BOBBY JINDAL
GOVERNOR

PEGGY M. HATCH
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL COMPLIANCE

June 25, 2012

Bryan A. Parker, IMPEP Team Leader
United States Nuclear Regulatory Commission
Region III
2443 Warrenville Road, Suite 210
Lisle, IL 60532-4352

RE: Response to IMPEP Review

Dear Mr. Parker:

We have received the copy of the 2012 IMPEP draft report that you provided. We reviewed the report and thank you for the opportunity to comment prior to your submitting the report to the Management Review Board. We appreciate what an arduous task it was for you as team leader to review four years of documentation for an entire state program.

The LDEQ Radiation Section was happy to cooperate with you and your team and appreciated that you tried to make the process as painless as possible. They have worked extremely hard for the last four years and were gratified to hear in your exit interview that you were recommending that the Louisiana Agreement State Program be found adequate to protect health and safety and compatible with NRC's program.

The following are comments we have with regard to the draft team report. In Section 2.0, Status of Items Identified in Previous Reviews, Item # 2, you recommend that the State adhere to the document format and content guidance in the current version of NUREG-1556, Volume 3. We are now following that guidance and have submitted ten Sealed Source and Device (SS&D) registrations to Traci Kime to be placed into the NRC Registry of Radioactive Sealed Sources and Devices. Nine of those ten registrations were evaluated by the review team and were found lacking in format and content. They have now been deemed acceptable. We have approximately 51 SS&D registrations left in our files that need to be thoroughly examined for compliance with the guidance document. We propose to accomplish this feat at the aggressive rate of approximately one registration per week, with a targeted completion date of July 1, 2013.

In Section 3.1, Technical Staffing and Training, the need for a documented training plan was mentioned. The paragraph below outlines the training policy for license writers. Attachment A is the eight-page training policy for surveillance inspectors.

Training Policy for Radiation License Writers

This policy states the training order for new Radiation License Writers. A new radiation license writer will begin by learning to process X-Ray Registrations or conduct the Industrial Radiography exam. The next step is to progress to training on Industrial Licenses for nuclear gauges, followed by training on Diagnostic Medical licenses. The next training step involves two paths. The first path is the medical training path. Here the training progresses from Radiopharmacy, to Therapy and finally to Cyclotrons. The second path is the industrial training path. Here the training progresses from Industrial Radiography to Well Logging. The training documentation will be maintained on the "Employee Radiation Training" form for each employee. The Registration and Licensing Supervisor reserves the right to alter the training schedule or job duties, if deemed necessary.

In Section 3.3, Technical Quality of Inspections, we request that the term "Notice of Deviation (NOD)" be changed to "Notice of Deficiency (NOD)", to reflect the terminology used by the department.

In Section 3.4, Technical Quality of Licensing Actions, the review team recommended that the Department evaluate its review processes and develop and implement a methodology to ensure that products issued are of high technical quality and meet the standard expectations of the Department. We have reiterated the importance of the review process with all of the affected employees. The initial license writer is responsible for accurately creating or amending the original license using the appropriate guidance documents. The peer reviewer is responsible for thoroughly checking all license conditions for accuracy and applicability, as well as reviewing any changes made. The supervisor/manager review consists of a routine review for correct formatting, names, addresses, the changes being made, license number, agency interest number, and amendment number. The technical staff reviewer is responsible for completing a comprehensive technical review of the entire license and supporting documents.

While the IMPEP review team was onsite, the Department developed the following policy for the control of sensitive information. This includes adding "Official Use Only – Security Related Information" in red ink on the top of each page of Increased Control licenses. This policy was immediately implemented and is now in use. See Attachment B for an example.

Policy for Controlling Sensitive Information

This policy applies to documents having radioactive material with quantities of concern. When a new license application or amendment request is received for Increased Control licenses, the documents are placed in an "Increased Controls" envelope and secured from inadvertent disclosure. The documents will remain in the "Increased Controls" envelope when not being reviewed. The "Increased Controls" envelope will be used while routing the documents for review. The security sensitive information will be removed by the Registration and Licensing Supervisor and placed in the "Increased Controls" cabinet. The Radioactive Materials Licenses that have Increased Control quantities will have "Official Use Only – Security Related Information" put on the top of the first page.

In Section 3.5, Technical Quality of Incident and Allegation Activities, it should be noted that on May 15, 2012, Louisiana hosted an NMED training session for two Mississippi Department of Health employees and six Louisiana DEQ employees. This will further enhance our abilities to effectively report incidents and allegations.

In Section 4.1.2, Program Elements Required for Compatibility, it appears that a correction to the Federal Register notice may be necessary. We believe that the citation for RATS ID 2000-1, "Energy Compensation Sources for Well Logging and Other Regulatory Clarifications," 10 CFR Part 39 amendment (65 FR 63750) should read (65 FR 20337).

Of the twelve amendments that have not been reviewed by the NRC as final regulations and are considered overdue, three were reviewed by the NRC as proposed rules and the NRC had no comments. These rules have since been promulgated by DEQ as final rules, which correspond to RATS ID 1991-3, "Standards for Protection Against Radiation", 10 CFR Part 20 amendment (56 FR 23360) (56 FR 61352) (57 FR 38588) (57 FR 57877) (58 FR 67657) (59 FR 41641) (60 FR 20183), RATS ID 1993-1, "Decommissioning Recordkeeping and License Termination: Documentation Additions," 10 CFR Parts 30 and 40 amendments (58 FR 39628), and RATS ID 1996-3, "Termination or Transfer of Licensed Activities: Recordkeeping Requirements," 10 CFR Parts 20, 30, 40, 61, and 70 amendments (61 FR 24669). These three final rules will be submitted to the NRC for review within 30 days.

Five amendments were reviewed as final rules; however, the NRC had comments on them. These five amendments, which correspond to RATS ID 1997-5, "Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiography Operations", Parts 30, 34, 71 and 150 amendments (62 FR 28947); RATS ID 1998-5, "Minor Corrections, Clarifying Changes, and a Minor Policy Change," 10 CFR Parts 20, 35, and 36 amendments (63 FR 39477; 63 FR 45393); RATS ID 2001-1, "Requirements for Certain Generally Licensed Industrial Devices Containing Byproduct Material," 10 CFR Parts 30, 31, and 32 amendments (65 FR 79162); RATS ID 2006-1, "Minor Amendments", 10 CFR Parts 20, 30, 32, 35, 40 and 70 amendments (71 FR 15005); and RATS ID 2007-1, "Medical Use of Byproduct Material – Minor Corrections and Clarifications," 10 CFR Parts 32 and 35 amendments (72 FR 45147, 72 FR 54207), will be addressed in a future rulemaking within the next six months.

Rulemaking documents equivalent to RATS ID 2007-2, "Exemptions From Licensing, General Licenses, and Distribution of Byproduct Material: Licensing and Reporting Requirements," 10 CFR Parts 30, 31, 32, and 150 amendments (72 FR 58473) and RATS ID 2008-1, "Occupational Dose Records, Labeling Containers, and Total Effective Dose Equivalent," 10 CFR Parts 19 and 20 amendments (72 FR 68043) will be published as proposed rules in the July 20, 2012, edition of the *Louisiana Register*. These rules are expected to be published as final rules in the September 20, 2012, edition of the *Louisiana Register*.

A rule equivalent to RATS ID 2007-3, "Requirements for Expanded Definition of Byproduct Material," Parts 20, 30, 31, 32, 33, 35, 61, and 150 amendments (72 FR 55864) will be published as a proposed rule in the August 20, 2012, edition of the *Louisiana Register* and a final rule expected in the October 20, 2012, edition.

The last rule that is considered overdue, which is equivalent to RATS ID 1991-4, "Notification of Incidents," 10 CFR Parts 20, 30, 31, 34, 39, 40, and 70 amendments (56 FR 64980), was apparently never submitted to the NRC for review. However, it was promulgated as a final rule on June 30, 1995 and will be submitted to the NRC for review within 30 days.

Four NRC amendments will need to be addressed in upcoming rulemakings before their stated deadlines. One of those, corresponding to RATS ID 2009-1, "Medical Use of Byproduct Material – Authorized User Clarification," 10 CFR Part 35 amendment (74 FR 33901), will be published as a proposed rule in the August 20, 2012, edition of the *Louisiana Register* and a final rule expected in the October 20, 2012, edition.

The timeline established on new rule packages is contingent upon receiving no comments. If comments are received, we would need to add time to address the comments in whatever fashion is appropriate. As you can see, we are making a concerted effort to rectify compatibility issues.

In Section 4.2.1, Technical Staffing and Training, a minor correction is needed in the second sentence of the second paragraph. Three of the four qualified reviewers with full signature authority each have greater than 10 years of experience with the department; the other one (Jabari Robinson) has five years of experience.

In response to comments in Section 4.2.2, we are thoroughly reviewing our entire Sealed Source and Device program. We are currently operating consistent with the format and content recommendations in NUREG-1556, Volume 3. As mentioned previously, the nine SS&D registrations that the review team evaluated have all been revised and resubmitted for posting to the NRC's SS&D Registry. All of the SS&D registrations and associated files are housed in a separate, locked filing cabinet. These files are currently being examined for accuracy and completeness. The projected completion date for this project is July 1, 2013.

We understand the Management Review Board will make a final determination at their July 12, 2012 meeting. I look forward to attending the meeting and appreciate the NRC providing travel expenses. Please feel free to contact Judith A. Schuerman, Ph.D., at 225-219-3634 to make further arrangements for travel to the meeting or for teleconferencing.

Sincerely,

Tim B. Knight, Administrator
Assessment Division

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Attachments

Attachment A

Training Policy for Radiation License Writers

Training Policy of Surveillance Personnel within the Radiation Surveillance Section:

PURPOSE: To ensure that those individuals performing radioactive materials inspection activities are adequately qualified and trained in a reasonable period of time to perform their duties.

Inspector training will be on-going through the duration of the inspector's tenure and will consist of three basic components: 1) basic inspector training, 2) program-specific training and 3) health and safety training. Basic inspector training may be achieved by attendance at one of the NRC sponsored training courses. Until the opportunity for this formalized training, an inspector may gain this training through the tutelage and accompaniment of a senior inspector that has been adequately trained and has demonstrated a proficiency in the subject inspection field. Such in-house training will continue until the inspector has demonstrated proficiency of inspection procedures to the satisfaction of senior inspection staff and the Management.

Health and safety training is accomplished internally at the LDEQ through the attendance of 40 hour HAZWOPER training and subsequent 8 hour annual refresher courses. Radiation safety training will be learned under the tutelage of a senior inspector until formal radiation safety training courses can be taken.

PROCEDURE: The training program begins with each inspector working in the X-ray inspection program. The inspector will remain in this program for approximately 1-2 years before progressing to the RAM inspection program. Exceptions to this include those individuals that possess prior ionizing radiation regulatory experience and/or those individuals that possess a degree in nuclear science, nuclear engineering, medical physics, nuclear medicine or another degree in the field of radioactive material and ionizing radiation. The new RAM inspector will begin training in the medical area with inspection of nuclear medicine departments. Several facilities are inspected by the trainer and the new inspector prior to the new inspector attending a formal classroom nuclear medicine course. Upon completion of the class the inspector again works with the trainer until both feel he is ready to conduct these type inspections unassisted. At that time the inspector is accompanied by an DCL for a "check ride" and depending on his performance is either approved or disapproved for unassisted inspection in nuclear medicine. After the inspector has satisfactorily completed several nuclear medicine inspections, he/she progresses to cancer treatment centers to begin training in HDR units and RAM implant licensee inspections. Upon completion of his/her OJT and classroom training in brachytherapy the inspector is given a "check ride" before being allowed to conduct these inspections unassisted. The training for the inspection of PET units and eye applicators usually consists of OJT only and a "check ride" is not normally required.

After completion of the medical licensee training the inspector is next moved into the industrial licenses beginning with nuclear gauges, fixed and portable. The training is by OJT alone except when the opportunity to attend one of the industry nuclear gauge classes is made available. After completion of the OJT another "check ride" by an DCL is made. This process of accompanying a trainer, attending a formal class if available for the type of inspection, again accompanying a trainer, and receiving a "check ride" from a DCL continues throughout each step in the inspector training. After adequate experience is

obtained in the inspection of nuclear gauges the inspector is moved into well logging and then into industrial radiography. The RAM training process from the beginning with nuclear medicine to the completion of industrial radiography takes about three years with some inspectors completing the training a little sooner and some taking a little longer.

APPENDICES:

The progression of the inspector through the Ram training process is listed in chronological order in which the inspector would attend the training. (see attachment A)

The RAM inspector will attend the formal core courses. (see attachment B)

Required Inspection Training/Duration of Inspections (see attachment C)

Employee Training Qualification Form (see attachment D)

ATTACHMENT A

PROGRESSION OF THE INSPECTOR THROUGH THE RAM TRAINING

(LISTED IN SEQUENTIAL ORDER)

Medical Series:

Nuclear Medicine
PET, Eye application
Brachytherapy

Industrial Series

Nuclear gauges
Academic, GC's
Well logging
Industrial radiography, office and field

ATTACHMENT B

FORMAL CORE COURSES

(LISTED IN SEQUENTIAL ORDER)

Introductory Health Physics H-117	1 week
Fundamental Health Physics I&II H-122	2 weeks
Fundamental Health Physics III	1 week
Advanced Health Physics H-201	2 weeks
Nuclear Medicine H-304	1 week
Brachytherapy H-313	1 week
Inspection Procedure G-108	1 week
Transportation H-308	1 week
Increased Controls S-201	1 week
Well Logging H-314	1 week
Industrial Radiography H-305	1 week

ATTACHMENT C

REQUIRED INSPECTION TRAINING / DURATION OF INSPECTIONS

X-ray (Dental) Inspections	80 – 100
Radiographic Dental	6 mos. – 1 yr.
Doctor & Chiropractors	3 mos. - 4mos.
Hospital Fluoro	8 mos. – 1 yr.
Nuclear Gauge	3 mos. – 4 mos.
Industrial Radiography	After attending class
Well Logging	After attending class
RAM (Nuclear Medl)	6 mos. – 1 yr.
Teletherapy and Brachytherapy	3 mos. – 4 mos.

ATTACHMENT D

Employee Training Qualification Form

Employee: _____ Hiring Date: _____ Perm. Date: _____

DEQ Orientation Date: _____ DEQ Procedure Date: _____

DEQ Timekeeping Date: _____ PPR with Supervisor: _____

HAZMAT 40 hour training: _____

X-RAY

Dental

Regulations Review Date: _____ Inspection Documentation Review Date: _____

Demonstration Inspections: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Inspections Performed: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Training Instr: _____ Approval Date: _____

Radiographic (Dr's, vets, chiropractors, etc.)

Regulations Review Date: _____ Inspection Documentation Review Date: _____

Demonstration Inspections: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Inspections Performed: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Training Instr: _____ Approval Date: _____

Multi-Specialty (Clinics & Out Patient)

Regulations Review Date: _____ Inspection Documentation Review Date: _____

Demonstration Inspections: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Inspections Performed: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Training Instr: _____ Approval Date: _____

Major Medical Facilities (Hospitals, Special Procedures, Etc)

Regulations Review Date: _____ Inspection Documentation Review Date: _____

Demonstration Inspections: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Inspections Performed: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Training Instr: _____ Approval Date: _____

Mammography

Regulations Review Date: _____ Inspection Documentation Review Date: _____

Training Course. Course 1 _____ Course 2 _____ Course 3 _____

Demonstration Inspections: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Inspections Performed: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Training Instr: _____ Approval Date: _____

Accelerators and Misc.

Regulations Review Date: _____ Inspection Documentation Review Date: _____

Demonstration Inspections: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Inspections Performed: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Training Instr: _____ Approval Date: _____

RAM

G.C., In-Vitro, Eye Applicators, Consultants, Etc.

Regulations Review Date: _____ Inspection Documentation Review Date: _____

Demonstration Inspections: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Inspections Performed: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Training Instr: _____ Approval Date: _____

Fixed and Moisture/Density Gauges

Regulations Review Date: _____ Inspection Documentation Review Date: _____

Training Course: _____ Date: _____

Demonstration Inspections: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Inspections Performed: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Training Instr: _____ Approval Date: _____

Nuclear Medicine & Therapy

Regulations Review Date: _____ Inspection Documentation Review Date: _____

Training Course: Diagnostic & Therapeutic Nuclear Medicine (H-304) Date: _____

Demonstration Inspections: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Inspections Performed: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Training Instr: _____ Approval Date: _____

Nuclear Pharmacies

Regulations Review Date: _____ Inspection Documentation Review Date: _____

Training Course: _____ Date: _____

Demonstration Inspections: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Inspections Performed: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Training Instr: _____ Approval Date: _____

Industrial Radiography

Regulations Review Date: _____ Inspection Documentation Review Date: _____

Training Course: Safety Aspects of Industrial Radiography (H-305) Date: _____

Office Demo Inspections: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Office Inspections Performed: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Field Demo Inspections: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Field Inspections Performed: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Training Instr: _____ Approval Date: _____

Well Logging

Regulations Review Date: _____ Inspection Documentation Review Date: _____

Training Course: Safety Aspects of Well Logging (H-314) Date: _____

Office Demo Inspections: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Office Inspections Performed: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Field Demo Inspections: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Field Inspections Performed: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Training Instr: _____ Approval Date: _____

Broad Scope and Manufacturers

Regulations Review Date: _____ Inspection Documentation Review Date: _____

Training Course: _____ Date: _____

Attachment B

Example of a License With Security Sensitive Information

Official Use Only-Security Related Information

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL COMPLIANCE
RADIATION LICENSING
P.O. BOX 4312
BATON ROUGE, LOUISIANA 70821-4312

RADIOACTIVE MATERIAL LICENSE

Pursuant to the Louisiana Environmental Quality Act (Louisiana Revised Statutes 30:2101 et seq.) and the Louisiana Radiation Regulations, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, own, possess and transfer radioactive material for the purpose(s) and at the place(s) designated below. This license shall be deemed to contain the conditions specified in the Louisiana Revised Statutes 30:2105 of the Louisiana Nuclear Energy and Radiation Control Law, and is subject to all applicable rules, regulations, and orders of the Department now or hereinafter in effect, including the Louisiana Radiation Regulations (LAC 33:XV) and to any condition specified in the license.

LICENSEE	LICENSE NUMBER	EXPIRATION DATE
Company X 111 X Street Baton Rouge, LA 70820 Attention: Mr. X Corporate Radiation Safety Contact	LA-XXXX-L01	March 31, 2016
	PREVIOUS AMENDMENTS ARE VOID AMENDMENT NUMBER 1	AI NUMBER 0000
	THIS LICENSE ISSUED PURSUANT TO AND IN ACCORDANCE WITH Letter	
	SIGNED BY Mr. X	DATE March 13, 2012

RADIONUCLIDE: ELEMENT	RADIONUCLIDE: MASS NO	MAXIMUM NUMBER OF SOURCES	MAXIMUM ACTIVITY OR QUANTITY PER SOURCE*	SEALED SOURCE IDENTIFICATION: CHEMICAL FORM—PHYSICAL STATE	SEALED CONTAINER OR EXPOSURE DEVICE: MANUFACTURER AND MODEL NO.	AUTHORIZED USE
Se	75	2	20 Ci	QSA Global Model 97941	QSA Global Model 989	Industrial Radiography
Se	75	6	80 Ci	AEA Technology Model A424-25W	AEA Technologies Model 660 System, 880 Delta, 880 Sigma, or 880 Elite	Industrial Radiography
Se	75	6	150 Ci	AEA Tehnology Model A424-25W	AEA Technologies Model 880 Delta, 880 Sigma, or 880 Elite	Industrial Radiography
Fe	55	10	40 mCi	AEA Model IEC.A1or IEC.D1	Niton XLi or XLp Series	X-Ray Fluorescence Analyzer
Cd	109	10	50 mCi	AEA Model CUC.D1		

*pCi-picocurie, µCi-Microcurie, mCi-Millicurie; Ci-Curie

	DATE	
XXXX Assistant Secretary		Page 1 of 2 Page(s)

LICENSEE	LICENSE NUMBER	AMENDMENT NUMBER	AI NUMBER	
Company X	LA-XXXX-L01	1	0000	Page 2 of 2 Page(s)

Isotope Products
Laboratories Model XFB-3,
Nes465 or Nes-467,
North American Scientific
Model IND 1602

Etc.