

RADIOGRAPHY LICENSE APPLICATION CHECKLIST

(NUREG-1556, Vol. 2 dated 8/98)

Licensee/Applicant: Acuren Inspection, Inc. [formerly Longview Inspection, Inc.]
 License Number: 42-27593-01
 Docket Number: 030-34780
 Control Number: 470557
 Date of Application: 5/17/2005
 Application Signed ☒ Yes ☐ No

REGULATORY PERFORMANCE:

☒ Review of last three inspections reveals no major regulatory considerations.

DATE	INSPECTOR	VIOLATIONS
■ Feb 16-17, '05	Michael LaFranzo	No Violations - facility Portage, MI
■ June 22, '04	Deborah Piskura	No Violations - facility Hermantown, MN
■ Apr 29, '04	Richard Ladun	No Violations - facility Erie, PA

Sept 9, '03 Randy Erickson No Violations - facility Billings, MT

☐ Major violations/repeat violations:

None

☐ Reviewer and inspector concerns:

None

* October 2001 Two violations where rad-camera was left unattended 20.1802 + camera key-lock mech was found unlocked 34.23(a)

1. LICENSE ACTION TYPE:

☐ NEW

☒ RENEWAL

☐ AMENDMENT

* April 2003 Two violations 20.1802 + 34.23(a) failure to control + maintain constant surveillance in an unrestricted area. Issued SL III w/ CP \$6,000 because of credit for corrective action.

2. NAME AND MAILING ADDRESS:

Name: Acuren Inspection, Inc

(formerly Longview Inspection, Inc.)

Mailing Address:

101 Old Underwood Rd, Bldg J.
La Porte, TX 77571

✓ Permanent Radiographic Installation Address: One Perm. Rad. Install.

() Field Station Address:

Several field stations (dispatch / storage)
Several storage only facilities

(✓) Temporary Job Sites

4. INDIVIDUAL TO CONTACT CONCERNING THE APPLICATION:

Name: Lloyd A. Gray

Telephone No.: 281-842-3364

5. MATERIAL TO BE POSSESSED: *Updated on license*

[illegible]

[illegible]

Item No.	Title and Criteria	Yes	Description Attached
5.	<p>RADIOACTIVE MATERIAL</p> <p>Sealed Sources and Devices</p> <ul style="list-style-type: none"> Confirm that each sealed source, device, and source/device combination possessed is registered as an approved sealed source or device by NRC or an Agreement State and will be possessed and used in accordance with the conditions specified in the registration certificate. Confirm that associated equipment is compatible with the exposure devices, source exchangers, and sealed sources containing byproduct material. Confirm that only radiographic exposure devices, source assemblies or sealed sources, and associated equipment which meet the requirements specified in 10 CFR 34.20 will be used in radiographic operations. 	<p><input checked="" type="checkbox"/></p> <p><input checked="" type="checkbox"/></p> <p><input checked="" type="checkbox"/></p>	

Item No.	Title and Criteria	Yes	Description Attached
5.	<p>RADIOACTIVE MATERIAL</p> <p>Financial Assurance and Recordkeeping for Decommissioning</p> <ul style="list-style-type: none"> Pursuant to 10 CFR 30.35(g), we shall maintain drawings and records important to decommissioning and to transfer these records to a new licensee before licensed activities are transferred, or to assign the records to the appropriate NRC regional office before the license is terminated. <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> If financial assurance is required, submit evidence. 	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6.	<p>PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED</p> <p>Equipment will only be used:</p> <ul style="list-style-type: none"> - industrial radiography - underwater radiography - lay-barge radiography - off-shore platform radiography - other than radiography 	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	

Item No.	Title and Criteria	Yes	Description Attached
7.	<p>INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE</p> <p>Radiation Safety Officer (RSO)</p> <ul style="list-style-type: none"> The name of the proposed RSO and other potential designees who will be responsible for ensuring that the licensee's radiation safety program is implemented in accordance with approved procedures. Name: <i>Lloyd A. Gray</i> <p style="text-align: center;">AND</p> <ul style="list-style-type: none"> Demonstrate that the RSO has sufficient independence and direct communication with responsible management officials by providing a copy of an organization chart by position, demonstrating day-to-day oversight of the radiation safety activities. <i>directly reports to Pres.</i> <p style="text-align: center;">AND EITHER</p> <ul style="list-style-type: none"> The specific training and experience of the RSO and other potential designees. Include the specific dates of certification and/or training in radiation safety. Documentation to show that the RSO has a minimum of 2,000 hours of hands-on experience as a qualified radiographer in industrial radiographic operations. Documentation to show that the RSO has obtained formal training in the establishment and maintenance of a radiation protection program. <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> Alternative information demonstrating that the proposed RSO is qualified by training and experience. Documentation to show the RSO has obtained formal training in the establishment and maintenance of a radiation protection program. 		<p><input checked="" type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input checked="" type="checkbox"/></p> <p><input checked="" type="checkbox"/></p> <p><input checked="" type="checkbox"/> Committed to 2000hrs.</p> <p><input type="checkbox"/> existing on license</p> <p><input checked="" type="checkbox"/></p> <p><input type="checkbox"/> existing program.</p>

Radiographer and Assistant Radiographer Training

Table G.1 10 CFR Part 34 Radiographer and Assistant Radiographer Training Requirements

Requirement	Training Criteria
34.43(a)(1)	Radiographer
<p>A. Receive Training in 10 CFR 34.43(g) Topics</p> <p>(Classroom Training — Approximately 40 hours in Length)</p>	<p>Topics in 10 CFR 34.43(g)</p> <p>Fundamentals of Radiation Safety — <i>Course B (16 hours)</i></p> <ul style="list-style-type: none"> • Characteristics of gamma radiation <i>Sec 4</i> • Units of radiation dose and quantity of radioactivity <i>Sec 3</i> • Hazards of exposure to radiation <i>Sec 6</i> • Levels of radiation from licensed material <i>Sec 8</i> • Methods of controlling radiation dose (time, distance, and shielding) <i>Sec 5 + Course A Sec 5</i> <p>Radiation Detection Instruments <i>Course B / A</i></p> <ul style="list-style-type: none"> • Use, operation, calibration and limitations <i>Sec 7 / 2</i> • Survey techniques — <i>Sec 7</i> • Personnel monitoring equipment <i>Sec 7 / 1</i> <p>Equipment to be Used <i>Course A (12 hours)</i></p> <ul style="list-style-type: none"> • Operation and control of radiographic exposure equipment,, remote handling equipment, storage containers and pictures or models of source assemblies (pigtailes) • Storage, control and disposal of licensed material <i>Sec 6 & 7</i> • Inspection and maintenance of equipment <i>Sec 6</i> <p>Requirements of Pertinent Federal Regulations <i>Course A</i></p> <p>Case Histories of Accidents in Radiography <i>Sec 8</i></p>
<p>B. On-the-Job Training — 2 months or 320 hours</p>	<p>Under the supervision of a qualified radiographer</p>

> Did not commit

Rad Equip + O+E *Course A: 12*
 Basic Radio Physics *Course B: 16*
 Indust. Radiog. *Course C: 5*
 Procedures + Equip *Course D: (4-7)*

APPENDIX G

Requirement	Training Criteria
C. Certification by a Certifying Entity	Radiographer Certification is required by June 27, 1999. In lieu of submitting a description of the training program to meet 10 CFR 34.43(g) <u>above</u> , you may indicate that only certified radiographers will be employed. However, the licensee must ensure training on the subjects listed in 34.43(g) has been conducted.
34.43(a)(2)	
D. Completion of a Written Examination	Radiographer Until June 27, 1999, individuals may complete a written examination submitted and approved by NRC.
34.43(b)	
E. Must Receive Copies of and Instruction in: (Classroom Training — Approximately 8 hours in Length)	Radiographer NRC Regulations 10 CFR Part 34 • 10 CFR 30.7, 10 CFR 30.9, and 10 CFR 30.10 • Applicable Parts of 10 CFR Parts 19 and 20 • Applicable DOT Regulations and 10 CFR Part 71 The NRC License The Licensee's Operating & Emergency Procedures
F. Pass Written or Oral Examination on Licensee's Operating & Emergency Procedures	<ul style="list-style-type: none"> 50 questions Passing Grade 80% <p><i>34.43(b)(2) ... has demonstrated understanding by successfully completing a written test + demonstrated competence ...</i></p> <p><i>licensee stated 75% justify</i></p>
G. Receive Equipment Training (Approximately 4 hours in Length)	<p>Training includes:</p> <ul style="list-style-type: none"> Exposure devices Sealed sources Associated equipment Survey meters Daily inspection <p><i>Course B + Course A</i></p>
H. Demonstrate Understanding in Use of Equipment by Passing Practical Exam	<p>Questions on topics determined by the licensee. <i>34.43(b)(4)</i> Use the Six-Month Radiographer/Radiographer's Assistant Inspection Checklist as a potential source of questions. <i>practical exam</i></p>

Case history of accidents in radiography 34.43(g)(5)

> licensee needs to include this in the Outline

Committed in Response to RHT

licensee did not commit to providing copies of Reg's + License - only OE Procedures under Course C

Curriculum § II

> updated to 80%

Requirement <i>Safety</i>		Training Criteria
I.	Annual Refresher Training <i>every 12 mos.</i>	Review the following: <ul style="list-style-type: none"> • Radiation Safety review ✓ • New procedures or equipment ✓ • New regulations ✓ • Observations and deficiencies during audits and discussion of any significant incidents or accidents involving radiography ✓ • Employee questions ✓
J.	Records	To be maintained in accordance with 10 CFR 34.79.
34.43(c)		Assistant Radiographer
A.	<u>Must Receive Copies of and Instruction in:</u> (Classroom Training — Approximately 8 hours in Length)	NRC Regulations: <ul style="list-style-type: none"> • 10 CFR Part 34 • 10 CFR 30.7, 10 CFR 30.9, and 10 CFR 30.10 • Applicable Parts of 10 CFR Parts 19 and 20 • Applicable DOT Regulations and 10 CFR Part 71 The NRC License The Licensee's Operating & Emergency Procedures
B.	Pass Written Exam	<ul style="list-style-type: none"> • 25 - 50 questions • Closed Book • Passing Grade 80% ✓ 34.43(c)(3)
C.	Receive Equipment Training (Approximately 4 hours in Length)	Training under the supervision of a qualified radiographer that includes: <ul style="list-style-type: none"> • Exposure devices • Sealed sources • Associated equipment • Survey meters • Daily inspection
D.	Demonstrate Understanding in Use of Equipment by Passing Practical Exam	25 - 50 questions on topics determined by the licensee. NRC suggests using the Semiannual Radiographer Audit Checklist for a potential source of questions

APPENDIX G

Requirement		Training Criteria
E.	Annual Refresher Training	<p>Review the following:</p> <ul style="list-style-type: none"> • Any Significant item identified in the annual review of the Radiation Safety Program • New procedures or equipment • New regulations • Observations and deficiencies during audits and discussion of any significant incidents or accidents involving radiography • Employee questions
F.	Records	To be maintained in accordance with 10 CFR 34.79.

Item No.	Title and Criteria	Yes	Description Attached
8.	<p>TRAINING FOR RADIOGRAPHERS AND RADIOGRAPHER'S ASSISTANTS</p> <ul style="list-style-type: none"> • Submit an outline of the training to be given to prospective radiographer's assistants. Submit your procedures for experienced radiographers who have worked for another licensee. • Provide a copy of a typical examination and the correct answers to the examination questions. Indicate the passing grade. • Prior to June 27, 1999, you may affirm that all individuals acting as radiographers will be certified in radiation safety in lieu of providing a description of your training and examination program in the topics listed in 10 CFR 34.43(g). (All other training program descriptions must still be submitted.) • Specify the qualifications of your instructors in radiation safety principles and describe their experience with radiography. If training will be conducted by someone outside the applicant's organization, identify the course by title and provide the name and address of the company providing the training. • Describe the field (practical) examination that will be given to prospective radiographers and radiographer's assistants. • Describe the annual refresher training program, including topics to be covered and how the training will be conducted. • Submit your procedures for verifying and documenting the certification status of radiographers and for verifying that their certification remains valid. • Submit a description of your program for inspecting the job performance of each radiographer and radiographers' assistant at intervals not to exceed 6 months as described in 10 CFR 34.43(e). 	<div></div> <div></div> [] <div></div> <div></div> <div></div> <div></div> <div></div>	<div><input checked="" type="checkbox"/></div> <div><input checked="" type="checkbox"/></div> <div><input checked="" type="checkbox"/></div> <div><input checked="" type="checkbox"/></div> <div><input checked="" type="checkbox"/></div> <div><input checked="" type="checkbox"/></div> <div><input checked="" type="checkbox"/></div>

Item No.	Title and Criteria	Yes	Description Attached
9.	FACILITIES AND EQUIPMENT Permanent Radiography Installations Provide the following information for each permanent radiography installation: <ul style="list-style-type: none"> • An annotated sketch or drawing of the facility and its surroundings. • The scale to which the sketch or drawing is made. • The type, thickness and density of shielding materials on all sides, including the floor and the roof. • The locations of entrance ways and other points of access to the facility. • A description of the areas adjacent to the facility and the distance to these areas. Include information on areas adjacent to, above, and below the facility. • A description of the general location of each proposed permanent facility listed in Item 3 (e.g., located in an <u>industrial park</u>, an office complex, etc.) and its current use. • If a proposed permanent facility is a private residence, provide diagrams of the facility that include the building, the proposed restricted area(s), and adjacent areas, including above and below the restricted areas. • Restricted areas do not include residential quarters. • Explain how radiation levels in unrestricted areas will be maintained at less than 1 mSv (100 millirem) per year. • A description of the visible-audible signal system or entrance control system and its locations. • The results of radiation-level calculations or actual radiation measurements adjacent to, above, and below the facility. 		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> No Fixed access to the roof. <input checked="" type="checkbox"/> single-story. nearest occupied residence is 300 feet <input type="checkbox"/> Not Applicable <input type="checkbox"/> <input checked="" type="checkbox"/> TO Model 492 gamma alarm; - red visible lights - audible alarm - roof mounted video camera w/ display rad. control, to - roof is not easily accessible + porting it determined to be adequate

Variances are considered and found acceptable ~
 Since construction of roof and dose rates exceed
 2mrem in any one hour.

Note: Approval is based on calculations. It was noted that the survey does not correspond to the calculation and requested licensee to provide an updated survey. The updated survey is still significantly lower than the calculations. Due to the potential variance in survey results due to distance/proximity to source beam location, the review was performed based on calculations only.
 RSB,

entry.	entry.	entry.	entry.	entry.
Currently 89 Ci	Booth 1	Ir-192 ($\frac{100}{Ci}$)	Calculated D.R. = 95 mR/hr	(11.2 mR/hr)
53 Ci	Booth 1	Co-60 ($\frac{100}{Ci}$)	Calculated D.R. = 99.8 mR/hr	(56 mR/hr)
89 Ci	Booth 2	Ir-192 ($\frac{100}{Ci}$)	Calculated D.R. = 95 mR/hr	(11.2 mR/hr)
		only		

Item No.	Title and Criteria	Yes	Description Attached
9.	FACILITIES AND EQUIPMENT Field Stations Provide the following information for each field station: <ul style="list-style-type: none"> Describe the storage location(s) at the address(es) listed in Item 3 of the application and submit a diagram showing where the radiography camera will be stored at the field stations. Indicate whether radiography will be performed at the place of business outside of a permanent facility as if the work was "in the field." For radiography performed at the place of business as if the work was "in the field," provide a diagram of the location where radiography may be performed and its surroundings, including a description of adjacent property. 		<input checked="" type="checkbox"/> <input type="checkbox"/> No, Storage & dispatch only, see designation on address page. <input type="checkbox"/> Not applicable
10.	RADIATION SAFETY PROGRAM Audit Program The applicant is <u>not</u> required to, and should not, submit its audit program to the NRC for review during the licensing phase.	Need Not Be Submitted With Application	

Per Telecom w/ Lloyd Gray on Oct 23, 2005:

* Note: in Combining license No. 42-27593-02 into current license No. 42-27593-01 ~ there were 3 locations which needed to be deleted:

- 277 West Main Street, Waterbury CT [Requested Removal 11/17/03]
- 3600 C Board Rd., York, PA [Amendment #16 Requested Removal 10/1/03-469]
- 1117 Beach Avenue, Beachwood, NJ [Requested Removal 6/23/03-469]

These locations had been added to license No 42-27593-02, although no material was stored at these locations under that license. Mr. Gray indicated that J. Montgon added these locations to the -02 license, when requested for the -01 license. And when the locations were requested to be removed, the NRC only removed them from the -01 license. There was only radiography material at these locations under -01 license, since no material was stored at these locations under -02 license AND Survey license, since no material was stored at these locations under -02 license.

Item No.	Title and Criteria	Yes	Description Attached
10.	Instruments We will possess and use calibrated and operable radiation survey meters. Calibration will be performed by a NRC or Agreement State licensee specifically authorized to perform instrument calibration. Calibration is to be performed in-house and the model procedures in Appendix J will be followed. Calibration is to be performed in-house and alternate procedures will be followed. Identify the qualifications of the individuals who will perform the calibrations.	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	 <i>licensees submitted adequate procedures to perform calibrations</i>
10.	RADIATION SAFETY PROGRAM Material Receipt and Accountability Physical inventories will be conducted and documented at quarterly intervals (not to exceed 3 months) to account for all sealed sources containing byproduct material and devices containing depleted uranium received and possessed under the license.	<input checked="" type="checkbox"/>	<i>in-house. RSB</i>
	Minimization of Contamination The applicant is <i>not</i> required to provide a response to the minimization of contamination if the applicant's responses meet the criteria for the following sections: "Radioactive Material - Sealed Sources and Devices," "Facilities and Equipment," "Radiation Safety Program - Leak Tests," "Radiation Safety Program - Operating and Emergency Procedures," and "Waste Management - Sealed Source/DU Device Transfer and Disposal."	Need Not Be Submitted With Application	


[illegible]

Item No.	Title and Criteria	Yes	Description Attached
10.	RADIATION SAFETY PROGRAM Public Dose The applicant is <u>not</u> required to, and should not, submit a response to the public dose section during the licensing phase. This matter will be inspected during an inspection.		Need Not Be Submitted With Application
10.	Quarterly Maintenance Submit the procedures to NRC for review and approval as Operating and Emergency Procedures and/or as Shipping Package Procedures as needed. Before using a new sealed source/device combination, we will have written inspection and maintenance procedures that address the use of the new equipment as a Type B transport package. In addition, we will provide training to radiographic personnel before using a new sealed source/device combination.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10.	Operating and Emergency Procedures Handling and Use of Sealed Sources and Radiography Exposure Devices Submit operating and emergency procedures which provide step-by-step instructions for using each type of radiographic device. Instructions for crank out devices should be separate from those for pipeliner devices. Submit operating and emergency procedures which provide instructions for performing source exchanges. <i>AET-650L.</i>		<input type="checkbox"/> <i>See attached Checklist *</i> <input checked="" type="checkbox"/>
10.	Methods and Occasions for Conducting Radiation Surveys Submit operating and emergency procedures which, where applicable, include each of the surveys included in Table 8.1		<input checked="" type="checkbox"/>

* 660's, 680's, 880's, 741's, 676's, IR-100, licensee committed to have procedures prior to purchasing using any other exposure devices.
same as 680's for Co-60

Item No.	Title and Criteria	Yes	Description Attached
10.	Operating and Emergency Procedures Methods for Controlling Access to Radiographic Areas Submit the procedures to control access to radiographic operations and storage areas. <i>Ch 6</i>		[4] ✓
10.	Methods and Occasions for Locking and Securing Radiographic Exposure Devices, Storage Containers, and Sealed Sources Submit operating and emergency procedures that include procedures for locking and securing radiographic equipment.		[4] ✓
10.	Personnel Monitoring and the Use of Personnel Monitoring Equipment Submit operating procedures that include instructions for proper use of personnel monitoring equipment. <i>Part A Ch 4</i>		[4] ✓
10.	Transporting Sealed Sources to Field Locations, Securing Exposure Devices and Storage Containers in Vehicles, Posting Vehicles, and Controlling Sealed Sources During Transportation Submit operating and emergency procedures for transporting sealed sources containing byproduct material, exposure devices, and source exchangers. <i>Part B Ch 5</i>		[4] ✓
10.	Daily Inspection and Maintenance of Radiographic Equipment Submit operating and emergency procedures for daily inspection and maintenance of radiographic equipment. <i>Part A Ch 7</i>		[4] ✓

Item No.	Title and Criteria	Yes	Description Attached
10.	Operating and Emergency Procedures Rate Meter Alarms or Off-scale Dosimeter Readings Submit operating and emergency procedures to address rate meter alarms or off-scale dosimeters.		<input checked="" type="checkbox"/>
10.	Procedure for Identifying and Reporting Defects and Non-compliance as Required by 10 Cfr Part 21 Submit operating and emergency procedures for notifying management of equipment malfunction or defect.		<input checked="" type="checkbox"/>
10.	Notification of Proper Persons in the Event of an Accident Submit operating and emergency procedures that include appropriate instructions for notifying the RSO and/or other personnel in the event of an emergency.		<input checked="" type="checkbox"/>
10.	Minimizing Exposure of Persons in the Event of an Accident--Emergency Procedures Submit operating and emergency procedures that include instructions for minimizing exposure of persons in the event of an accident.		<input checked="" type="checkbox"/>
10.	Source Retrieval We will <u>not</u> perform source retrievals and will use the services of a person specifically licensed by the NRC or an Agreement State to perform the retrievals of our sources. Submit operating and emergency procedures that include instructions for source retrieval procedures and specific training.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Item No.	Title and Criteria	Yes	Description Attached
10.	<p>Operating and Emergency Procedures</p> <p>Maintenance of Records</p> <p>Submit operating and emergency procedures which ensure proper maintenance of records.</p>		
11.	<p>WASTE MANAGEMENT</p> <p>Disposal or Transfer of Radiography Sealed Sources Containing Byproduct Material or Devices Containing Depleted Uranium</p> <p>The applicant does <u>not</u> need to provide a response to this item during the licensing process. However, the applicant should establish and include waste disposal procedures in its radiation safety program.</p>		<p>Need Not Be Submitted With Application</p>