

## Roadmap to New Jersey's Agreement State Application

This application follows the section numbering and headings in the US Nuclear Regulatory Commission's (NRC) State and Tribal Program document entitled *Processing an Agreement - SA-700*.

### 4.1 Legal Elements

#### 4.1.1 Authority to Establish a Program and Enter an Agreement

The New Jersey Department of Environmental Protection's (NJDEP) statutory authority to establish the Agreement State program and to implement it is provided in the Radiation Protection Act (N.J.S.A. 26:2D-1), the Administrative Procedures Act (N.J.S.A. 52:14B-1 et seq.), and the Atlantic Interstate Low-Level Radioactive Waste Compact Implementation Act. These documents are provided in the section of the application labeled 4.1.1 Authority to Establish a Program and Enter an Agreement.

The State's rulemaking process accommodates future NRC amendments through the incorporation by reference of the Federal rules, with the exception of Subpart E of 10 CFR 20. Consequently, when the NRC amends its rules, the amendments are automatically part of New Jersey's rules, without further proposal or publication. Because the State rules substitute New Jersey titles, addresses, and cross references to State rules for language in some of the Federal rules, it may be necessary for the State to amend its rules to make administrative changes. This does not effect the substance of the Federal rules incorporated by reference.

Interpretation of State law is done by the Office of the Attorney General in the Department of Public Law and Safety. The procedure for obtaining an opinion is for the Director of the Division of Environmental Safety & Health (DESH) to write a memorandum to the Director of the Office of Legal Affairs (OLA). The OLA Director then sends a memorandum to the Attorney General and the Assistant Attorney General in Charge of Administrative Agency Advice in the Division of Law. Included in the application under this section is an example of the DESH Director's memorandum and the OLA Director's memorandum to the Attorney General.

As part of the NRC's review of the NJDEP's statutory authority, eight questions were asked by the NRC. The Attorney General submitted answers to those eight questions in a letter dated July 21, 2008 which is included in this section. Subsequently, NRC staff had questions related to the future siting of a low-level radioactive waste facility. The Deputy Attorney General response will be forthcoming.

#### 4.1.2 Organization of the Proposed Program

The Bureau of Environmental Radiation within the NJDEP is responsible for the implementation of the Agreement State Program. The bulk of the Agreement State workload will be performed by staff of the Radioactive Materials Section (RMS). The RMS will be divided into two sections, one devoted to Medical licenses and the other to

Non-Medical and Industrial licenses. RMS staff members will be responsible for licensing, inspection, and enforcement in their respective sections. Staff from the Radiological Assessment Section (RAS) will be responsible for decommissioning of all license types. In addition, RAS staff will assist with some medical and increased controls responsibilities. A brief history of radiation control, a description of the current Radiation Protection and Release Prevention Program, a Memorandum of Understanding between the Bureau of Nuclear Engineering and the NRC, and organizational charts showing the link between the Governor and the State Program Director are included in the section of the application labeled 4.1.2 Organization of the Proposed Program.

Legal support will be provided by the Office of the Attorney General in the Department of Law and Public Safety. The Environmental Permitting and Counseling Section provides legal advice and services for regulations and licensing matters and the Environmental Enforcement Section provides legal advice and services for enforcement matters. An organizational chart for the Division of Law is included in this section.

Electronic copies of the references to the Attorney General letter are not available, but are included in the hard copy of the application.

This Roadmap lists all the program elements and where they are found in the application. Also included is a matrix addressing the NRC's review of the draft application.

#### 4.1.3 Content of the Proposed Agreement

The State of New Jersey is requesting authority to regulate source, byproduct material as defined in sections 11e.(1), 11e.(3), and 11e.(4) of the Atomic Energy Act, and special nuclear material in quantities not sufficient to form a critical mass. The State requests authority to regulate the land disposal of byproduct, source, and special nuclear waste materials received from other persons, although the State may never need to implement this activity.

The State is not seeking authority to regulate byproduct material as defined in section 11e.(2) of the Atomic Energy Act or the evaluation of radiation safety information on sealed sources or devices containing byproduct, source, or special nuclear material and the registration of the sealed sources or devices for distribution, as provided for in the regulations or orders of the NRC. Byproduct material as defined in section 11e.(2) refers to uranium and thorium mill tailings. New Jersey has one site with NRC licensed 11e.(2) material, Stepan Chemical. The NRC will retain regulatory authority over this site which is currently undergoing decommissioning by the US Army Corps of Engineers. The section labeled 4.1.3 Content of the Proposed Agreement contains the Agreement with the categories of materials and specific authorities that the State wishes to regulate.

## **4.2 Regulatory Requirements Program Elements**

### **4.2.1 Standards for Protection Against Radiation**

The Department adopted Agreement State regulations on September 15, 2008. The NRC regulations have been incorporated by reference, meaning that whenever the NRC's rules change, the Department's rules will also change. The exception to this is the Department's regulations at N.J.A.C. 7:28-12 which address decommissioning. The Department did not incorporate 10 CFR 20 Subpart E by reference the rule Summary, provides the NRC staff with information regarding the impacts to the regulated community. Because New Jersey has decided to incorporate by reference, a "whiplash" effect will be avoided for NRC licenses. Most existing State regulated licensees are also NRC licensees, so the effect of changing regulatory agencies from federal to state is minimal. Because the State rules substitute New Jersey titles, addresses, and cross references to State rules for language in some of the Federal rules, it may be necessary for the State to amend its rules to make administrative changes. This does not affect the substance of the Federal rules incorporated by reference.

A courtesy copy of the Proposal Summary, the Agreement State Regulations, and the Response to Comment document are included in section labeled 4.2 Standards for Protection Against Radiation.

The complete Radiation Protection rules will not be published in the New Jersey Administrative Code book until the Agreement with the NRC is signed. A hard copy of N.J.A.C. 7:28, "Radiation Protection Programs" current through September 5, 2008, is included in this section to facilitate the staff's review of the changes on adoption.

In addition to the adopted regulations, provisions for the Increased Controls as per NRC Order EA-05-090 to certain licensees possessing risk-significant sources (IAEA Category 1 and 2 radioactive materials) are included in Section 4.3.1.

### **4.2.2 Regulatory Requirements with Significant Transboundary Implications**

New Jersey regulations are adopted by reference and disclaim any intent to regulate materials or activities over which the NRC retains jurisdiction. This has been accomplished by citing specific sections of the federal code which New Jersey adopts and leaving out those portions of the federal code where NRC retains jurisdiction. The Transboundary Issues table compares the federal code to the adopted State code and lists the compatibility categories. Any changes from the federal code are noted in the Comments column of the table. The Transboundary Table is included in the section labeled 4.2.2 Regulatory Requirements with Significant Transboundary Implications.

#### 4.2.3 Regulatory Requirements Needed for an Orderly Pattern of Regulation or Which Have Particular Health and Safety Significance

The Transboundary Table in Section 4.2.2 contains the compatibility cross reference list for regulations which have particular health and safety significance. New Jersey is not seeking to regulate 11e.(2) material. New Jersey has incorporated 10 CFR Part 61 by reference into its regulations. Although New Jersey wishes to regulate siting and operation of a low-level radioactive waste disposal facility, this authority may never need to be implemented, as New Jersey is currently a member of the Atlantic Compact.

### **4.3 Licensing Program Elements**

#### 4.3.1 Procedures for the Technical Evaluation of Proposed Uses of Radioactive Material

The RMS of the BER is responsible for establishing written licensing procedures for the safe use, storage, and possession of licensed materials. Technical procedures that have been modeled on NRC procedures along with standard review plans, checklists and policies, will assure the applications are thoroughly and equitably evaluated. Source material licensing procedures will be developed using NRC guidance for any future Source Material licenses. Presently, New Jersey has only one Source Material licensee that is undergoing decommissioning. The procedures and criteria that will be used to evaluate the use of radioactive materials are included in the section labeled 4.3.1 Procedures for the Technical Evaluation of Proposed Uses of Radioactive Material.

#### 4.3.2 Procedures for the Evaluation of Radiation Safety Information on Sealed Sources and Devices, and Registration for Distribution

New Jersey will not be adopting these procedures since the NRC will retain the authority. Therefore there is no section in the application for 4.3.2.

#### 4.3.3 Procedure for Conducting the Technical Evaluation of a Proposed License for a Low-level Radioactive Waste (LLRW) Land Disposal Site

New Jersey will develop procedures for conducting the technical evaluation of a proposed license for a LLRW land disposal site if the need arises. While New Jersey has the regulations in place to exercise the authority to license a LLRW facility, this authority may never need to be implemented, as New Jersey is currently a member of the Atlantic Compact. Documentation pertaining to the Atlantic Compact is in the section labeled 4.1.1 Authority to Establish a Program and Enter an Agreement.

#### 4.3.4 Procedure for Conducting the Technical Evaluation of a Proposed Uranium or Thorium Recovery Facility

New Jersey is not seeking the authority to regulate byproduct material as defined in section 11e. (2) of the Atomic Energy Act, so there is no section 4.3.4 in the application. Therefore, there is no section in the application for 4.3.4.

#### 4.3.5 Procedures for Assuring the Technical Quality of Licenses

New Jersey has established procedures as a means of assuring the integrity and quality of licensing actions. Included in the procedure is a requirement that all licenses will be submitted for a secondary peer review prior to being sent for final evaluation and signature. The procedures are included in the section labeled 4.3.5 Procedures for Assuring the Technical Quality of Licenses.

#### 4.3.6 Administrative Licensing Procedures

New Jersey's administrative procedures for licensing that address receipt of licensing actions to technical evaluators, license documentation preparation, tracking of action progress, signing of completed licenses, transmittal of signed license to the licensee, and license file maintenance can be found in the section labeled 4.3.6 Administrative Licensing Procedures.

### **4.4 Inspection Program Elements**

#### 4.4.1 Procedures for Inspecting Facilities where Radioactive Material is Stored or Used

The inspection procedures enclosed in the application cover each type of facility to be regulated by the Department. The procedures include guidance on scheduling and conducting inspections, as well as the manner in which the facility is informed of the results of the inspection and the generation of inspection reports. These procedures also encompass the different types of inspections that will be conducted (e.g. pre-license, routine, etc.). Since New Jersey does not have a low-level radioactive waste facility within its borders, and has no plans to have one in the foreseeable future, inspection procedures for this type of facility are not included in the application. Inspection procedures for a low-level radioactive waste storage facility will be developed should the need arise. Additionally, inspection procedures that pertain to fuel cycle facilities and nuclear power plants are not included in the application as there are no fuel cycle facilities in New Jersey and the NRC is retaining jurisdiction over nuclear power plants. Inspection procedures are included in the section of the application labeled 4.4.1 Procedures for Inspecting Facilities where Radioactive Material is Stored or Used.

#### 4.4.2 Procedures for Assuring the Technical Quality of Inspections and Inspection Reports

As part of the post-inspection process, all inspectors will review the inspections they have conducted with their immediate supervisor. Questions that arise during the course of the inspection, as well as potential violations, will be discussed. Reports generated as a result of the inspection will also be reviewed. Procedures that will be used to assure the technical quality of inspections and inspection reports are included in the section of the application labeled 4.4.2 Procedures for Assuring the Technical Quality of Inspections and Inspection Reports.

#### 4.4.3 Administrative Procedures for Inspections

The required procedures to generate an inspection report, have it reviewed and subsequently sent to a licensee are part of the Radioactive Materials Section's computerized New Jersey Environmental Management System (NJEMS) data tracking system. Everyone involved in the processing of an inspection report will be required to use this system. Turnovers in personnel will not be an issue, since any new personnel will learn and utilize the established system. Procedures that cover the administrative procedures related to the processing of an inspection report are included in the section of the application labeled 4.4.3 Administrative Procedures for Inspections.

### **4.5 Enforcement Program Elements**

#### 4.5.1 Routine Enforcement Procedures

Formal citations for regulatory violations are issued utilizing New Jersey's established enforcement procedures. These procedures include a system of escalated penalties for repeat violations, as well as different initial penalties based upon the severity of the violation. Violations that would constitute a low risk of harm to individuals would be issued a formal written warning for the initial violation, while graded civil penalties would be issued for initial violations that carry a risk of greater potential harm to individuals. A copy of the State's "Master Code of Violations" is included as part of the application. The Master Code is being updated to reflect the new Agreement State regulation citations, however, this application includes the existing Master Code which demonstrates escalated penalties, and penalties based on the severity of the violation. Procedures for implementing routine enforcement actions are included in the section of the application labeled 4.5.1 Routine Enforcement Procedures.

#### 4.5.2 Escalated Enforcement Procedures

In addition to the written warning and civil penalties discussed in 4.5.1 above, severe or repeated violations will lead to escalated enforcement action. These actions can include the modification, suspension or revocation of a license and/or referral of the matter to the State Attorney General's office for criminal prosecution. Procedures for

implementing these escalated enforcement actions are included in the section of the application labeled 4.5.2 Escalated Enforcement Procedures.

#### **4. 6 Technical Staffing and Training Elements**

The Bureau of Environmental Radiation has adopted staffing standards similar to the NRC's standards. All current staff members and future staff members will attend core training courses as necessary to perform their duties. There are currently enough trained and proficient staff members for each license type to allow for licensing and inspecting. Other staff members will attend the necessary courses as approved by the NRC in 2009 and/or will be trained by proficient staff.

##### 4.6.1 Technical Staff Organization

The Bureau of Environmental Radiation has conducted an analysis of the expected workload, and established an appropriate staffing plan. Included in this section are the number, distribution and types of radioactive materials licenses, organization charts and breakdown of the section. The section is organized into medical and non-medical/industrial and decommissioning areas. Staff will be responsible for both licensing and inspection responsibilities in the respective areas. There will be 13.25 FTE assigned to the Agreement State Program. The exact details are provided in the application in the section labeled 4.6.1 Technical Staff Organization.

##### 4.6.2 Formal Qualification Plan

The ability to conduct an effective materials program depends on having enough trained and experienced staff members. Training needs for staff assigned to the Agreement State program have been developed and are based on the category of licenses assigned to each section. Position descriptions, the qualification procedures, and example qualification journals are included in the application in the section labeled 4.6.2 Formal Qualification Plan.

##### 4.6.3 Current Technical Staff Qualifications

Program staff qualifications cover both routine functions and emergency response cases. The distribution of staff qualifications matches the distribution of licenses transferred under the Agreement. Staff resumes which show the educational level, experience and specialty training are provided along with individual qualification journals. For staff members that have not completed required training, a training plan is submitted. In addition to the resumes and training, documentation of licensing actions and inspection accompaniments for new staff with senior staff members both NJ and NRC are provided in the section of the application labeled 4.6.3 Current Technical Staff Qualifications.

## **4.7 Event Allegation Response Program Elements**

### **4.7.1 Procedures for Responding to Events and Allegations**

The response to a materials event will be as per the procedures that are included in the State's "Radioactive Materials and Radiological Assessment Team" manual. This document includes the necessary steps that will be taken to respond to, assess and mitigate any material event that occurs within the State. Reach-back capabilities to Federal agencies are included for events that exceed the capabilities of the State. If the event occurred due to the actions of a licensee, steps the licensee took to minimize the likelihood of a recurrence will be reviewed during the following inspection. If a generic problem that could affect multiple licensees is discovered, information related to the particular issue will be made available to potentially impacted licensees.

Allegations of improper activities will be investigated in a timely manner. If the allegation is confirmed, appropriate action will be taken to address the situation. Severe infractions can be discussed with, and potentially referred to, the State Office of the Attorney General, if so warranted. Procedures describing the State's response to materials events and allegations of misconduct are included in the section of the application labeled 4.7.1 Procedures for Responding to Events and Allegations.

### **4.7.2 Procedures for Identifying Significant Events and Allegations and for Entering Same into the Nuclear Materials Events Database (NMED)**

Events that are required to be reported to NMED will be appropriately entered into the NMED database. This will include such occurrences as incidents and medical misadministrations that meet the reporting criteria. Procedures describing the State's process for entering information into the NMED database are included in the section of the application labeled 4.7.2 Procedures for Identifying Significant Events and Allegations and for Entering Same into the Nuclear Materials Events Database.