

APPENDIX A

CHECKLIST FOR PROCEDURES

All activities listed below are to be covered by written procedures. The list is not intended to be all-inclusive or to imply that procedures be developed with the same titles as those on the list. This listing is divided into four categories and provides guidance on topics to be covered.

1. Management Control Procedures

- Training
- Audits and assessments
- Incident investigation
- Records management
- Configuration management
- Quality assurance
- Equipment control (lockout/tagout)
- Shift turnover
- Work control
- Procedure management
- Nuclear criticality safety
- Fire protection
- Radiation protection
- Radioactive waste management
- Maintenance
- Environmental protection
- Chemical process safety
- Operations
- Calibration control
- Preventive maintenance

2. Operating Procedures

a. System Procedures That Address Startup, Operation, Shutdown, Control of Process Operations, and Recovery After a Process Upset

- Ventilation
- Criticality alarms
- Shift routines, shift turnover, and operating practices
- Decontamination operations
- Uranium recovery
- Facility utilities (air, other gases, cooling water, fire water, steam)
- Temporary changes in operating procedures

b. Abnormal Operation/Alarm Response

- Loss of cooling water
- Loss of instrument air
- Loss of electrical power
- Loss of criticality alarm system

Fires
Chemical process releases

3. Maintenance Activities That Address System Repair, Calibration, Surveillance, and Functional Testing

Repairs and preventive repairs of items relied on for safety (IROFS)
Testing of criticality alarm units
Calibration of IROFS
High-Efficiency particulate air (HEPA) filter maintenance
Functional testing of IROFS
Relief valve replacement/testing
Surveillance/monitoring
Pressure vessel testing
Nonfired pressure vessel testing
Piping integrity testing
Containment device testing

4. Emergency Procedures

Response to a criticality
Hazardous process chemical releases (including uranium hexafluoride)

APPENDIX B

RECORDS

The requirements for records management vary according to the nature of the facility and the hazards and risks posed by it. Examples of the records required by 10 CFR Parts 19, 20, 21, 25, and 70 are listed below. The records are listed under the chapter headings of the Standard Review Plan (SRP). The list is not intended to be exhaustive or prescriptive. Different or additional records might be required in certain circumstances. Further, the applicant may choose to organize the records in other ways.

Examples of Records

SRP Chapter

1 General Information

Construction records

Facility and equipment descriptions and drawings

Design criteria, requirements, and bases for items relied on for safety (IROFS) as specified by the facility CM function

Records of facility changes and associated integrated safety analyses, as specified by the facility CM function

Safety analyses, reports, and assessments

Records of site characterization measurements and data

Records pertaining to onsite disposal of radioactive or mixed wastes in surface landfills

Procurement records, including specifications for IROFS

2 Organization and Administration

Administrative procedures with safety implications

Change control records for material control and accounting program

Organization charts, position descriptions, and qualification records

Safety and health compliance records, medical records, personnel exposure records, etc.

QA records

Safety inspections, audits, assessments, and investigations

Safety statistics and trends

3 Integrated Safety Analysis

4 Radiation Safety

Bioassay data

Exposure records

Radiation protection (and contamination control) records

Radiation training records

Radiation work permits

5 Nuclear Criticality Safety

Nuclear criticality control written procedures and statistics

Nuclear criticality safety analyses

Records pertaining to nuclear criticality inspections, audits, investigations, and assessments

Records pertaining to nuclear criticality incidents, unusual occurrences, or accidents

Records pertaining to nuclear criticality safety analyses

6 Chemical Safety

Chemical process safety procedures and plans

Records pertaining to chemical process inspections, audits, investigations, and assessments

Diagrams, charts, and drawings

Records pertaining to chemical process incidents, unusual occurrences, or accidents

Chemical process safety reports and analyses

Chemical process safety training

7 Fire Safety

Fire Hazard Analysis

Fire prevention measures, including hot-work permits and fire watch records

Records pertaining to inspection, maintenance, and testing of fire protection equipment

Records pertaining to fire protection training and retraining of response teams

Pre-fire emergency plans

8 Emergency Management

Emergency plan(s) and procedures

Comments on emergency plan from outside emergency response organizations

Emergency drill records

Memoranda of understanding with outside emergency response organizations

Records of actual events

Records pertaining to the training and retraining of personnel involved in emergency preparedness functions

Records pertaining to the inspection and maintenance of emergency response equipment and supplies

9 Environmental Protection

Environmental release and monitoring records

Environmental report and supplements to the environmental report, as applicable

10 Decommissioning

Decommissioning records

Financial assurance documents

Decommissioning cost estimates

Site characterization data

Final survey data

Decommissioning procedures

11 Management Measures

11.1 Configuration Management

- Safety analyses, reports, and assessments that support the physical configuration of process designs, and changes to those designs
- Validation records for computer software used for safety analysis or material control and accounting
- Integrated Safety Analysis (ISA) documents, including process descriptions, plant drawings and specifications, purchase specifications for IROFS
- Approved, current operating procedures and emergency operating procedures

11.2 Maintenance

- Record of IROFS failures (required by 10 CFR 70.62)
- PM records, including trending and root cause analysis
- Calibration and testing data for IROFS
- Corrective maintenance records

11.3 Training and Qualification

- Personnel training and qualification records
- Procedures

11.4 Procedures

- Standard operating procedures
- Functional test procedures

11.5 Audits and Assessments

- Audits and assessments of safety and environmental activities

11.6 Incident Investigations

- Investigation reports
- Changes recommended by investigation reports, how and when implemented
- Summary of reportable events for the term of the license
- Incident investigation policy

11.7 Records Management

- Policy
- Material storage records
- Records of receipt, transfer, and disposal of radioactive material

11.8 Other Quality Assurance Elements

- Inspection records
- Test records
- Corrective action records

APPENDIX A

FILING STANDARDS FOR SUBMITTALS

The requirements of 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material," specify that applications for a license to possess and use special nuclear material should be filed in accordance with the general information in Sections 70.5, "Communications" and 70.21, "Filing." This appendix has been prepared to provide more specific guidance for staff reviewers regarding the acceptable and preferred format for license and amendment applications.

Use of a standard submittal format for new and renewal applications facilitates a uniform and clear presentation by fuel cycle facility applicants. Such clarity and uniformity will facilitate a timely and uniform review by the NRC staff, and a clear and cogent presentation for understanding by parties other than the NRC and applicant who may have a legitimate interest in the application. Information contained in previous submittals, statements, or reports filed with the NRC with respect to an existing license may be incorporated by reference provided such references are clear and specific. The information called for in this SRP that is incorporated by reference to a previous application should be summarized.

Proprietary Information

Proprietary information should be submitted separately. When submitted, it should be clearly identified and accompanied by the applicant's justifications for requesting its being withheld from public disclosure, as specified by § 2.790, "Public Inspections, Exemptions, Requests for Withholding," of 10 CFR Part 2, "Rules of Practice for Domestic Licensing Proceedings." The NRC staff's review of the safety analysis should depend as much as possible on nonproprietary information to ensure that the public is properly apprized of the reasons for and effects of licensing actions.

Classified Information

Classified information should be submitted separately. When submitted, it should be clearly identified and accompanied by the applicant's justifications for requesting its being withheld from public disclosure, as specified by applicable classification regulations. The NRC staff's review of the safety analysis should depend as much as possible on unclassified information to ensure that the public is properly apprized of the reasons for and effects of licensing actions.

Style and Composition

Applications should clearly and concisely present the information to demonstrate compliance with NRC requirements.

Where numerical values are stated, the number of significant figures given should reflect the accuracy or precision to which the number is known. Where appropriate, estimated limits of errors or uncertainty should be given.

Abbreviations should be consistent throughout the application and should be consistent with generally accepted usage. Any abbreviations, symbols, or special terms not in general usage or unique to the facility should be defined when they first appear in the application or should be presented in a separate glossary of terms and definitions.

Text pages should be single spaced, with a type face and style suitable for microfilming or reproduction by image-copying equipment.

Pages should be numbered with the digits corresponding to the chapter followed by a hyphen and a sequential number, e.g., the third page of Chapter 4 should be number 4-3. Sequential numbers for the entire report should not be used.

A table of contents should be included in each volume of the renewal application.

Graphical Presentations

Graphical presentations such as drawings, maps, diagrams, sketches, and tables should be employed where the information may be presented more adequately or conveniently by such means. All information so presented should be legible, symbols should be clearly defined, and scales large enough that visual aids are not necessary to interpret pertinent items of information. These graphical presentations should be located in the section where they are primarily referenced.

Physical Specifications

Paper size:

Text pages should be 8 ½ × 11 inches; drawings and graphics should also be 8 ½ × 11 inches; however, a larger size is acceptable provided the finished copy when folded does not exceed 8 ½ × 11 inches.

Paper stock and ink:

The paper stock should be of suitable quality and color, and the ink of suitable density for handling and reproduction by microfilming or image-copying equipment.

Page margins:

A margin of no less than 1 inch should be maintained on the top, bottom, and binding side of all pages submitted.

Printing:

The material may be mechanically or photographically reproduced. All pages of text should be printed on both sides and the image printed head to head. Pages should be punched and mounted in three-hole ring binders.

Submittal to NRC

In addition to paper copies of the applications submitted in accordance with 10 CFR 70.5 and 70.21, submittals to NRC should include a reproducible copy in electronic media in Corel WordPerfect version 8.0 or other word processing format that converts accurately to the Corel WordPerfect format.

Procedures for Updating or Revising Pages

Data and text should be updated or revised by replacing pages. The changed or revised portion on each page should be highlighted by a "change indicator" mark consisting of a bold vertical line drawn in the margin opposite the binding margin. The line should be of the same length as the portion actually changed. All pages submitted to update, revise, or add pages to the report should show the date of change and a revision or amendment number. A guide page listing the pages to be inserted and the pages to be removed should accompany the revised pages. Where major changes or additions are made, a revised table of contents should be provided.

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