for Class 9 accidents.

B. Planning Base for Action

In conducting Radiological Contingency Planning Program reviews, a set of accident situations ranging from almost everyday occurrences of small consequences through highly improbable but not impossible accidents such as those resulting from severe natural phenomena, human error, multiple equipment failures, and safeguards incidents, likely to exhibit more severe consequences than the accidents considered in the safety and environmental analyses carried out in connection with licensing actions will be considered.

1071 346

POOR ORIGINAL

C. Action Plan

Short Term

Existing 10 CFR 70 emergency plans will be re-reviewed to assess their adequacy for dealing with accident situations more severe than the design basis accidents that may have been considered in the Safety Evaluation Report. Backfitting may be appropriate for some plans. Selected Parts 30 and 40 licensees will be requested or ordered to submit emergency plans addressing severe accident situations. The results will serve as input to criteria development.

Long Term

Requirements for emergency plans adequate for dealing with severe accidents likely to exhibit more severe consequences than the accidents considered in the Safety Evaluation Reports prepared in support of licensing actions will be established for those NMSS licensee activities which should have approved emergency plans will be established by rule-making.

Tentative Schedule

See Problem Topic E-3.

C-1 - NRC emergency planning guidance needs improvement.

Resolution: Short and long term  
Lead (Licensee): NRR/NMSS  
Support (Licensee): All staff of  
Lead (State/local): SP  
Support (State/local): All staff offices

- (a) It does not necessarily contain specific NRC acceptance criteria;
- (b) It is not restricted to that which is needed for implementing the NRC position as defined in Regulatory Guides (e.g., branch technical positions, bulletins, circulars, generic letters, etc.).

A. Details of Problem

While acceptance criteria can be developed for strictly licensee functions, there is a question whether the term "acceptable criteria" is applicable to the offsite elements of the emergency plan.

Because of the uncertainties rooted in the lack of criteria for an emergency plan, most of the offsite elements of a licensee's plan are generated in a quasi-regulatory atmosphere.

The draft of revised Regulatory Guide 1.89 on qualification of equipment to radiation source items should be issued.

1071-347

POOR ORIGINAL

In the NMSS licensing activities only certain fuel cycle licensees are currently required to provide emergency plans to meet existing regulations, viz:

Reprocessing	}	10 CFR 50	10 CFR 50 Appendix E
Uranium Enrichment			
UF <sub>6</sub> Conversion	}	10 CFR 70	Sect. IV of 10 CFR 50 Appendix E
Processing & Fuel Fabrication			
Scrap Recovery			

Source materials (uranium and thorium) licensees under regulation 10 CFR 40 are not required to provide specific emergency plans although accidents are assessed in preparation of environmental impacts.

Byproduct material licenses issued under 10 CFR Parts 30 through 35 do not contain the requirement for plans, although some licensees provide such plans voluntarily.

The approvals of emergency plans are now handled by the licensing project managers who use 10 CFR 50, Appendix E, and Regulatory Guide 3.42 to determine if the plans are adequate. Regulatory Guide 3.42 provides guidance to the licensee in the preparation of his plan. NMSS has no formally documented or promulgated acceptance criteria.

Within the purview of NMSS's general responsibilities for the protection of health, safety and environment and the charge of Manual Chapter 0502 that the planning, execution and followup actions must be implemented, it is incumbent on NMSS to provide proper guidance and acceptance criteria for emergency plans.

At present, NMSS licensing project managers have been responsible for review and approvals of emergency plans which generally focused on onsite impacts and considered impacts offsite as minimal (when compared to reactors).

B. Planning Base for Action

The special group, the Environmental Radiation and Emergency Support Section (ERESS), has been formed to guide and coordinate NMSS efforts to review existing emergency plans, and prepare interim and long-term action plans for upgrading licensee emergency planning and implementation.

C. Action Plan

Short Term

No short term solutions are foreseen, other than the updating of existing emergency procedures available in the Emergency Response Center and requesting licensees to provide plans on a voluntary basis.

Long Term

1. Working with NRR on the updating of Appendix E to 10 CFR Part 50, NMSS will establish an interim position on the requirements for emergency plans for the broad spectrum of non-reactor licensee activities.
2. Regulatory Guide 3.42, Revision 1, will be modified as appropriate.
3. NMSS will, with SD and IE, and concurrently with rulemaking extending the requirements for emergency planning to other Part 70 licensees and to Part 30 and 40 licensees, develop and promulgate appropriate guidance.

Tentative Schedule

Regulatory Guide 3.42, Revision 1, will be updated or supplemented to cover Part 30 and Part 40 licensees by July 1981. Reviewer criteria by December 1981. Inspection criteria by December 1981.

D-1 - During the licensing process, NRC does not fully assess actual offsite capability but limits examination to the pledges of resources.

Resolution:	Short term
Lead:	NRR/NMSS
Support:	IE/SP/EDO

A. Details of Problem

To assure an adequate response to nuclear emergencies NMSS may include field trips to discuss the capabilities available offsite in addition to IE's perspective of such capabilities. These may take the form of assessments or evaluations of these resources, at least in the numbers, types, training curricula, etc., but normally do not include a comprehensive assessment of resources likely to be brought to bear. As such, the actual capability available is not known in very great detail either before or after a license is granted.

B. Planning Base for Action

POOR ORIGINAL

The ERESS will:

- Establish plans and priorities for effective short term improvements and for longer range development and maintenance of response capabilities appropriate for fuel cycle and byproduct material licensees.
- Coordinate planned emergency response activities with the Office of Inspection and Enforcement and the Office of State Programs and other NRC offices and Federal, State and local emergency response groups.
- Prepare and negotiate any needed interagency Memoranda of Understanding to delineate agency responsibilities and to protect against ambiguities in channels of communications and lines of authority.
- Plan for NMSS participation in exercises designed to test radiological emergency response capability and to train response personnel.
- Provide expert technical assistance and analytical tools to NMSS licensing units in the areas of criticality hazards control and radiological impacts assessments and emergency response planning.

C. Action Plan

1. After the overall evaluation of impacts from the "worst" accident considered of each licensee, an attempt should be made to categorize (as opposed to setting up generic plans) the licensees based on offsite impacts, set priorities for action and assign required offsite response needs to each.
2. Assess the offsite capabilities by actual inspection and discussions with licensees and State and local agencies.
3. Obtain confirmation from state and local agencies.
4. Assist all parties in coming up with EP's that meet needs for adequate capabilities to protect the health and safety of the public and the environment and are suitable for NRC approvals.
5. For the short term action, attempts should be made by NMSS, with the assistance of IE and SP, to establish locations of existing state and local capabilities to cope with emergencies at licensee locations.

Schedule

The complexity of the operations of the various fuel cycle and byproduct material licensee activities and the large number of licensees are such that the technical assessment required to set priorities for implementation of adequate emergency plans with the assistance of licensing project managers could take about six months for the higher priority licensees and 12 to 18 months for the remaining group.

E-2 - Licensing and inspection resources need expansion to better implement their emergency planning efforts.

Resolution: Short and long term  
Lead: NRR/NMSS/IE  
Support: N/A

A. Details of Problem

Inspection and licensing efforts related to emergency planning are not in all cases closely integrated. The necessary improvements in implementation will require increased resources.

NMSS has until recently had little activity requiring close coordination with other offices relative to emergency planning.

NMSS currently reviews and approves those emergency plans required by 10 CFR 50.34 and 70.22 using the licensing program managers with little involvement of IE and no formal overall integration or coordination program. Some portions of those reviews are performed by NRR, again with no formal overall coordination with integration function.

B. Planning Base for Action

The NMSS ERESS functional unit is charged with, inter alia, integration and coordination with IE, SP and others of NMSS's emergency planning activities.

C. Action Plan

Short Term

1. NMSS is installing an Environmental Radiation and Emergency Support Section (ERESS) which will guide and coordinate NMSS activities relative to emergency planning. That effort has been steered by an ad hoc Incident Response Planning Group. IE appointed a representative to the Group. IE inputs are being factored into the planning and implementation of the ERESS and, presumably, vice versa.



POOR ORIGINAL

Long Term

2. IE will inspect NMSS licensees for compliance with the provisions of their licenses with regard to emergency plans, both pre-licensing and post-licensing, to criteria mutually agreeable to IE and NMSS.
3. IE will similarly inspect and evaluate the capabilities of the licensee's emergency response support organizations with inputs from SP, where appropriate.
4. The inspection methodology and inspection criteria and procedures will be developed by IE with appropriate consultation of NMSS and other offices as deemed necessary by IE.

Tentative Schedule

- Development of Long-Range Plan

NMSS will install the ERESS by Fall 1979. Final overall plans, including staff assignments and schedules for coordination and integration with IE and others, will be developed by March 1980. About one person full time is to be assigned for that planning activity.

E-3 - The majority of operating facilities have not been evaluated against the staff's current criteria for emergency planning.

Resolution: Short and long term  
 Lead: NRR/NMSS  
 Support: IE/SP

A. Details of Problem

Sufficient resources are not available to review emergency plans of existing reactor licensees to bring them into conformance with present emergency planning criteria.

NMSS has until only recently had no program for emergency preparedness of its licensees. Only recently were Part 50 and some Part 70 facilities, viz., reprocessing facilities, enrichment facilities, and processing, fuel fabrication, scrap recovery and uranium hexafluoride conversion activities, required to have approved emergency plans. About 20 such licensees have received approval of their emergency plans, but most of those restrict their emergency planning to design basis accidents of small consequence. Other NMSS licensees are not required to have approved plans for dealing with the offsite aspects of emergencies, although some have such plans incorporated into their license applications and, by reference, the plans become license conditions.

B. Planning Base for Action

NMSS will extend the requirements for approved emergency plans to all those licensees which should have them. NMSS will install (with IE and SD) the capability to review, approve, and maintain adequate licensee emergency preparedness planning.

NMSS must assure that emergency preparedness planning relative to licensed activities under its purview is adequate. It must, with IE, assure that the implementation of that planning is similarly adequate. To that end, NMSS must develop and promulgate criteria for emergency preparedness planning adequate to protect the health and safety of the public and property, and then evaluate the plans of NMSS licensees versus those criteria.

C. Action Plan

Short Term

1. For those NMSS licensees already required to have approved emergency plans, i.e., reprocessing facilities and SNM processing and fabrication, scrap recovery and UF<sub>6</sub> conversion activities:

- Define current criteria for the short term.
- Review existing requirements, other guidance, and licensee plans (70.22, 50.34, 10 CFR Part 50, Appendix E, Regulatory Guide 3.42, and any existing emergency plans and define deficiencies.

Review all fuel cycle licensee emergency plans for possible consideration of accidents with consequences more severe than the design basis accidents.

2. For those NMSS licensees not presently required to have approved emergency plans assess the situation and define high-risk licensee activities.

Survey licensees using licensing program managers, license reviewers for input for Parts 30 and 40 and other Part 70 activities. NMSS byproduct material licensees to be surveyed will be those thought by cognizant licensing staff to exhibit significant potentials for offsite adverse impacts. Some of those are:

Radiopharmaceutical manufacturers  
Sealed source manufacturers  
Large teaching hospitals  
Oil well gaging and logging companies  
Large depleted uranium metal foundries  
M, D & S broad licensees  
Large academic broad licensees  
Large institutional broad licensees

- Seek short term remedies in existing regulations and guides, i.e., obtain emergency plans from selected higher-risk licensees by request or Order.
- Implement short-term remedies for high-risk licensees by Branch positions or mutual agreements with licensees.

Long Term

1. Methodology - Requirements will be developed and installed as regulations through public proceedings. Commensurate other guidance will be developed and promulgated.
2. Extend 10 CFR Parts 30, 40, 70 to require approved emergency plans for all those activities that should have them.

Tentative Schedule

Rulemaking public proceeding--begin early CY 1980 and extend through CY 1980.

Prepare criteria for determination of need for and scope of licensee emergency plans by December 1979.

Prepare Regulatory Guide, Acceptance Criteria and Standard Format and Content documents and promulgate as Drafts by July 1980. Finalize and promulgate July 1981.

Prepare reviewer criteria and procedures by December 1980.

E-7 - A need exists for expanded NRC monitoring capability.

Resolution: Short and long term  
Lead: NRR/NMSS/IE  
Support: SP

A. Details of Problem

Although the level of monitoring capability necessary to ensure adequate performance of an NRC response team is not currently defined, the analysis of TMI experience, coupled with a better definition of NRC's role, should provide a sufficient base for estimating technical requirements. Monitoring capabilities must also address the requirements relative to NMSS licensee activities which, in some cases, could differ substantially from those of power reactor facilities.

B. Planning Base for Action

NMSS has implemented an organization to guide and facilitate the implementation of adequate emergency planning, the Environmental Radiation and Emergency Support Section (ERESS) in the Uranium Fuel Licensing Branch. NMSS has not had a formal program related to monitoring for emergency response teams in the past.

NMSS will support NRR and IE in their equipping of NRC response teams with appropriate monitoring capabilities by defining those monitoring needs unique to NMSS licensee activities.

C. Action Plan

Short Term

1. NMSS will quickly survey those of its licensee activities judged by project review staff to exhibit the potential for significant offsite adverse impacts due to accidents, sabotage, or severe natural phenomena through a survey questionnaire.
2. Analyses of those data for NMSS-unique possible monitoring requirements will be made and the results conveyed to IE and NRR.

Long Term

3. NRC response teams must also be appropriately equipped to assess environmental contamination resulting from unplanned releases from NMSS licensed activities.
4. Likely contaminant isotopes and levels will be identified as part of licensee emergency plans to be required by regulation.
5. Any special monitoring needs will be conveyed to IE for their evaluation and implementation.

Schedule

Supply monitoring requirements and updated requirements to IE as revealed by emergency plan reviews.

F-2 - Evaluation criteria for drills/ exercises are not defined.

Resolution: Short and long term  
Lead: NRR/NMSS  
Support: IE/SP/SD

A. Details of Problem

Although a varying degree of evaluation or assessment is associated with the licensing process, NRC does not systematically evaluate the ongoing capability for emergency response, particularly for offsite non-licensee resources. Evaluation criteria for this purpose exist only for the RAC's, although IE does annually verify that arrangements are still in place at power reactors and some other facilities. This does not, however, ensure their adequacy in terms of likely performance but is limited to confidence that they will respond. NMSS reevaluates, to some extent, during license renewal reviews, i.e., every 5 years.

B. Planning Basis for Action

NMSS will apply the same criteria for review of applicants' emergency plans and the assessment of support organization capabilities related to license renewals as are applied to applications for new licenses or newly required emergency plans. Reassessment criteria and procedures for non-renewing NMSS licensed facilities will be developed when such facilities are licensed.

C. Action Plan

Short Term

1. NMSS is presently reviewing post-licensing emergency plans for fuel cycle facilities on a pre-TMI-2 basis. New criteria will possibly require a second review.
2. NMSS will review any emergency plans submitted in support of renewal applications to the same post-TMI-2 criteria as will be applied for new licensee applications.

Long Term

3. This item will be integrated with development of criteria for review of new emergency plans.
4. At 5-year intervals, all active NMSS activities are renewed and emergency plans will be reevaluated at those times to criteria identical to those then current for new plans.
5. At such time as licensed production and utilization facilities are active, NMSS will develop and/or adapt from NRR, criteria and procedures for post-licensing reassessment of emergency support capabilities.