U.S. NUCLEAR REGULATORY COMMISSION
STANDARD REVIEW PLAN
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS

8.0 EMERGENCY MANAGEMENT

8.1 PURPOSE OF REVIEW

The review should determine if the applicant has established, before the start of operations, adequate emergency management facilities and procedures to protect the public, the workers, and the environment. The Applicant may use either this SRP or Regulatory Guide 3.67, "Standard Format and Content for Emergency Plans for Fuel Cycle and Materials Facilities," in preparing its emergency plan. Information requested for the Emergency plan may be provided once and cross referenced in other sections.

Licensed facilities requiring an Emergency Management Plan are those authorized to possess: (a) enriched uranium or plutonium for which a criticality accident alarm system is required; (b) uranium hexafluoride in excess of 50 kg (110 lb.) in a single container or (c) 1000 kg (2200 lb.) total; or in excess of 2 Ci of plutonium in unsealed form or on foils or plated sources and when an evaluation(the ISA Summary may be referenced in lieu of the evaluation) shows that the maximum dose to a member of the public off-site from a release of radioactive materials would exceed 0.01 Sv (1 rem) effective dose equivalent or an intake of 2 milligrams of soluble uranium.

Emergency capability is incorporated into the baseline design criteria (BDC) of Part 70, as revised, and is intended to ensure control of licensed material, evacuation of personnel, and availability of emergency facilities.

8.2 RESPONSIBILITY FOR REVIEW

Primary: Assigned LIB staff

Secondary: Licensing Project Manager

Supporting: Regional Emergency Preparedness Inspector
ISA Reviewer
Fuel Facility Inspection staff

8.3 AREAS OF REVIEW

The NRC staff should review the applicant's submittal for an acceptable level of evidence of planning for emergency preparedness directed at situations involving real or potential radiological hazards. The review should address those design features, facilities, functions, and equipment that may affect some aspect of emergency planning or the capability of an applicant to cope with plant emergencies. In addition, the review should address coordination with off-site emergency response organizations. The staff should either review the emergency plan made in accordance with 10 CFR 70.22(i)(1)(ii) and with the guidance contained in the

acceptance criteria below, or review the applicant's evaluation(the applicant may reference the ISA Summary in lieu of providing the evaluation.) that an emergency plan is not needed in accordance with 10 CFR 70.22(i)(1)(i).

The NRC staff reviewer should address the material presented, as described below.

8.3.1 Evaluation That No Emergency Plan is Required

If the applicant submits an evaluation, or references the ISA Summary to demonstrate that an emergency plan is not required, the staff should review the information against 10 CFR 70.22(i)(1)(i), and NUREG-1140, "A Regulatory Analysis of Emergency Preparedness for Fuel Cycle and Other Radioactive Material Licensees." NUREG/CR-6410, "Nuclear Fuel Cycle Facility Accident Analysis Handbook," also contains useful information. Areas to be evaluated should include the following:

1. A description of the facility;
2. Types of materials used, including both radioactive material and hazardous chemicals;
3. Types of accidents;
4. Detection of accidents;
5. Site specific information used to support the evaluation; and
6. An evaluation of the consequences.

8.3.2 Emergency Plan

If the applicant submits an emergency plan, the staff should evaluate the emergency plan against 10 CFR 70.22(i)(1)(ii) and Regulatory Guide 3.67, "Standard Format and Content for Emergency Plans for Fuel Cycle and Materials Facilities," which provides a standard format and content for an emergency plan. Elements in the emergency plan to be reviewed should include the following:

1. Facility description (including both on-site and off-site emergency facilities);
2. Types of accidents;
3. Classification of accidents;
4. Detection of accidents;
5. Mitigation of consequences (and safe shutdown);
6. Assessment of releases;
7. Responsibilities of licensee;
8. Notification and coordination;
9. Information to be communicated and parties to be contacted;
10. Training;
11. Safe shutdown (recovery and plant restoration);
12. Exercises and drills;
13. Hazardous chemicals inventories and locations; and
14. Responsibilities for developing and maintaining the emergency program and its procedures.

8.4 ACCEPTANCE CRITERIA

8.4.1 Regulatory Requirements

10 Part 70.22(i)(1)(i) specifies when an emergency plan does not have to be submitted to the NRC and, if an emergency plan is required to be submitted, 10 CFR 70.22(i)(3) contains the information that must be included in the emergency plan.

10 CFR 70.64(a)(6) requires that applicants address the control of licensed material, evacuation of personnel, and availability of emergency facilities for the design of new facilities.

8.4.2 Regulatory Guidance

Regulatory guidance for preparing an emergency plan includes:

U.S. Nuclear Regulatory Commission Regulatory Guide 3.67, "Standard Format and Content for Emergency Plans for Fuel Cycle and Materials Facilities," January 1992.

U.S. Nuclear Regulatory Commission NUREG-1140, “A Regulatory Analysis of Emergency Preparedness for Fuel Cycle and Other Radioactive Materials,” January 1988.

U.S. Nuclear Regulatory Commission NUREG/CR-6410, “Nuclear Fuel Cycle Facility Accident Analysis Handbook,” 1998.

8.4.3 Regulatory Acceptance Criteria

8.4.3.1 Evaluation That No Emergency Plan Is Required

The adequacy of the evaluation or the referenced ISA Summary that no emergency plan is required should be reviewed by the staff against the requirements in 10 CFR 70.22(i)(2), and the specific criteria given in the following sections of the SRP. This evaluation should be acceptable if the regulatory requirements and the following criteria are met:

8.4.3.1.1 Facility Description

The evaluation includes a description of the facility and site, the area near the site, and the licensed activities conducted at the facility sufficient to support the evaluation. The description includes the following:

1. A detailed drawing of the site showing: (1) on-site and near off-site, within 1.61 Km (1 mile) structures, with building numbers and labels; (2) roads and parking lots on-site and main roads near the site; (3) site boundaries, showing fences and gates; (4) major site features; (5) water bodies within approximately 1.61Km (1 mile); and (6) the location(s) of nearest residents.

2. The stack heights, typical stack flow rates, and the efficiencies of any emission - control devices.
3. A general description of licensed and other major activities conducted at the facility, and the type, form, and quantities of radioactive material used.

8.4.3.1.2 Types of Accidents

The evaluation describes or refers to each type of accident identified by the ISA Summary that has the maximum off-site consequences exceeding the limit of 10 CFR 70.22(i)(1)(i), and the following information is available for review:

1. The process and physical location where it could occur;

2. Complicating factors and off-site consequences including non-radioactive hazardous chemicals incident to the process that are released; and

3. The accident sequence that has the potential for the greatest radiological or non-radioactive hazardous chemicals incident to the process impact.

8.4.3.1.3 Detection of Accidents

The evaluation described, for each type of accident identified, the following:

1. The means of detecting the accident;

2. The means of detecting any release of radioactive or non-radioactive hazardous chemicals incident to the process that are released;

3. The means of alerting the operating staff; and

4. The anticipated response of the operating staff.

8.4.3.1.4 Evaluation of Maximum Public Exposure

To demonstrate that no emergency plan is required, an applicant may either; (1) request that its total possession limit for radioactive material be reduced below the emergency plan threshold in 10 CFR 70.22(i)(1); or (2) perform a site-specific evaluation(or refer to the ISA Summary as appropriate) that demonstrates maximum public exposure is less than the limits in 10CFR 70.22(i)(1)(i).

The evaluation should make available the following information sufficient to allow for independent verification:

1. Type of accident (e.g., fire, exposure, non-radioactive hazardous chemicals incident to the process that are released; and, nuclear criticality);
2. Location of accident;
3. Maximum source term;
4. Solubility of material;
5. Facility design or IROFS and the proposed release fraction;
6. Location and distance of nearest member of the public to the facility;
7. Dose model used and the process used to verify the reliability of the model and validity of the assumptions;

8. Assumed worst case weather condition; and
9. Maximum calculated exposure to a member of the public at the facility boundary.

The evaluation should include a list and a description of the factors in 10 CFR 70.22(i)(2) considered in evaluating maximum dose to members of the public. The applicant should demonstrate why the factors used in the evaluation are appropriate when compared with the factors in NUREG-1140. If the factors and evaluation show that the maximum dose to a member of the public off-site from a release of radioactive materials, could not exceed 0.01 Sv (1 rem) effective dose equivalent or the intake of soluble uranium of 2 milligrams, no emergency plan is required, in accordance with 10 CFR 70.22(i)(1)(i).

8.4.3.2 Emergency Plan

The adequacy of the proposed emergency plan should be evaluated by the reviewer against the requirements in 10 CFR 70.22(i)(3), and the specific criteria given in the following sections of the SRP. The applicant's emergency plan should be acceptable, if the regulatory requirements and the following criteria are met:

8.4.3.2.1 Facility Description

8.4.3.2.1.1 Operational Facilities

The emergency plan should include a description of the facility and site, the area near the site, and the licensed activities. The description should include the following:

1. A detailed drawing of the site showing:

    a. On-site and near off-site within 1.61 km (1mile) structures with building numbers and labels;
    b. Roads and parking lots on-site and main roads near the site;
    c. Site boundaries, showing fences and gates;
    d. Major site features; and
    e. Water bodies within approximately 1.61 km (1 mile).

2. A general area map (approximately 16.1 km [10-mile] radius); a United States Geological Survey topographical quadrangle (7 ½ minute series; including the adjacent quadrangle(s) if site is located less than 1.61 km (1 mile) from the edge of the quadrangle); and a map or aerial photograph indicating on-site structures and near-site structures (about 1.61 km [1-mile] radius). The map should include the location of sensitive facilities near the site such as hospitals, schools, nursing homes, nearest residents, fire department, prisons, and environmental sampling locations, and other structures and facilities important to emergency management;

3. The stack heights, typical stack flow rates, and the efficiencies of any emission-control devices;
4. A general description of licensed and other major activities conducted at the facility, and the type, form, and quantities of radioactive and other hazardous materials normally on-

site, by location (use and storage) and building, and hazardous characteristics (exposure rates, pH, temperature, and other characteristics) important to emergency management; and

5. Certification by the Plant Manager or the individual authorized be the applicant, that the applicant has met responsibilities under Emergency Planning and Community Right To Know Act of 1986, Title III, Public Law 99-499, in accordance with 10 CFR 70.22(i)(3)(xiii).

8.4.3.2.2 On-site and Off-site Emergency Facilities

The emergency plan should include a list and description of on-site and off-site facilities that could be relied on in case of an emergency. The description should include the following:

1. A list and description of both on-site and off-site emergency facilities, by location and purpose of the facility;

2. A description of emergency monitoring equipment that is available for personnel and area monitoring, as well as that for assessing the release of radioactive or hazardous chemicals incident to the process to the environment;

3. A description of the on-site and off-site services that support emergency response operations. The following are included:

   a. Decontamination facilities;
   b. Medical treatment facilities;
   c. First aid personnel;
   d. Fire fighters;
   e. Law enforcement assistance; and
   f. Ambulance services.

4. In addition, the applicant should commit to the following:

   a. Facilities of adequate size and appropriate location that are designated, equipped, and ready for emergency use;

   b. Adequate backup facilities required by the emergency plan and supporting documents that are available and ready for use;

   c. Appropriate equipment and supplies necessary to support emergency response activities, that are accessible during accident conditions;

   d. Emergency equipment that is inventoried, tested, and serviced on a periodic basis, to ensure accountability and reliability;

   e. Sufficient reliable primary and backup communications channels that are available to accommodate emergency needs;

f. Off-site emergency resources and services that are identified, and are ready, to ensure their timely mobilization and use;

g. Operational engineering information, such as current as-built drawings and procedures, that are readily available in the emergency facilities;

h. Sufficient equipment for personnel protection and monitoring; and

i. Systems in place to alert on-site and off-site personnel in case of an emergency.

8.4.3.2.3 Types of Accidents

The emergency plan should include a description for each generic- type accident, identified in the ISA Summary, for which protective actions may be needed. The description should include:

1. The process and physical location(s) where the accidents could occur;

2. Complicating factors and possible on-site and off-site consequences, including nonradioactive hazardous chemicals incident to the process releases that could impact emergency response efforts;

3. The accident sequence that has the potential for the greatest radiological and/or nonradioactive hazardous chemicals incident to the process impact; and

4. Figure(s) projecting doses and chemicals substance concentrations as a function of distance and time for various meteorological stability classes, including a description of how such doses/ concentrations were projected(e.g., computer models, assumptions, etc.)

8.4.3.2.4 Classification of Accidents

1. The emergency plan classification system should include the following two classifications:

   - "Alert": Events that may occur, are in progress, or have occurred, that could lead to a release of radioactive material or hazardous chemicals, incident to the process however, the release is not expected to require a response by an off-site response organization, to protect persons off-site; and

   - "Site area emergency": Events that may occur, are in progress, or have occurred, that could lead to a significant release of radioactive material or hazardous chemicals, incident to the process, that could require a response by off-site emergency response organizations to protect persons off-site.

2. For each accident in the emergency plan, the classification (alert or site area emergency) that is expected for each accident is identified;

3. The emergency plan should specify emergency action levels (EALs) at which an alert or site area emergency will be declared. EALs are specific conditions that require emergency response measures to be performed. The applicant's EALs should be consistent with Appendix A of Regulatory Guide 3.67 and should be comparable with the U.S. Environmental Protection Agency's Protective Action Guides (EPA 400-R-92-001, May 1992, Revision). Transportation accidents more than 1.61Km (1 mile) from the facility should not classified.

4. The emergency plan should designate the personnel positions and alternates with the responsibility for accident classification during normal operations and back shifts.

8.4.3.2.5 Detection of Accidents

The emergency plan should describe, for each type of accident identified, the following:

1. The means of detecting the accident;

2. The means of detecting any release of radioactive material or hazardous chemicals, incident to the process;

3. The means of alerting the operating staff; and

4. The anticipated response of the operating staff.

8.4.3.2.6 Mitigation of Consequences

The emergency plan should briefly describe, for each accident identified in the ISA Summary, measures and equipment used for a safe shutdown and for mitigating the consequences to workers on-site and off-site, as well as to the public, off-site.

8.4.3.2.7 Assessment of Releases

1. The emergency plan should describe the applicant's procedures to be used to promptly and effectively assess the release of radioactive material or hazardous chemicals, incident to the process. The description includes:

   a. The procedures for estimating or measuring the release rate or source term;

   b. Valid computer codes used to project doses or concentrations to the public or environment and associated assumptions, along with adequate justifications to show the validity of the assumptions;

   c. The types, methods, frequencies, implementation time, and other details of on-site and off-site sampling and monitoring that will be performed to assess a release of radioactive materials or hazardous chemicals, incident to the process; and
   d. Method for assessing collateral damage to the facility, especially IROFS.

2. The emergency plan should describe the applicant's procedure for validating any code used to assess releases of radioactive material or hazardous chemicals, incident to the process.

8.4.3.2.8 Responsibilities

The emergency plan should describe the emergency response organization and administration that ensure effective planning, implementation, and control of emergency preparedness activities.

In addition the applicant should make the following commitments.

1. The organizational structure and chain of command will be clearly defined in procedures;

2. Staffing and resources will be sufficient to accomplish all assigned tasks;

3. Responsibilities and authority for each management, supervisory, and professional position will be clearly defined in procedures. Responsibility is assigned for the coordination of on-site and off-site emergency response preparedness;

4. Interfaces with supporting groups, both on-site and off-site, will be clearly defined in procedures;

5. Mutual cooperation agreements exist with local agencies such as fire, police, ambulance/rescue, and medical units;

6. Plant management measures will be in place by procedures to audit and assess of emergency preparedness to ensure site readiness to handle emergencies and to identify and correct problems;

7. The on-site emergency response organization will provide effective command and control of the site during the assessment, mitigation, and recovery phase of an accident;

8. The emergency public information system will provides advance and ongoing information to the media and public on subjects that would be discussed during an emergency, such as radiation hazards, chemical hazards, site operation, and site emergency plans; and

9. The schedule of emergency preparedness procedure will provide for availability of procedures to support startup and operation of new processes/ facilities on-site.

8.4.3.2.9 Notification and Coordination

1. The emergency plan should provide reasonable assurance that emergency notification procedures will enable the emergency organization to correctly classify emergencies, notify emergency response personnel, and initiate or recommend appropriate actions in a timely manner, based on the following:

   a. Classification of emergency events are based on the current emergency plan;

   b. Notification procedures minimize distractions of shift operating personnel and include concise, preformatted messages. Appropriate follow-up messages to off-site authorities are issued in a timely manner;

c. Information on the nature and magnitude of the hazards is made available to appropriate emergency response personnel;

d. Radiological and chemical source term data are available to the command post, technical support center, emergency operation center, and appropriate State personnel, in cooperation with the NRC;

e. When available, off-site field monitoring data are logged, compared with source term data, and used in the protective action recommendation process;

f. Protective Action Guides are available and used by appropriate personnel in a timely manner;

g. The emergency public information program ensures timely dissemination of accurate, reliable, and understandable information;

h. Systems are in place, if required, to alert, notify, and mobilize on-site and off-site response personnel in case of an emergency;

i. Notification and coordination with responsible parties when some personnel, equipment, and facility components are not available.

2. The emergency plan should describe how and by whom the following actions will promptly and effectively be taken:

a. Decision to declare an alert or site area emergency;

b. Activation of on-site emergency response organization during all shifts;

c. Prompt notification of off-site response authorities that an alert or site area emergency has been declared, including the licensee's initial recommendation for off-site protective actions (normally within 15 minutes of classification);

d. Notification to the NRC Operations Center (as soon as possible and, in any case, no later than one hour after a declared emergency);

e. Decision on what on-site protective actions to initiate;

f. Decision on what off-site protective actions to recommend;

g. Decision to request support from off-site organizations; and

h. Decision to terminate the emergency or enter recovery mode.

8.4.3.2.10 Information To Be Communicated

The emergency plan should describe the information to be communicated during an emergency, including the following:

1. A standard reporting checklist to facilitate timely notification;

2. The types of information to be provided concerning facility status, radioactive releases or hazardous chemicals, incident to the process, and protective action recommendations,

3. A description of preplanned protective action recommendations to be made to each appropriate off-site organization;
4. The off-site officials to be notified, as a function of the classification of the event; and

5. The recommended actions to be implemented by off-site organizations for each accident treated in the emergency plan.

8.4.3.2.11 Training

The emergency plan should include a description of the frequency and performance objective and plans for the training that the licensee will provide workers on how to respond to an emergency including any special instructions and orientation tours the licensee would offer to fire, police, medical, and other non-licensees emergency personnel to ensure knowledge of the emergency plan, assigned duties, and effective response to an actual emergency. The following should be included:

1. The topics and general content of training programs used for training the on-site and off-site licensee's emergency response personnel to satisfy the objectives described above;

2. The administration of the training program, including responsibility for training, the positions to be trained, the schedules for training, the frequency of retraining, use of team training, and the estimated number of hours of initial training and retraining;

3. The training to be provided on the use of protective equipment such as respirators, protective clothing, monitoring devices, and other equipment used in emergency response;

4. The training program for on-site personnel who are not members of the emergency response staff; and

5. Any special instructions and orientation tours the licensee would offer to fire, police, medical, and other non- licensee's personnel, who may be required to respond to an emergency.

8.4.3.2.12 Safe Shutdown (Recovery and Plant Restoration)

The emergency plan should describe the plans for adequately restoring the facility to a safe status after an accident and recovery after an emergency. The description should include:

1. The methods and responsibilities for assessing the damage to and the status of the facility's capabilities to safely control radioactive material or hazardous chemicals associated with the process;

2. The procedures for promptly determining the actions necessary to reduce any ongoing releases of radioactive material or hazardous chemicals, incident to the process, and to prevent further incidents;

3. The provisions for promptly and effectively accomplishing required restoration action; and

4 key positions in the recovery organization.

8.4.3.2.13 Exercises and Drills

The emergency plan should commit to conducting exercises and drills in a manner that demonstrates the capability of the organization to plan and perform an effective response to an emergency. An adequate plan should demonstrate the following:

1. Task-related knowledge is demonstrated through periodic participation by all qualified individuals for each position in the emergency response organization;

2. Drill performance is assessed against specific scenario objectives, using postulated accidents, that adequately test personnel, equipment, and resources, including previously identified weaknesses;

3. Effective player, controller, evaluator, and observer pre-drill briefings are conducted;

4. Scenario data and exercise messages provided by the controllers effectively maintain the time line and do not interfere with the emergency organization's response to exercise scenario events, except where safety considerations are involved;

5. Trained evaluators are used to identify and record participant performance, scenario strengths and deficiencies, and equipment problems;

6. Prestaging of equipment and personnel is minimized to realistically test the activation and staffing of emergency facilities;

7. Critiques are conducted in a timely manner and include a follow-up plan for correcting identified weaknesses and improving training effectiveness;

8. Emergency drills demonstrate that resources are effectively used to control the site, to mitigate further damage, and to control radiological releases, to perform required on-site activities, under simulated radiation/airborne and other emergency conditions, to provide accurate assessments and status during an accident, and to initiate recovery;

9. Emergency drills demonstrate personnel protection measures, including controlling and minimizing hazards to individuals during events such as fires, medical emergencies, mitigation activities, search and rescue, and other similar events;

10. The emergency drill demonstrates that on-site communications effectively support emergency response activities;

11. The emergency drill demonstrates that the emergency public information organization disseminates accurate, reliable, timely, and understandable information;

12. Provisions are made for conducting quarterly communications checks with off-site response organizations; and

13. Off-site organizations are invited to participate in the biennial on-site exercise that tests the major elements of the emergency plan and response organizations.

8.4.3.2.14 Responsibilities for Developing and Maintaining Current, the Emergency Program and Its Procedures

The emergency plan should describe the responsibilities for developing and maintaining the emergency program and its procedures. The description should include:

1. The means for ensuring that the revisions to the emergency plan and the procedures that implement the emergency plan are adequately prepared, kept up to date normally (within 30 days of any changes), and distributed to all affected parties, including the NRC; and

2. The provisions for approval of the implementing emergency procedures, making and distributing changes to the procedures, and ensuring that each person responsible for an emergency response function has immediate access to a current copy of emergency procedures. Provisions for approval of changes to the emergency plan and the procedures and those individuals authorized to make these changes are clearly stated;

3. Procedures for allowing off-site response organizations 60 days to comment on any new emergency plan or significantly updated emergency plans. Amendments to emergency plans that do not affect an organization or those changes allowed by 10 CFR 70.32(i))need not be provided to offsite organizations prior to submitting it to the NRC.

8.5 AMENDMENTS OR CHANGES TO THE EMERGENCY PLAN

The applicant may make changes to the approved emergency plan without NRC approval, if the changes do not decrease the effectiveness of the plan and the applicant provides copies of the changes to the NRC and appropriate organizations within 6 months of the changes in accordance with 10 CFR 70.32(i). Proposed changes that decrease the effectiveness of the emergency plan may not be implemented without prior application to and prior approval of the NRC.

8.6 REVIEW PROCEDURES

8.6.1 Acceptance Review

The primary reviewer should evaluate the application to determine whether it addresses the "Areas of Review" discussed in Section 8.3, above. If significant deficiencies are identified, the applicant should be requested to submit additional material before the start of the safety evaluation.

8.6.2 Safety Evaluation

After determining that the application is acceptable for review in accordance with Section 8.6.1, above, the primary reviewer should perform a safety evaluation against the acceptance criteria described in Section 8.4. If, during the course of the safety evaluation, the primary reviewer determines the need for additional information, the primary reviewer should coordinate a request for additional information with the licensing project manager.

8.6.2.1 Evaluation That No Emergency Plan Is Required

The primary reviewer should verify that the evaluation is consistent with the potential accident sequences described in the ISA Summary. The ISA reviewer and the primary reviewer should coordinate to assure the resolution of any issues concerning the evaluation relative to ISA information. The final step for the primary reviewer should be to prepare a SER in accordance with Section 8.7 that either agrees with the applicant's conclusion that no emergency plan is required or indicates that the staff does not accept the applicant's evaluation and recommends that an emergency plan be required by the applicant.

8.6.2.2 Emergency Plan

After an acceptable application has been received from the applicant, the primary reviewer should conduct a complete review and determine its acceptability in accordance with Section 8.4.3.2. The reviewer should verify that emergency planning is consistent with the potential accident sequences described in the ISA Summary. The ISA reviewer and emergency plan reviewer should coordinate to assure the resolution of any issues concerning the emergency plan relative to ISA Summary information.

Although the bulk of this information should be found in the Emergency Management program section of the licensee's submittal, the primary and secondary reviewers should gain familiarity with the site, including the demography, land use, plant design and layout, and major accidents postulated by the applicant presented in relevant sections of the application. The primary and secondary reviewers should also gain familiarity with proposed radiation protection activities

and other operational matters that interface with emergency plans, particularly the functions reviewed using SRP Chapters 4 and 11. Draft and final environmental statements for the proposed facility should be consulted. This information may be supplemented by a personal visit to the site by the reviewer and meetings with the applicant.
The final step for the primary reviewer should be to prepare an SER in accordance with Section 8.7, "Evaluation Findings."

8.7 EVALUATION FINDINGS

The primary reviewer writes an SER section addressing each topic reviewed under this SRP Chapter and explains why the NRC staff has reasonable assurance that the emergency management part of the application is acceptable. License conditions may be proposed to impose requirements where the application is deficient. The report includes a summary statement of what was evaluated and why the reviewer finds the submittal acceptable.

The staff can document the evaluation as follows:

The staff has evaluated [Insert a summary statement of what was evaluated and why the reviewer finds the submittal acceptable.] In accordance with 10 CFR 70.22(i), the licensee commits to maintaining and executing an emergency plan for responding to the radiological hazards resulting from a release of radioactive material or hazardous chemicals, incident to the process. The NRC staff reviewed the emergency plan with respect to 10 CFR 70.22(i) and the acceptance criteria in 8.4.3 of the SRP. NRC staff determined that the applicant's emergency plan is adequate to demonstrate compliance with 10 CFR 70.22(i), including: (1) the plant is properly configured to limit releases of radioactive materials in the event of an accident; (2) a capability exists for measuring and assessing the significance of accidental releases of radioactive materials; (3) appropriate emergency equipment and procedures are provided on-site to protect workers against radiation and other chemical hazards that might be encountered after an accident; (4) a notification system has been established for notifying Federal, State, and local government agencies and recommending appropriate protective actions to protect members of the public; and (5) necessary recovery actions are established for returning the plant to a safe condition after an accident.

The requirements of the emergency plan are implemented through approved written procedures. Changes that decrease the effectiveness of the emergency plan may not be made without NRC approval. The NRC will be notified of other changes which do not decrease the effectiveness of the emergency plan within 6 months of the changes.

8.8 REFERENCES

1. U.S. Nuclear Regulatory Commission, "Part 30 Statements of Consideration and Emergency Preparedness for Fuel Cycle and Other Radioactive Material Licensees," Federal Register 54, 14051, 1989.
2. U.S. Nuclear Regulatory Commission, NUREG/CR-6410, Nuclear Fuel Cycle Accident Analysis Handbook, 1998.

3. U.S. Nuclear Regulatory Commission, NUREG/BR-0150, Vol. 1, Rev. 4, RTM-96 Response Technical Manual, 1996.

4. U.S. Environmental Protection Agency, EPA 400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents,, May 1992.