July 13, 2000

Mr. Harold Reheis, Director
Environmental Protection Division
Department of Natural Resources
205 Butler Street, East Tower, E-1152
Atlanta, Georgia 30334

Dear Mr. Reheis:

On June 27, 2000, the Management Review Board (MRB) met to consider the proposed final Integrated Materials Performance Evaluation Program (IMPEP) report on the Georgia Agreement State Program. The MRB found the Georgia program adequate to assure public health and safety and compatible with the Nuclear Regulatory Commission's program.

Section 5.0, page 14, of the enclosed final report presents the IMPEP team's recommendations. We received your May 24, 2000 letter which described your actions taken in response to the recommendations in the draft report. We request no additional information.

Based on the results of the current IMPEP review, the next full review will be in approximately four years.

I appreciate the courtesy and cooperation extended to the IMPEP team during the review and your support of the Radiation Control Program. I look forward to our agencies continuing to work cooperatively in the future.

Sincerely,

/RA/

Carl J. Paperiello, Deputy Executive Director
for Materials, Research and State Programs

Enclosure:
As stated

cc: Mr. David Word, Deputy Director,
Environmental Protection Division

Mr. James Setser, Chief
Program Coordination Branch

Mr. Thomas Hill, Manager
Radioactive Materials Program

Mr. Harold Reheis

bcc: Chairman Meserve
Commissioner Dicus
Commissioner Diaz
Commissioner McGaffigan
Commissioner Merrifield

Distribution:
DIR RF DCD (SP01) PDR (YES /)
SDroggitis, STP
KSchneider, STP
KHseuh, STP
WSilva, Texas
DCollins, RII
RTrojanowski, RII
DCool, NMSS
GDeegan, NMSS
MShaffer, RIV
VCampbell, RIV
RWoodruff, RII
CMaupin, ASPO
STreby, OGC
HNewsome, OGC
FCameron, OGC
TCombs, OCA (2)
Geogia File

DOCUMENT NAME: I:\Reviews\Ga00\gaimp2000final report.wpd
To receive a copy of this document, indicate in the box: "**C**" = Copy without attachment/enclosure "**E**" = Copy with attachment/enclosure "**N**" = No copy

OFFICE	RIV		STP:DD		OSP:D		DEDMRS			
NAME	MRShaffer:gd		FCombs		PHLohaus		CPaperiello			
DATE	6/30/00		7/3/00		7/3/00		7/13/00			

STP FILE CODE: AG-7

INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM

REVIEW OF GEORGIA AGREEMENT STATE PROGRAM

April 3-7, 2000

FINAL REPORT

U.S. Nuclear Regulatory Commission

1.0 INTRODUCTION

This report presents the results of the review of the Georgia radiation control program. The review was conducted during the period April 3-7, 2000, by a review team comprised of technical staff members from the Nuclear Regulatory Commission (NRC) and the Agreement State of Texas. Team members are identified in Appendix A. The review was conducted in accordance with the "Implementation of the Integrated Materials Performance Evaluation Program and Rescission of a Final General Statement of Policy," published in the Federal Register on October 16, 1997, and the November 5, 1999, NRC Management Directive 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)." Preliminary results of the review, which covered the period February 16, 1996 to April 7, 2000 were discussed with Georgia management on April 7, 2000.

A draft of this report was issued to Georgia for factual comment on April 22, 2000. The State responded in a letter dated May 24, 2000. The Management Review Board (MRB) met on June 27, 2000, to consider the proposed final report. The MRB found the Georgia radiation control program was adequate to protect public health and safety and compatible with NRC's program.

The Georgia Agreement State program is administered by Georgia's Department of Natural Resources (the Department) and is located within the Program Coordination Branch (the Branch), Environmental Protection Division (the Division). Two programs within the Branch have responsibility for the Agreement State program, the Radioactive Materials Program (the Program) and the Environmental Radiation Program. The Program which administers the major portion of the Agreement State program is under the supervision of a Program Manager. An organization chart for the Department of Natural Resources is included as Appendix B. At the time of the review, the Georgia program regulated 481 specific licenses authorizing agreement materials. The review focused on the materials program as it is carried out under the Section 274b. (of the Atomic Energy Act of 1954, as amended) Agreement between the NRC and the State of Georgia.

In preparation for the review, a questionnaire addressing the common and non-common performance indicators was sent to the Program on January 7, 2000. The Program provided a response to the questionnaire on March 1, 2000. During the review, discussions with the Program staff resulted in the responses being further developed. A copy of the questionnaire responses is included as Appendix G to proposed final report.

The review team's general approach for conduct of this review consisted of: (1) examination of Georgia's response to the questionnaire; (2) review of applicable Georgia statutes and regulations; (3) analysis of quantitative information from the Program's licensing and inspection data base; (4) technical review of selected licensing and inspection actions; (5) field accompaniments of six Georgia inspectors; and (6) interviews with staff and management to answer questions or clarify issues. The team evaluated the information that it gathered against the IMPEP performance criteria for each common and non-common performance indicator and made a preliminary assessment of the radiation control program's performance.

Section 2 below discusses the Program's actions in response to recommendations made following the previous IMPEP review. Results of the current review for the IMPEP common performance

indicators are presented in Section 3. Section 4 discusses results of the applicable non-common performance indicators, and Section 5 summarizes the review team's findings and recommendations. Recommendations made by the review team are comments that relate directly to program performance by the Program. A response is requested from the Program to all recommendations in the final report.

2.0 STATUS OF ITEMS IDENTIFIED IN PREVIOUS REVIEWS

During the previous IMPEP review, which concluded on February 16, 1996, eight recommendations were made and transmitted to Mr. Harold F. Reheis, Director, Environmental Protection Division, Georgia Department of Natural Resources on July 8, 1996. The team's review of the current status of these recommendations is as follows:

1. The review team recommends that Georgia reevaluate its procedures for scheduling initial inspections to ensure that all licensees are inspected within 12 months of license issuance, regardless of whether or not they possess material or perform licensed operations.

   Current Status: The procedures were re-evaluated for scheduling initial inspections to insure that all licensees are inspected within 12 months of license issuance, whether or not they possess material or conduct licensed operations. These inspections are being scheduled and performed according to the recommendation. This recommendation is closed.

2. The review team recommends that the State's "announced" inspection policy be revised to provide for more unannounced routine inspections and reciprocity inspections. More consistency with the policy in IMC 2800 would result.

   Current Status: The Program's goals and objectives were modified so that 10-15 percent of routine inspections are conducted as unannounced inspections. This recommendation is closed.

3. The review team recommends that the State consider for adoption a policy of annual accompaniments of all inspectors, and that these accompaniments be performed by a supervisor or another senior inspector and the results documented.

   Current Status: With one or two exceptions, the Program Manager has accompanied each inspector at least once each year. The documentation of these accompaniments has been captured in the data base. Each inspector is orally critiqued at the conclusion of the inspection. This recommendation is closed.

4. The review team recommends that the State's current system for tracking enforcement actions and correspondence be reevaluated and revised as appropriate to assure that enforcement actions are closed out in a consistent and timely manner.

Current Status: The Program's current system for tracking enforcement actions and correspondence was reevaluated and revised to assure that enforcement actions are closed in a timely manner. This recommendation is closed.

5. The review team recommends that the Program's internal administrative procedures for reporting Misadministrations, Complaints and Incidents be revised to reflect the most recent NRC guidance regarding the primary contact, event reporting criteria and the event report format.

   Current Status: The Program's internal administrative procedures have been revised and reflect the most recent NRC guidance regarding event reporting and allegations. This recommendation is closed.

6. The review team recommends that Associates document their reviews of events, in the licensee's radioactive materials file, for each reportable event.

   Current Status: The Program revised its procedure to include documenting incident reports in the licensee's radioactive material file. The Program staff has been informed of this change and the new procedure has been implemented. This recommendation is closed.

7. The review team recommends that manufacturers and distributors of sealed sources and devices (SS&D) be required to establish and implement a manufacturing Quality Assurance/Quality Control (QA/QC) Program.

   Current Status: In order to determine whether manufacturers and distributors had established a QA/QC program, the Program established a manufacturing/distribution QA/QC inspection program. The program became effective in November 1996. The initial QA/QC inspection was performed June 1, 1997. The Program has confirmed that each manufacturing/distribution licensee has a QA/QC program in place. This recommendation is closed.

8. The review team recommends that Georgia adopt regulations compatible with 10 CFR 30.32 (g) and 10 CFR 32.210 in order to maintain an effective SS&D evaluation program.

   Current Status: Georgia adopted regulations effective May 6, 1997 compatible with 10 CFR 30.32(g) and 10 CFR 32.210 (391-3-17-.02(7)(i) and .02(11)(l) respectively). This recommendation is closed.

During the 1996 review, four suggestions were made concerning: (1) the adoption of standardized inspection forms; (2) second party reviews of inspection and enforcement documents; (3) guidance for the review of quality management programs for medical licensees; and (4) the documentation of two incident reviews. The team determined that the Program considered the suggestions and took appropriate actions.

3.0 COMMON PERFORMANCE INDICATORS

IMPEP identifies five common performance indicators to be used in reviewing both NRC Regional and Agreement State programs. These indicators are: (1) Status of Materials Inspection Program; (2) Technical Quality of Inspections; (3) Technical Staffing and Training; (4) Technical Quality of Licensing Actions; and (5) Response to Incidents and Allegations.

3.1 Status of Materials Inspection Program

The team focused on four factors in reviewing this indicator: inspection frequency, overdue inspections, initial inspections of new licenses, and timely dispatch of inspection findings to licensees. The review team's evaluation is based on the Georgia questionnaire responses relative to this indicator, data gathered independently from the Program's licensing and inspection data tracking system, the examination of complete licensing and inspection casework, and interviews with managers and staff.

A review of the Program's inspection priorities revealed that the inspection frequencies for the various types of licenses are the same or more frequent than similar license types listed in NRC Inspection Manual Chapter (IMC) 2800. The Program may also extend the inspection frequency based on the compliance history of the licensee. The Program has a procedure whereby every six months a listing of inspections due during the next six months is provided to each inspector for their assigned areas of the State. The inspectors use these lists to determine their inspection schedule.

In their response to the questionnaire, the Program Manager indicated that the Program had only one inspection overdue by more than 25% of the NRC frequency. The single exception is a licensee who requested termination of its license more than three years ago; however, the licensee cannot locate disposal records for several small sources. Routine inspections of the facility are not necessary, but the Program will not terminate the license until the licensee provides documentation of the proper disposal of the sources.

With respect to initial inspections of new licensees, the team evaluated a list of licensing actions and determined that there were 83 new licenses issued during the review period. A random sampling of five of these new licenses were reviewed. All but one licensee had been inspected within six months. The one licensee not inspected had been contacted by telephone and due to delays with the construction phase of their facility, the licensee had not yet received licensed material. The Program does not intend to perform an onsite inspection until the licensee receives material, but the Program will continue to perform telephone contacts to review the status of licensed activities.

The timeliness of the issuance of inspection findings was evaluated during the inspection casework review. All of the inspection findings were transmitted to the licensees within the Program's goal of 15 work days following the inspection. Inspectors have the option of issuing a Violation Acknowledgment Form (similar to NRC Form 591) if no items or only minor items of noncompliance are identified during an inspection.

To evaluate the Program's reciprocity inspection program, the review team obtained a computer printout of data for the years of 1996 through 1999. With regard to core licensees (Priorities 1, 2 and 3) the Program received 55 requests for reciprocity in 1996; 48 requests for reciprocity in 1997; 62 requests for reciprocity in 1998; and 46 requests for reciprocity in 1999. The Program performed six reciprocity inspections in 1996, seven in 1997, 10 in 1998 and 10 in 1999. Although the Program's efforts did not meet the goals established in IMC 1220, the Program continues to perform inspections of reciprocity licensees as resources permit. The team believes that this level of effort is acceptable.

Based on the IMPEP evaluation criteria, the review team recommends that Georgia's performance with respect to the indicator, Status of the Materials Inspection Program, be found satisfactory.

3.2 Technical Quality of Inspections

The team evaluated the inspection reports, enforcement documentation, and inspection field notes and interviewed inspectors for 22 radioactive materials inspections conducted during the review period. The casework included five of the Program's materials license inspectors, and covered inspections of various types including radiography, medical, academic, portable and fixed gauges, and nuclear pharmacy. Appendix C lists the inspection casework files reviewed for completeness and adequacy with case-specific comments.

The inspection procedures utilized by the Program are consistent with the inspection guidance outlined in IMC 2800. Inspection reports are in a checklist format that adequately cover all inspection areas. The Program has specific inspection forms for the various types of licensees. An inspector has the option of issuing a Violation Acknowledgment Form whenever they find no violations or minor violations. The form is signed by a licensee representative and a copy is maintained for the files. Narrative reports are completed for all of broad scope licensees. The Program Manager reviews a sampling of inspection reports as time permits. The Program Manager does review all new employees' inspection reports.

It was noted that Georgia has an adequate number and types of survey meters to support the current inspection program. Appropriate, calibrated survey instruments such as GM meters, scintillation detectors, ion chambers and micro-R meters were observed in the meter cabinet. Inspectors are not assigned meters, but check out an appropriate meter for the inspection they are performing. The meters are calibrated by Ludlum, Eberline, and the South Carolina Department of Health and Environmental Control. The Bonner sphere is calibrated by Georgia Tech each time it is used. The task of ensuring the survey meters are calibrated is rotated among the inspection staff. Georgia Tech is contracted to provide laboratory support. In addition to routine laboratory services, the Environmental Radiation Program maintains the mobile laboratory.

Based on casework, the review team noted that the routine inspections covered all aspects of the licensee's radiation programs. The review team found that inspection reports were thorough, complete, consistent, and of high quality, with sufficient documentation to ensure that the licensee's performance with respect to health and safety was acceptable. The documentation supported violations, recommendations made to the licensee, unresolved safety issues, and discussions held with the licensee during exit interviews. Team inspections were performed when appropriate and for training purposes.

During the review period, inspector accompaniments were performed by the Program Manager on each of the staff at least annually, with one exception. The Program's SS&D reviewer had not been accompanied each year; however, this individual is an experienced inspector and had only performed a few materials inspections during this review period. The Program Manager concentrated his accompaniment efforts on the newer inspectors. The review team considered this approach acceptable.

Six Program inspectors were accompanied during inspections by a review team member between February 14, and March 22, 2000. The accompaniments included a nuclear pharmacy, two institutional nuclear medicine facilities, one cardiologist, one high dose rate afterloaders (HDR), and one SS&D manufacturer's license. These accompaniments are also identified in Appendix C.

During the accompaniments, each inspector demonstrated appropriate inspection techniques and knowledge of the regulations. The inspectors were trained, prepared, and thorough in their audits of the licensees' radiation safety programs. Overall, each inspector utilized good health physics practices, their interviews with licensee personnel were performed in an effective manner, and their inspections were adequate to assess radiological health and safety at the licensed facilities.

Based on the IMPEP evaluation criteria, the team review team recommends that Georgia's performance with respect to the indicator, Technical Quality of Inspections, be found satisfactory.

3.3 Technical Staffing and Training

Issues central to the evaluation of this indicator include the Program's staffing level and staff turnover, as well as the technical qualifications and training histories of the staff. To evaluate these issues, the review team examined the State's questionnaire responses relative to this indicator, interviewed program management and staff, and considered any possible workload backlogs.

The Board of Natural Resources is a Constitutional Board, empowered by State statute with all the general policy-making functions of the Department of Natural Resources. Currently the Board has 16 governor-appointed members; 12 are from each voting district and the remaining four are members-at-large. The review team examined the State's conflict of interest policy that is applicable to the Board. It was noted that Board members are required to recuse themselves from matters posing a potential conflict of interest.

The Program Manager supervises two administrative and eight technical staff members. The technical staff members are classified as either Environmental Radiation Specialists 1 or 3 (specialist). The Program is fully staffed and there have been only three turnovers since the last IMPEP review. Vacancies were filled in an expedient manner.

The Program divided the State into six regional areas with one specialist assigned to each area and responsible for licensing and inspection in that area. One specialist has been assigned to work out of the area office located in Savannah and the other specialists all work out of Atlanta. One specialist is assigned to the review and inspection of SS&D licenses which is discussed further in Section 4.2. All of the technical staff members are trained to perform license reviews and inspections. One specialist is assigned to manage and computerize the technical information,

and this individual also has training and experience as a license reviewer and inspector. The team determined that the program has a well balanced staff, and a sufficient number of trained personnel to carry out the regulatory duties of the program.

The Program has developed a written training program, based upon the requirements specified in IMC 1246, for license reviewers and inspectors. Qualification journals for the specialists have also been developed. All radiation specialists are required to have bachelor's degrees or equivalent training in the physical and/or life sciences. The specialists are sent to the 5-week Health Physics course and other specialist training sponsored by the NRC as the courses become available. New hires are allowed to work with the more senior staff and under the direct guidance of the Program Manager until appropriate training and experience is received, and until the individual obtains the confidence to perform the assigned tasks independently. The Program Manager reviews the licensing work performed by the junior personnel and accompanies them during inspections to assure regulatory consistency and quality of work performed. The team confirmed the qualifications of the staff hired since the l996 IMPEP review and verified their performance through licensing and compliance casework and inspection accompaniments. The Program Manager expressed a strong commitment to training, and on several occasions has allowed the staff to attend training conducted at NRC's Region II office on risk assessment and other topics.

The Environmental Radiation Program is a sister program within the Department and provides assistance in environmental monitoring, obtaining samples and sample analyses. Also, some of the Environmental Radiation Program staff are trained and qualified to perform materials inspections, and are available to respond to incidents when requested by the Program Manager.

Based on the team's finding and the IMPEP evaluation criteria, the review team recommends that Georgia's performance with respect to the indicator, Technical Staffing and Training, be found satisfactory.

3.4 Technical Quality of Licensing Actions

The review team examined completed licensing casework and interviewed the staff for 18 specific licenses. Licensing actions were evaluated for completeness, consistency, proper isotopes and quantities used, qualifications of authorized users, adequate facilities and equipment, and operating and emergency procedures sufficient to establish the basis for licensing actions. Licenses were evaluated for overall technical quality including accuracy, appropriateness of the license, its conditions, and tie-down conditions. Casework was evaluated for timeliness; adherence to good health physics practices; reference to appropriate regulations; documentation of safety evaluation reports, product certifications or other supporting documents; consideration of enforcement history on renewals; pre-licensing visits, peer or supervisory review as indicated; and proper signature authority. The files were checked for retention of necessary documents and supporting data.

The licensing casework was selected to provide a representative sample of licensing actions that were completed during the review period. The sampling included the following types: industrial radiography, medical (institution and private practice), nuclear pharmacy, academic and industrial broad scope, nuclear laundry, manufacturing and distribution, portable and fixed gauge, and

in-vitro laboratory. Types of licensing actions selected for evaluation included four new licenses, eight amendments to existing licenses, four license renewals, and two license terminations. In discussions with the Program Manager, it was noted that there were no major decommissioning efforts underway with regard to agreement material in Georgia. Also, there were no identified sites with potential decommissioning difficulties equivalent to those sites in NRC's site Decommissioning Management Plan. A list of the licenses evaluated with case-specific comments can be found in Appendix D.

The casework evaluation indicated that the staff follows appropriate licensing guides during the review process to ensure that licensees submit information necessary to support their request. The review team found the checklists used for each type of program to be comprehensive and incorporated excellent notes to assist the staff with their review of the applications. Deficiencies were addressed by letters and documented telephone conversations containing appropriate regulatory language. The use of license templates by the staff also resulted in notable consistency between reviewers. Each license reviewer has proper signature authority to sign their own licensing actions. Overall, the review team found that the licensing actions were thorough, complete, consistent, of high quality and properly addressed health and safety issues.

The review team determined that the Program had not fully implemented the financial assurance requirements adopted by the Department in 1991 and clarified in May 1997. The team's examination of the licenses disclosed that several licenses authorized radioactive material in the types and quantities requiring financial assurance documents. However, the licensees did not address the financial assurance requirements. Two licensees submitted a certification of financial assurance but the Program did not amend these licenses to properly limit the possession of radioactive material as prescribed by the regulations. One licensee submitted a decommissioning funding plan with the appropriate financial instrument, and later submitted an adjusted site-specific cost estimate. However, the licensee did not adjust the amount of the financial instrument to match the amended cost estimate. The review team noted that the Program's staff did not have a clear understanding of Georgia's regulations regarding financial assurance requirements. The review team recommends that the Program review all Georgia licenses to ascertain if they require financial assurance, and take appropriate action on each affected license to ensure that all licenses meet the State's financial assurance requirements.

Based on the IMPEP evaluation criteria, the review team recommends that Georgia's performance with respect to the indicator, Technical Quality of Licensing Actions, be found satisfactory.

3.5 Response to Incidents and Allegations

In evaluating the effectiveness of the Program's actions in responding to incidents, the review team examined the Program's response to the questionnaire relative to this indicator, evaluated selected incidents reported for Georgia in the Nuclear Material Events Database (NMED) against those contained in the Georgia files, and evaluated the casework and supporting documentation for ten material incidents. A list of the incident casework examined with the case-specific comments is included in Appendix E. The team also reviewed the State's response to nine allegations involving radioactive materials including three allegations referred to the State by NRC during the review period.

The review team discussed the Program's incident and allegation procedure, file documentation, the State's equivalent to the Freedom of Information Act, NMED, and notification of incidents to the NRC Operations Center with the Program Manager and selected staff.

The responsibility for initial response and follow-up to incidents and allegations involving radioactive materials is shared between the Program and the Environmental Radiation Program. Written procedures exist for handling incidents and allegations (referred to as "complaints" by the Program). These procedures and accompanying summary forms are available to all staff on the Program's Local Area Network system. Event calls or reports are handled by the individual receiving the notification, or are assigned to another staff member by the Program Manager. The Program Manager is informed of the initial call and any subsequent follow-up or resolution of the case.

The Program had 26 reportable radioactive materials incidents during the review period and 10 were selected for review. The incidents included: loss of radioactive material, damaged devices, leaking sources, misadministrations and stolen gauges. The review team found that the State's response to incidents were complete and comprehensive. Initial responses were prompt and well-coordinated. The level of effort was commensurate with the health and safety significance. Inspectors were dispatched for on-site investigations when appropriate and the State took suitable enforcement action including coordination with the license reviewers and follow up, as appropriate.

During the period of this review, the Program adopted and implemented the NMED incident reporting system. However, in 1999, the Program's computer system was upgraded and does not include Microsoft Access 2.0 software, the database management software currently used by NMED. Since that time, the Program has been submitting routine event information by e-mail to NRC's contractor, Idaho National Engineering and Environmental Laboratory, for input to NMED. The Program plans to resolve this software issue and begin using the NMED incident reporting system in the near future.

The Program's procedures for handling incidents includes NRC's 24-hour Emergency Operation Center telephone number as the first point of contact with the NRC for events which require immediate or 24-hour reporting by licensees. However, at the time of this review, the procedure did not reference the most recent version of NRC's guidance on event reporting, "Handbook on Nuclear Event Reporting in the Agreement States." As a result, the Program's staff was not aware of the requirement to report routine events to NMED within one month following notification of the event by its licensees. The Program reported routine events to the NMED contractor in June and December of 1999.

The team discussed this issue with the Program Manager and the staff member responsible for NMED data entry. The Program's incident procedure was revised to reference the Office of State and Tribal Programs (STP) Procedure SA-300, Handbook on Nuclear Event Reporting in the Agreement States, during the week of this review. The Program's staff has been informed of the reporting criteria contained in the revised procedure. Also, NRC staff is modifying SA-300 to clarify the timing requirements for event reporting to NRC. Routine events occurring between December 1999 and April 2000, were also reported to the NMED contractor during this review.

During the review period, three allegations were referred to the Program by the NRC. The casework for these allegations was reviewed as well as the case work for the six additional allegations reported directly to the Program. The review of the casework and the Program's files indicated that the Program took prompt and appropriate action in response to the concerns raised. All of the allegations reviewed were appropriately closed and the team noted that allegations were treated and documented internally in the same manner as incidents. There were no performance issues identified from the review of the casework documentation. The team also noted that Georgia law requires that all public documents be made available for inspection and copying unless specifically exempted from disclosure under Georgia's Open Records Act. The Program makes every effort to protect an alleger's identity, but it cannot be guaranteed.

Based on the IMPEP evaluation criteria, the review team recommends that Georgia's performance with respect to the indicator, Response to Incidents and Allegations, be found satisfactory.

4.0 NON-COMMON PERFORMANCE INDICATORS

IMPEP identifies four non-common performance indicators to be used in reviewing Agreement State programs: (1) Legislation and Program Elements Required for Compatibility; (2) Sealed Source and Device Evaluation Program; (3) Low-Level Radioactive Waste Disposal Program; and (4) Uranium Recovery Program. Georgia's Agreement does not cover uranium recovery, so only the first three non-common performance indicators were applicable to this review.

4.1 Legislation and Program Elements Required for Compatibility

4.1.1 Legislation

Along with their response to the questionnaire, the Program provided the review team with the opportunity to review copies of legislation that affects the radiation control program. Legislative authority to create an agency and enter into an agreement with the NRC is granted in the Georgia Radiation Control Act (O.C.G.A. Title 31 Chapter 13, et seq., as amended). Further authority for program activities is addressed in the State Administrative Procedures Act (O.C.G.A. Title 50 Chapter 13, as amended). The Department of Natural Resources is designated as the State's radiation control agency. The review team noted that no legislation affecting the radiation control program was passed since being found adequate during the previous review, and found that the State legislation is adequate.

4.1.2 Program Elements Required for Compatibility

The Georgia Regulations for Control of Radiation, found in Chapter 391-3-17, Rules and Regulations for Radioactive Materials, apply to all ionizing radiation, whether emitted from radionuclides or devices. Georgia requires a license for possession, and use, of all radioactive material including naturally occurring materials, such as radium, and accelerator-produced radionuclides.

The review team examined the procedures used in the Program's regulatory process and found that the public and other interested parties are offered an opportunity to comment on proposed rules during a 30-day comment period and during a public meeting. The NRC is provided with drafts for comment on the proposed rules early in the promulgation process. The proposed rules are forwarded to the Board of Natural Resources for review and approval. The Board's calendar for rule adoption is tentatively set in January for that calendar year and all programs in the Department wishing to promulgate rules must get on the Board's calendar. After the proposed rules are adopted by the Board, they must be filed with the Secretary of State. Twenty days after filing the rules become final. Typically, rule promulgation requires 9 to 12 months, including drafting of revisions. The Department's Rules and Regulations are not the subject of "sunset" laws.

The team evaluated Georgia's responses to the questionnaire, reviewed the status of regulations required to be adopted by the State under the Commission's Adequacy and Compatibility Policy, and verified the adoption of regulations with data obtained from the Office of State and Tribal Programs Regulation Assessment Tracking System.

The team identified the following regulation changes and adoptions that will be needed in the future. The Program Manager related that these regulations would be addressed in an upcoming rulemaking scheduled for fiscal year 2001, but not before the revised 10 CFR Part 35 becomes final. The State's fiscal year 2001 is from July 2000 through June 2001.

- "Resolution of Dual Regulation of Airborne Effluents of Radioactive Materials; Clean Air Act," 10 CFR Part 20 amendment (61 FR 65120) that became effective January 9, 1997.

- "Recognition of Agreement State Licenses in Areas Under Exclusive Federal Jurisdiction Within an Agreement State," 10 CFR Part 150 amendment (62 FR 1662) that became effective February 27, 1997.

- "Criteria for the Release of Individuals Administered Radioactive Material," 10 CFR Parts 20 and 35 amendments (62 FR 4120) that became effective May 29, 1997.

- "Licenses for Industrial Radiography and Radiation Safety - Requirements for Industrial Radiography Operations," 10 CFR Parts 30, 34, 71, and 150 amendments (62 FR 28947) that became effective June 27, 1997.

- "Radiological Criteria for License Termination," 10 CFR Parts 20, 30, 40, and 70 amendments (62 FR 39057) that became effective August 20, 1997.

- "Exempt Distribution of a Radioactive Drug Containing One Microcurie of Carbon-14 Urea," 10 CFR Part 30 amendment (62 FR 63634) that became effective January 2, 1998.

- "Deliberate Misconduct by Unlicensed Persons," 10 CFR Parts 30, 40, 61, 70, and 150 amendments (63 FR 1890 and 13773) that became effective February 12, 1998.

- "License for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations; Clarifying Amendments and Corrections," 10 CFR Part 34 amendment (63 FR 37059) that became effective July 9, 1998.

- "Respiratory Protection and Controls to Restrict Internal Exposures," 10 CFR Part 20 amendment (64 FR 54543 and 64 FR 55524) that became effective February 2, 2000.

During the review, the Program Manager related that the above regulations have been drafted and will be combined with the State's equivalent final 10 CFR Part 35 regulation as a package of regulations to be adopted in fiscal year 2001.

It is noted that Management Directive 5.9, Handbook, Part V, (1)(C)(III) provides that the above regulations issued prior to September 3, 1997 should be adopted by the State as expeditiously as possible, but not later than three years after the September 3, 1997 effective date of the Commission Policy Statement on Adequacy and Compatibility, i.e., September 3, 2000.

Based on the IMPEP evaluation criteria, the review team recommends that Georgia's performance with respect to the indicator, Legislation and Program Elements Required for Compatibility, be found satisfactory.

4.2 Sealed Source and Device (SS&D) Evaluation Program

In assessing the State's SS&D evaluation program, the review team examined information provided by the State in response to the IMPEP questionnaire on this indicator. A review of selected new and amended SS&D evaluations and supporting documents covering the review period was conducted. The team observed the staff's use of guidance documents and procedures, interviewed the staff and Program Manager involved in SS&D evaluations, and verified the use of regulations and license conditions to enforce commitments made in the applications.

4.2.1 Technical Quality of the Product Evaluation Program

The Program has processed nine new registrations, nine amendments, 12 change of address actions, and six transfers from NRC since the last review. The review team selected eight of the newly issued SS&D registry certificates and one registry that had been amended in it's entirety. The review included all amendments, supporting documentation, licenses, and inspections associated with each of the registrations selected. The nine certificates reviewed covered the period since the last program review in February 1996 and represented cases completed by the principal reviewer. The SS&D certificates issued by the Program and evaluated by the review team are listed with case-specific comments in Appendix F.

Analysis of the files and interviews with the staff confirmed that the program follows the recommended guidance from the NRC SS&D training workshops and NUREG-1556, Volume 3, issued September 1997. Appropriate review checklists were used to assure all relevant

materials have been submitted and reviewed. The checklist was contained in the registration file. All pertinent American National Standards Institute standard, Regulatory Guides, and applicable references were confirmed to be available and were used when performing SS&D reviews.

The registration files contained all correspondence, photographs, engineering drawings, radiation profiles, and results of tests conducted by the applicant. The registrations clearly summarized the product evaluation to provide license reviewers with adequate information to license the possession and use of the product. Deficiency letters clearly stated regulatory positions and all health and safety issues were properly addressed. The team determined that the product evaluations were thorough, complete, consistent, of acceptable technical quality, and adequately addressed the integrity of the products during use and in the event of an accident.

As noted in Section 2.0, the program implemented a policy of conducting QA/QC inspections on all SS&D registrants to ensure accuracy and consistency in the production of sources/devices. A letter was sent to all manufacturers and distributors of SS&Ds which informed the registrants (licensees) that a QA/QC inspection was being implemented to ensure that products are being constructed according to design specifications. The Program developed a QA Inspection Form for SS&D's and a Gauge Distribution Inspection Form for use during the QA/QC inspections. These inspections were completed during the period of July 1997 through June 1998 and were in addition to the normal routine inspections conducted on each license. The team believes that this method to evaluate SS&D registrants' QA/QC programs should be considered a good practice.

4.2.2 Technical Staffing and Training

Following the Program's previous IMPEP review, one specialist was assigned the primary duties of reviewing all SS&D registrations. Two additional specialists were designated for concurrence reviews. The principal SS&D reviewer signs all registration sheets and a concurrence review is performed by either the Program Manager or one of two other designated specialist. The principal reviewer has a Bachelor of Science degree in Nuclear Engineering with additional courses in Mechanical Engineering. In addition, this individual performed "on the job training" for two weeks in the NRC's Materials Safety Branch. The other Specialists that perform concurrence reviews and the Program Manager have had several years experience in licensing and inspection activities, and have attended the SS&D workshops sponsored by NRC. The Program Manager and the principal SS&D reviewer are committed to maintaining a high degree of quality in their SS&D reviews. The team determined that the reviewers meet the technical training required for SS&D reviews as described under the guidance.

4.2.3 Evaluation of Defects and Incidents Regarding SS&Ds

No incidents or defects related to SS&Ds were reported with these devices (products) during the review period. The team also verified that there were no reported incidents through discussions with the SS&D reviewers and a review of the incidents as discussed under Section 3.5. An on-line search by manufacturer utilizing the NMED system was conducted by the team prior to the review, and no incidents were identified that were related to any malfunctioning devices or products considered during this review. During the review, discussions were held with the SS&D reviewers and the individual responsible for entering and searching for data through the

NMED system. Program staff demonstrated their abilities to conduct computer searches for NMED data concerning specified SS&D devices and manufacturers.

Based on the IMPEP evaluation criteria, the review team recommends that Georgia's performance with respect to the indicator, Sealed Source and Device Evaluation Program, be found satisfactory.

4.3 Low-Level Radioactive Waste (LLRW) Disposal Program

In 1981, the NRC amended its Policy Statement, "Criteria for Guidance of States and NRC in Discontinuance of NRC Authority and Assumption Thereof by States Through Agreement" to allow a State to seek an amendment for the regulation of LLRW as a separate category. Those States with existing Agreements prior to 1981 were determined to have continued LLRW disposal authority without the need of an amendment. Although Georgia has LLRW disposal authority, NRC has not required States to have a program for licensing a LLRW disposal facility until such time as the State has been designated as a host State for a LLRW disposal facility. When an Agreement State has been notified or becomes aware of the need to regulate a LLRW disposal facility, they are expected to put in place a regulatory program which will meet the criteria for an adequate and compatible LLRW disposal program. There are no plans for a LLRW disposal facility in Georgia. Accordingly, the review team did not review this indicator.

5.0 SUMMARY

As noted in Sections 3 and 4 above, the review team found Georgia's performance to be satisfactory for all seven performance indicators. Accordingly, the review team recommended and the MRB concurred in finding the Georgia Agreement State Program to be adequate and compatible with NRC's program. Based on the results of the current IMPEP review, the next full review will be in approximately 4 years.

Below is a summary list of recommendations, as mentioned in earlier sections of the report, for evaluation and implementation, as appropriate, by the State. Also, the good practice noted in the report is identified.

RECOMMENDATION:

1. The review team recommends that the Program review all Georgia licenses to ascertain if they require financial assurance, and take appropriate action on each affected license to ensure that all licenses meet the State's financial assurance requirements. (Section 3.4)

GOOD PRACTICE:

1. The review team identified the Program's policy of conducting quality assurance and quality control inspections on all SS&D registrants to ensure accuracy and consistency in the production of sources and devices as a good practice. (Section 4.2)

LIST OF APPENDICES AND ATTACHMENTS

APPENDIX A

IMPEP REVIEW TEAM MEMBERS

Name	**Area of Responsibility**
Mark Shaffer, Region IV	Team Leader
Richard Woodruff, Region II	Technical Staffing and Training Sealed Source and Device Evaluation Program
William Silva, Texas	Technical Quality of Inspections Status of Materials Inspection Program
Vivian Campbell, Region IV	Technical Quality of Licensing Actions
Kevin Hsueh, STP	Response to Incidents and Allegations Legislation and Program Elements Required for Compatibility

APPENDIX B

GEORGIA

DEPARTMENT OF NATURAL RESOURCES
and
ENVIRONMENTAL PROTECTION DIVISION
and
PROGRAM COORDINATION BRANCH

ORGANIZATION CHART
(SEE ML003721959)