



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

May 14, 2001

GENERIC USE

MEMORANDUM TO: Dwight D. Chamberlain, Director  
Division of Nuclear Materials Safety, RIV

FROM: John W.N. Hickey, Chief *John W.N. Hickey*  
Materials Safety and Inspection Branch  
Division of Industrial and  
Medical Nuclear Safety, NMSS

SUBJECT: TECHNICAL ASSISTANCE REQUESTS: GLOBAL X-RAY &  
TESTING CORPORATION, DATED JULY 28, 2000 LOUISIANA  
LICENSE NUMBER LA-0577-L01; BAYOU TESTING SERVICES  
INC. DATED AUGUST 28, 2000, LOUISIANA LICENSE NUMBER  
LA-7112-L01; ACCURATE NDE & INSPECTION L.L.C., DATED  
SEPTEMBER 18, 2000, LOUISIANA LICENSE NUMBER LA-10207-  
L01, REQUEST FOR EXEMPTION FROM 10CFR34.20(A)(1).

**Request:**

Technical Assistance Requests (TAR's): from Global X-ray & Testing Corporation, dated July 18, 2000, Louisiana License Number LA-0577-L01; Bayou Testing Services Inc., Louisiana License Number LA-7112-L01, dated August 28, 2000; and Accurate NDE & Inspection L.L.C., dated September 18, 2000, Louisiana License Number LA-10207-L01 are seeking an exemption from 10CFR34.20(a)(1) in order to use "PIPELINER" radiographic inspection devices for offshore radiography activities on lay barges, in the Gulf of Mexico, an area under federal jurisdiction.

**Finding:**

NRC staff has reviewed the applications, and concluded that the information submitted by the applicants, when supplemented by information developed by the staff, is sufficient to make a determination that with the conditions as describe below, these exemptions may be granted.

**Action:**

Notwithstanding the requirements of 10CFR34.20(a)(1), and pursuant to 10CFR34.11 and 10CFR150.20, applicants would be authorized to use Gamma Industries Model Pipeliner I, Gamma Industries Model 201, SPEC Model SPEC-CHECK model I, and SPEC-CHECK Model II pipeliner exposure devices for conventional pipelining radiography operations, on lay barges in areas under federal jurisdiction, subject to written commitments, by the applicants, to the following compensatory safety measures:

1. To reduce external dose rates, the radioactive source within the device shall be limited to 100 Ci;
2. To limit the risk of failure of a dropped device, the maximum height at which the device is to be operated shall be limited to 5 feet above the barge deck;

CONTACT: Michael Raddatz, NMSS/IMNS  
(301) 415-6334

3. To prevent the device from accidentally falling from the pipe, onto the barge deck, during operation, the device shall be secured to the pipe using robust attachment mechanisms, such as chains, binders, and/or steel springs;
4. To minimize personnel exposure, especially to extremities, whenever practical, extension rods, with a minimum length of 3 feet, shall be used. When extension rods are deemed impractical, the reasons must be documented, by the authorized user, prior to commencing radiography operations;
5. To document exposure to the extremities, during pipeliner use operators must, in addition to normal whole body dosimetry, wear extremity dosimetry on the wrist of the hand which could receive the highest exposure; and
6. This exemption expires on January 31, 2003.

**DISCUSSION:****Why the exemption is requested:**

The applicants contend that due to the design of the lay barges and the limited space that is available, the use of the pipeliner would allow them to conduct their operations in an efficient and safe manner. They also state that currently there are no other devices that would satisfy the requirement to allow this type of work to be performed as efficiently. According to the applicants, using another type of device would increase the radiation area, require more area to work (which may be unavailable due to the design of the lay barges), and create higher doses to the workers. The NRC has determined that, subject to compensatory safety measures specified above, it will grant the exemptions requested. However, the staff believes that the applicants should explore alternatives that do not require an exemption and therefore, the staff has included a time limit on the exemptions.

Requests for exemptions are considered on a case-by-case basis; however, the information and findings presented in this response can be used to evaluate such requests for similar devices. If they are found to be bounded by these findings, the exemption may be granted without further headquarters review, subject to the same time constraints, i.e. expiring on Jan. 31, 2003.

Prior to authorizing these exemptions an Environmental Assessment (EA) must be prepared, and noticed in the Federal Register (Attachment 5). We will notify you when the EA is published.

**Attachments:**

1. TAR's dated: July 28, 2000; September 12, 2000; and October 11, 2000
2. Global X-ray & Testing Corporation Letter, dated July 11, 2000
3. Bayou Testing Services Inc. Letter dated August 28, 2000
4. Accurate NDE & Inspection L.L.C. Letter, dated September 18, 2000
5. Federal Register Notice with Environmental Assessment

MEMORANDUM TO: Dwight D. Chamberlain, Director  
Division of Nuclear Materials Safety, RIV

SUBJECT: TECHNICAL ASSISTANCE REQUEST'S: GLOBAL X-RAY &  
TESTING CORPORATION, DATED July 28, 2000 LOUISIANA  
LICENSE NUMBER LA-0577-L01; BAYOU TESTING SERVICES  
INC. LOUISIANA LICENSE NUMBER LA-7112-L01 DATED  
SEPTEMBER 12, 2000; ACCURATE NDE & INSPECTION L.L.C.,  
DATED SEPTEMBER 18, 2000, LOUISIANA LICENSE NUMBER  
LA-10207-L01, REQUEST FOR EXEMPTION FROM  
10CFR34.20(a)(1).

**TAR DISTRIBUTION:**

Hard copy

NRC File Center  
IMNS r/f  
NMSS r/f

**E-Mail only**

FCostello, RI	RBellamy, RI
MShanbacky, RI	JKinneman, RI
SVillar, RI	
JHenson, RII	CHosey, RII
TDecker, RII	RWoodruff, RII
JMadera, RIII	CFrazier, RIII
IMPhillips, RIII	GWright, RIII
CCain, RIV	BSpitzberg, RIV
LHowell, RIV	ECollins, RIV
PLohaus, OSP	JLieberman, OE

**Hard copy w/incoming & E-mail**

GPangburn, RI  
DCollins/MLesser, RII  
CPederson, RIII  
DChamberlain, RIV  
MFuller, RII (Navy Coord.)  
TGaines, RIV (Airforce Coord)

5. To prevent the device from accidentally falling from the pipe, onto the barge deck, during operation, the device shall be secured to the pipe using robust attachment mechanisms, such as chains, binders, and/or steel springs;
6. To minimize personnel exposure, especially to extremities, whenever practical, extension rods, with a minimum length of 3 feet, shall be used. When extension rods are deemed impractical, the reasons must be documented, by the authorized user, prior to commencing radiography operations;
7. To document exposure to the extremities, during pipeliner use operators must, in addition to normal whole body dosimetry, wear extremity dosimetry on the wrist of the hand which could receive the highest exposure; and
8. This exemption expires on January 31, 2003.

### **DISCUSSION:**

#### **Why the exemption is requested:**

The applicants contend that due to the design of the lay barges and the limited space that is available, the use of the pipeliner would allow them to conduct their operations in an efficient and safe manner. They also state that currently there are no other devices that would satisfy the requirement to allow this type of work to be performed as efficiently. According to the applicants, using another type of device would increase the radiation area, require more area to work (which may be unavailable due to the design of the lay barges), and create higher doses to the workers. The NRC has determined that, subject to compensatory safety measures specified above, it will grant the exemptions requested. However, the staff believes that the applicants should explore alternatives that do not require an exemption and therefore, the staff has included a time limit on the exemptions.

Requests for exemptions are considered on a case-by-case basis; however, the information and findings presented in this response can be used to evaluate such requests for similar devices. If they are found to be bounded by these findings, the exemption may be granted without further headquarters review, subject to the same time constraints, i.e. expiring on Jan. 31, 2003.

Prior to authorizing these exemptions an Environmental Assessment (EA) must be prepared, and noticed in the Federal Register (Attachment 5). We will notify you when the EA is published.

#### **Attachments:**

1. TAR's dated: July 28, 2000; September 12, 2000; and October 11, 2000
2. Global X-ray & Testing Corporation Letter, dated July 11, 2000
3. Bayou Testing Services Inc. Letter dated August 28, 2000
4. Accurate NDE & Inspection L.L.C. Letter, dated September 18, 2000
5. Federal Register Notice with Environmental Assessment

DOCUMENT NAME: g:\RaddatzM\pipeliner Exemption.wpd

\*See previous concurrence

OFC	MSIB	C	MSIB	N	MSIB	N	OGC	N				
NAME	MGRaddatz*		F Sturz*		J Hickey		STreby*					
DATE	04/ /01		04/ /01		05/14/01		05/2/01					

**OFFICIAL RECORD COPY**

- deemed impractical, the reasons must be documented, by the authorized user, prior to commencing radiography operations;
5. To document exposure to the extremities, during pipeliner use, operators must, in addition to normal whole body dosimetry, wear extremity dosimetry on the wrist of the hand which could receive the highest exposure; and
  6. This exemption expires after January 31, 2003.

## **DISCUSSION:**

### **Why the exemption is requested:**

The Applicants contend that due to the design of the lay barges and the limited space that is available, the use of the pipeliner would allow the licensee to conduct their operations in an efficient, and safe manner. The licensee also states that currently there are no other devices that would satisfy the requirement to allow this type of work to be performed as efficiently. Using another type of device would increase the radiation area, require more area to work (which may be unavailable due to the design of the lay barges), and create higher doses to the workers. The NRC has determined that, subject to compensatory safety measures specified above, it will grant the exemptions requested. However, the Staff believes that alternatives should be explored, so it has included a time limit on the exemptions.

Requests for exemptions are considered on a case-by-case basis; however, the information and findings presented in this response can be used to evaluate such requests for similar devices. If they are found to be bounded by these findings, the exemption may be granted without further headquarters review.

Prior to authorizing these exemptions an Environmental Assessment must be prepared, and noticed in the Federal Register (Attachment 5)

### **Attachments:**

1. TAR's dated: July 28, 2000; September 12, 2000; and October 11, 2000
2. Global X-ray & Testing Corporation Letter, dated July 28, 2000
3. Bayou Testing Services Inc. Letter dated August 28, 2000
4. Accurate NDE & Inspection L.L.C. Letter, dated September 18, 2000
5. Federal Register Notice with Environmental Assessment

### **DOCUMENT NAME:**

To receive a copy of this document, indicate in the box:  
 "C" = Copy w/o att/encl. "E" = Copy w/att/encl. "N" = No copy

*no duplication subject to edits*

OFC	MSIB	C	MSIB	N	MSIB	N	OGC	N				
NAME	MGRaddatz	X	F Sturz	X	J Hickey	X	STreby	X				
DATE	04/ /01		04/ /01		04/ /01		04/ /01					

**OFFICIAL RECORD COPY**

D. Chamberlain