

TO: License Fee and Accounts Receivable Branch  
FROM: Region IV - WCFO  
SUBJECT: VOIDED APPLICATION

Applicant: CTI, Inc.  
Control Number: 572220  
License No.: 50-19202-01  
Docket No.: 030-17129  
Date Voided: 4/2/97

Reason for Void:

34.20 exemption  
The licensee withdrew the request for the braided brass tubes and decided to use SPEC equipment instead. The proposal to use the SPEC equipment also involves a 34.20 exemption.  
See the letter of 3/27/97. NOTE: a TAR had been written for the braided brass tubes (Sept. 25, 1995). A new one will be prepared to forward the request of 3/27/97.

Beth A. Prange 4/2/97  
Signature Date

Attachment:  
Official Record Copy of  
Voided Action

FOR LFARB USE ONLY

Final Review of VOID completed:

☐ Refund Authorized and processed  
☐ No Refund Due  
☒ Fee Exempt or Fee Not Required

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Log completed ☒  
Processed by: Jim

9704230213 970402  
PDR ADOCK 03017129  
C PDR



ML40  
0/1

BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM  
AND  
REGIONAL LICENSING SECTIONS

(FOR LFMS USE)  
INFORMATION FROM LTS

PROGRAM CODE: 03320  
STATUS CODE: 2  
FEE CATEGORY: 30 2B  
EXP. DATE: 19951031  
FEE COMMENTS:  
DECOM FIN ASSUR REQD: N

RECEIVED  
NRC  
RIV WCFO

95 SEP 32 AM 10:56

LICENSE FEE TRANSMITTAL

A. REGION V

1. APPLICATION ATTACHED  
APPLICANT/LICENSEE: CTI, INC.  
RECEIVED DATE: 950907  
DOCKET NO: 3017129  
CONTROL NO.: 572220  
LICENSE NO.: 50-19202-01  
ACTION TYPE: AMENDMENT

2. FEE ATTACHED  
AMOUNT: None \*  
CHECK NO.: None

3. COMMENTS

SIGNED  
DATE

John Garcia  
9-25-95

B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE 03 IS ENTERED)

1. FEE CATEGORY AND AMOUNT: 30 2B

FEE NOT REQUIRED

2. CORRECT FEE PAID. APPLICATION MAY BE PROCESSED FOR:  
AMENDMENT ✓  
RENEWAL  
LICENSE

Add Info 572193

3. OTHER

SIGNED  
DATE

Lita Messier  
9/28/95

\* Fee was already paid under  
Control # 572193-renewal request

RECEIVED BY LFMS	
Date	<u>9/27/95</u>
Log	<u>Sep 1</u>
By	<u>Jim</u>
Date Completed	<u>9/28/95</u>

**CTI Alaska, Inc.****Facsimile Lead Sheet**DATE: 04 / 02 / 97

ATTENTION: Beth Prange  
COMPANY: U.S. Nuclear Regulatory Commission, WCFO  
LOCATION: 1450 Maria Lane, Suite 210, Walnut Creek, CA 94596-5368  
TELEPHONE: ( 510 ) 975-0250 FAX NO.: ( 510 ) 975-0381  
FROM: Sandy N. Watson, RSO

**CTI Alaska, Inc.**  
**4831 Old Seward Highway, Suite 107**  
**Anchorage, Alaska 99503**

Confirmation No.: (907) 562-4442 Fax No.: (907) 562-5093

This transmission consists of 7 page(s), including this cover sheet. If there are any problems in receiving this fax, please contact the sender.

COMMENTS: Letter to NRC dated 03-27-97  
Application for Exemption, 10 CFR 34.51

Confidence Through Inspection



March 27, 1997

**CTI**  
ALASKA

U. S. Nuclear Regulatory Commission  
WCFO  
1450 Maria Lane, Suite 210  
Walnut Creek, CA 94596-5368

Attention: Frank Wenslawski, Branch Chief

Subject: Application for Exemption, 10 CFR Part 34.  
License number 50-19202-01

Gentlemen:

Pleased be advised that CTI Alaska, Inc. is dropping its request for Technical Assistance, control No. 572220, dated August 31, 1995, exemption to use braided copper source exposure tubes.

*Confidence  
Through  
Inspection*

However, CTI Alaska, Inc. requests that the NRC grant an exemption to the rules stated in Part 34.20 "Performance requirements for radiography equipment," whereby it refers to modification of exposure devices and associated equipment such as the source guide tubes.

CTI Alaska, Inc.  
4831 Old Seward Hwy  
Suite 107  
Anchorage, AK 99503

Tel: 907-562-4442  
Fax: 907-562-5093

We assume that "associated equipment" means that components such as the source guide tubes be part of an approved system. As Part 34.20 does not specifically address mixing of components, such as source guides, from one approved radiographic system to another, this is the reason for our asking for an exemption, if there is in fact a requirement to do so in this case.

CTI Alaska has two (2) models of radiographic systems (Amersham 660B and INC IR-100) that fall within the guidelines of Part 34.20. We are using the devices as an approved system and are not mixing associated equipment since we assign the same model devices and associated equipment to each facility and to long term projects.

As ANSI N432 does not require low temperature testing of the devices or associated equipment, it has left CTI Alaska and its radiographic operations in





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Alaska, which works in harsh arctic winter conditions approximately eight (8) months of the year, with a very real documented problem of source guide tubes continuously cracking and breaking. We believe this should be included as a safety design feature of the approved source guide tubes as the continual cracking and breaking compromises safety and is dangerous to radiographers and is also very expensive. All of our source guide tubes have experienced cracking, some have even been covered with arctic shrink tubing. We have purchased approximately one (100) hundred source guide tubes this past year to support an average of nine (9) exposure devices utilized on a daily basis.

We believe we have identified a remedy to this particular problem. If we are granted an exemption to utilize source guide tubes from a manufacturer of different exposure devices which meet the requirements of N432 and is specifically designed for use in winter weather and remains pliable during very low temperatures, this then would be the solution to our problem.

The nomenclature of this source guide tube is as follows (as is currently known):

Manufacture	- Source Production & Equipment Company 113 Teal Street St. Rose, Louisiana 70087
Part Number	- 228007
Description	- Heavy duty 7' Low temperature source tube T.O. with threaded end caps; 3/4" diameter tube; steel with cover of black soft rubber (In appearance); heavy duty brass fittings.
SPEC Contact	- Kenny Carrington
Telephone	- (504)464-9471

Mr. Kenny Carrington of SPEC has stated that he will get us manufacturing data and a copy of their submittal to the state of Louisiana for testing of their winter designed source guide tube and connectors to ANSI N432 requirements.

This request for exemption is based upon the following operational particulars:

a) CTI Alaska performs radiography in the state of Alaska with work being performed in outside ambient air temperature that approach -60 degrees F. When combined with wind, the resulting chill effect on equipment can exceed -100 degrees.



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ALASKA

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b) As a result of such extreme temperature conditions CTI Alaska has found that the approved source guide tube materials literally freeze in position when used in this environment, even when used for short periods of time. The tubes will then crack or split when attempts are made to reposition the tube or roll the material up for storage. Cracking of the tubes allows melted snow to enter the guide tube and then can form ice plugs that could effect safe travel of the source. This causes unnecessary exposures to the radiographers because of work stoppages and could cause source hang-ups within the source guide tube.

c) Current ANSI N432 approved source guide tubes that are available in systems other than SPEC's winter design have not proven effective in harsh winter conditions.

d) The SPEC 228007 source guide tube appears to be a very heavy duty constructed component.

e) CTI has experienced much less of a problem with crank control tubes as they are different in materials utilized and the number of plies used in construction and has a smaller inside diameter.

We have tested this source guide tube utilizing one of our training (Dummy) exposure devices along with the standard source guide tubes and have noted that the SPEC tube remains flexible through various operating temperature ranges thus allowing safer radiography in the inclement working conditions that CTI Alaska, Inc. encounters.

We also noted that the SPEC guide tube end piece threads match and the heavy duty design is very rugged and it is compatible to the Amersham 660B and the INC IR-100 exposures devices. This source guide tube does not comprise safety as it meets the requirements of ANSI N432, is compatible to the Amersham 660B and the INC IR-100 devices, and appears to be better designed.

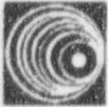
We therefore request an exemption from the aforementioned requirements and request approval to utilize the SPEC 228007 source guide tube with Amertest 660B and the Industrial Nuclear Company IR-100 exposure device systems.

Stated below are apparent reasons why CTI would expect serious consideration by the NRC to grant our exemption:



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- a) Safety to our radiographers and the public in which it would,
  - Reduce unnecessary exposures to our radiographers and assistant radiographers
  - Reduce possible source hang-ups
- b) Increase production for our clients;
  - Eliminate work stoppages to replace equipment
- c) It would make it much easier to teach good radiographic safety practices if we could provide radiographers with the safest components available;
  - Promote employee trust in the fact that CTI is willing to pay for the best equipment available and that the NRC allows its licensees to use the safest equipment possible.
- d) Save on total costs of source guide tubes even though they cost more on an individual basis;
  - Approximately one hundred (100) purchased in 1996.
- e) Information Notice 95-58 states "Exemptions to 10 CFR 34.20 may be considered only for limited special or unique cases where the licensee can demonstrate that the engineered safety features, use limitations, and procedures would compensate for not meeting the requirements and afford similar or increased radiation safety protection";
  - we have discussed extreme temperatures which create unique problems, the fact that no source guide tubes have been available that required testing for low temperature, the fact that there is a source guide tube available that meets ANSI N432 and is designed for low temperature usage and appears to be more rugged in construction, and would reduce exposures to our radiographers and is needed for radiation safety.
- f) Part 34.20, b, (3) states "Modification of any exposure devices and associated equipment is prohibited, unless the design of any replacement component, including



CTI  
ALASKA

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source holder, source assembly, controls or guide tubes would not compromise the design safety features of the system";

- we have discussed the fact that the SPEC source guide tube is compatible to the Amersham 660B and the INC IR-100 exposure devices, would not compromise the design safety features of the systems, and would increase radiation safety.

Should additional information or clarification be needed, please contact the writer.

Thank you very much for your consideration of our request.

Sincerely,

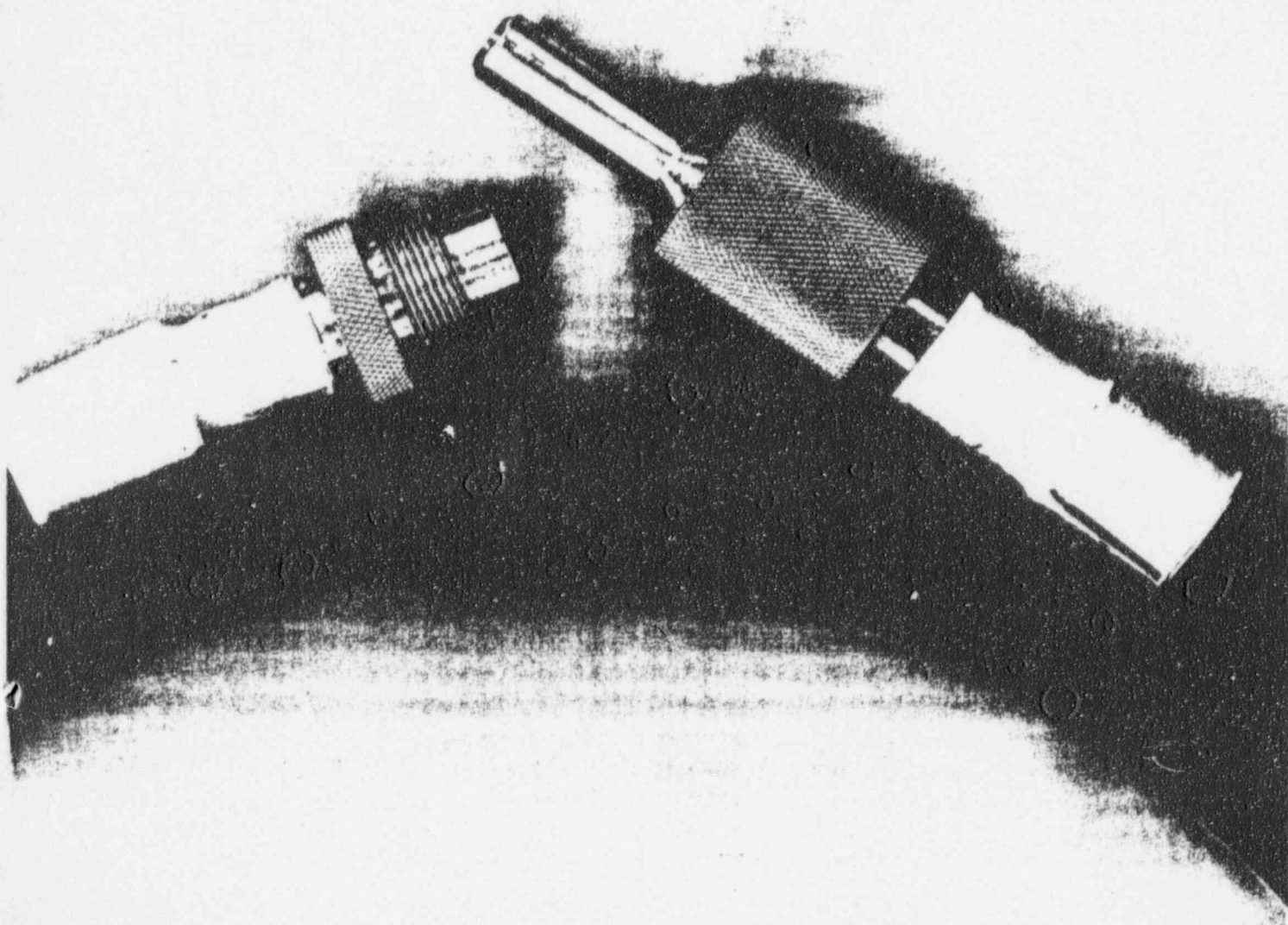
Sandy N. Watson  
Radiation Safety Officer

Encl: Copy/photo of SPEC tube

CC: G.E. Haugen  
K.E. Remele  
R.N. Fox  
J. Arveson  
M. Thorne/F. Noble  
T. Karnowski  
RSO File  
nReliCeN

SOURCE PRODUCTION & EQUIPMENT COMPANY

GUIDE TUBE 228007





00/00/00 3/18/97

TELEPHONE OR VERBAL CONVERSATION  
RECORDTIME 10:15  
00:00 am/pm☐ INCOMING CALL☒ OUTGOING CALL☐ VISIT

PERSON CALLING:

OFFICE/ADDRESS:

PHONE NUMBER:

PERSON CALLED:

OFFICE/ADDRESS:

PHONE NUMBER:

Sandy Watson

CTI, Inc.

(907) 562-4442

## CONVERSATION

SUBJECT -

Control No. 572220

SUMMARY -

During the IMPEP review, I was questioned about this case.

The auditor suggested that it would be more appropriate to request an exemption under 34.51. Give specifics as to why following Part 34 requirements would not be as safe as using guide tubes designed for cold weather.

Supply specifics re manufacturer information + testing. Give information on failure of approved equipment. State why different equipment is needed for worker + public safety.

- B. Prange

REFERRED TO:

☐ ADVISE ME ON ACTION  
TAKEN

ACTION REQUESTED:

INITIALS:

DATE:

ACTION TAKEN:

INITIALS:

DATE:



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV

Walnut Creek Field Office  
1450 Maria Lane  
Walnut Creek, California 94596-5363

JUL 09 1996

CTI Alaska, Inc.  
ATTN: Sandy N. Watson  
Radiation Safety Officer  
4831 Old Seward Highway, Suite 107  
Anchorage, Alaska 99503-7450

SUBJECT: EXEMPTION REQUEST

This is in reference to your request dated August 31, 1995 for an exemption from the requirements of 10 CFR 34.20 (a) and (c)(5). Your request was reviewed by NRC Headquarters, and additional information was identified as being necessary to complete the review. Most notably, in Information Notice 95-58 (copy enclosed), it was stated that exemptions from 34.20 would be granted only in limited or unique cases " where the licensee can demonstrate that the engineered safety features, use limitations, and procedures would compensate for not meeting the requirements and afford similar or increased radiation safety protection." In your reply, you should submit adequate information to demonstrate that equivalent or increased radiation safety protection is afforded by engineered safety considerations, use limitations, and/or additional radiation safety procedures.

The specific information requested relating to 10 CFR 34.20 requirements is as follows:

1. Provide manufacturing data on the braided brass guide tube which you use. Specify its model number and materials composition. Describe its construction, and supply manufacturing specifications and drawings.
2. Provide information on materials performance testing of the braided brass guide tubes which has been performed either by CTI or by the manufacturer--especially any tests which relate to 10 CFR 34.20, such as kinking or crushing tests. Useful supplemental information might also include wear data, lubricant performance, and useful life of the equipment. You may submit engineering analysis to demonstrate the applicability of previously performed testing on similar individual radiography equipment components, instead of performing the testing at CTI.
3. Describe the crushing and kinking forces which are likely to be encountered during the use of the braided brass guide tubes. Justify why these forces are appropriate. Describe any unusual forces associated with the cold weather application of the guide tube.

4. Describe any special maintenance or use procedures unique to the braided brass guide tubes.
5. Specify whether similar problems are encountered with the control tubes, which are usually plastic-jacketed. If similar problems are not encountered, specify why they do not occur.
6. Describe the connectors which you use. Identify their manufacturers. Confirm that the guide tube-head connections meet the tensile test for control units as specified in ANSI-N432 and required by 10 CFR 34.20 (c)(8).

We will continue the review of your exemption request upon receipt of this information. Please reply in duplicate, and refer to Mail Control 572220.

Sincerely,

*Beth A. Prange*

Beth A. Prange  
Sr. Health Physicist (Licensing)  
Materials Branch

Enclosure: As Stated

Docket: 030-17129  
License: 50-19202-01  
Control: 572220

bcc:

Docket File  
WCFO Inspection File  
LFDCB, T-9 E10  
~~State of AK (License Only)~~

DOCUMENT NAME: G:\beth\572220

To receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

MB	N							
BPrange	BaP							
07/9/96	07/ /96	07/ /96	07/ /96	07/ /96	07/ /96	07/ /96	07/ /96	07/ /96

OFFICIAL RECORD COPY



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

June 28, 1996

95 JUL -9 11 09:54

MEMORANDUM TO: Frank A. Wenslawski, Chief  
Materials Branch (WCFO)  
Division of Nuclear Materials Safety, RIV

FROM: Larry W. Camper, Chief *Larry W. Camper*  
Medical, Academic, and Commercial  
Use Safety Branch  
Division of Industrial and  
Medical Nuclear Safety, NMSS

SUBJECT: TECHNICAL ASSISTANCE REQUEST; CTI ALASKA, INC.;  
LICENSE NO. 50-19202-01; CONTROL NO. 572220

I am responding to your technical assistance request (TAR) dated September 25, 1995 (Attachment 1), transmitting letter dated August 31, 1995, from CTI, Alaska, Inc. (CTI), requesting an exemption from 10 CFR 34.20(a) and (c)(5). 10 CFR 34.20(c)(5), requires guide tubes to "...have passed the crushing tests for the control tube as specified in ANSI-N432 and a kinking resistance test that closely approximates the kinking forces likely to be encountered during use." The exemption would allow CTI to use a braided brass, source guide tube.

CTI indicates that they need the exemption "based on operational necessity in that:"

1. CTI performs radiography in the State of Alaska where outside ambient air temperatures can drop to below -60°.
2. CTI has found that under such extreme temperature conditions that a traditional source guide tube will split or crack.
3. CTI has used braided brass guide tube since the early 1980's, without an incident related to kinking or crushing, etc.

CTI describes the braided brass guide tube material as able to remain flexible under the extremely cold working conditions found in Alaska. The manufacturer of the material, Co-Operative Industries, describes the material as "duraflex pressure tight flexible braided bronze and intercore brass metal hose," applicable for use with fluids and gases. The Type H-3 is described as explosion proof and the Type H-6 is described as abrasion resistant. CTI does not indicate which type(s) of hose they use for guide tube. In addition, there is no information concerning any performance testing to which the tubes may have been subjected.

CONTACT: Anthony S. Kirkwood, NMSS  
(301) 415-6140



The intent of the crushing and kinking resistance tests found in the 10 CFR 34.20(c)(5) requirements, is to prevent the source assembly from hanging up in the guide tube and creating a condition that could lead to radiation overexposures. CTI has not yet demonstrated that by using the braided brass guide tube, they would compensate for not meeting the requirements, and afford similar or increased radiation safety protection.

The Commission directed the Nuclear Regulatory Commission staff to publish Information Notice 95-58 (IN 95-58): "10 CFR 34.20; FINAL EFFECTIVE DATE" (Attachment 2), dated December 18, 1995. The Information Notice states, "Exemptions to 10 CFR 34.20 may be considered only for limited special or unique cases, where the licensee can demonstrate that the engineered safety features, use limitations, and procedures would compensate for not meeting the requirements and afford similar or increased radiation safety protection."

CTI's letter does not provide sufficient information to determine whether the licensee can demonstrate that the engineered safety features, use limitations, and/or procedures would compensate for not meeting the requirements and afford similar or increased radiation safety protection. CTI needs to provide additional information relating to 10 CFR 34.20 requirements:

1. CTI should provide manufacturing data on the braided brass, guide tube they use (Type H-3 and/or H-6), such as materials composition and construction, and manufacturing specifications and drawings.
2. CTI should provide information on materials performance testing of the braided brass, guide tubes (Type H-3 and/or H-6), either performed by the manufacturer and/or CTI, especially as the tests relate to 10 CFR 34.20 requirements, e.g., kinking, crushing. Useful supplemental information would describe wear data, lubricants, and useful life. CTI may submit engineering analysis to demonstrate the applicability of previously performed testing on similar individual radiography equipment components, instead of performing testing themselves.
3. CTI needs to describe what crushing and kinking forces are likely to be encountered during use of the braided brass, guide tube and justify why these forces are appropriate. Any unusual forces associated with the cold weather application of the guide tube should be incorporated in this description.
4. CTI should detail any special maintenance procedures for the braided brass, guide tube. Also, CTI should be asked to describe any additional procedures unique to the braided brass, guide tubes not mentioned in their license documents.
5. We note that CTI does not indicate that it has similar problems with the control tube, which generally are plastic jacketed. CTI should describe why similar problems do not occur.

6. In addition, CTI should describe the connectors used, identify the manufacturers who installed them on the tubes, and confirm that the guide tube-head connections, met the tensile test for control units specified in ANSI-N432 and required by 10 CFR 34.20(c)(8).

Attachments: 1. TAR dtd 9/25/95  
2. IN 95-28



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV

Walnut Creek Field Office  
1450 Maria Lane  
Walnut Creek, California 94596-5368

SEP 25 1995

MEMORANDUM TO: Donald A. Cool, Director  
Division of Industrial and Medical  
Safety, NMSS

FROM: *DAT*  
*for FAW* Frank A. Wenslawski, Chief  
Materials Branch

SUBJECT: TECHNICAL ASSISTANCE REQUEST (TAR)

Enclosed is a TAR requesting an exemption to 10 CFR 34.20(a) and (c)(5) for source guide tubes used in industrial radiography. The licensee wishes to continue to use braided brass source guide tubes which can withstand the extremely cold temperatures encountered in Alaska. Your reply to the TAR is requested by December 8, 1995 to allow us time to incorporate the exemption into their license prior to the January 10, 1996 implementation date of the applicable regulations.

If questions arise or additional information is needed, please contact Beth Prange of my staff at (510) 975-0250.

Enclosure: TAR

Attachment 1

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS  
WASHINGTON, D.C. 20555

December 18, 1995

NRC INFORMATION NOTICE 95-58: 10 CFR 34.20; FINAL EFFECTIVE DATE

Addressees:

Industrial Radiography Licensees

Purpose:

The U.S. Nuclear Regulatory Commission is issuing this information notice (IN) to remind addressees of the effective date implementing a final provision of the regulations in 10 CFR 34.20. It is expected that recipients will review the information for applicability to their facilities and consider appropriate actions. This notice also advises recipients of the Commission's plans for enforcement action to address failures to meet 10 CFR 34.20. However, this IN does not contain any new requirements; therefore, no specific action or written response is required.

Background:

Paragraph (e) of 10 CFR 34.20 provides that all radiographic exposure devices and associated equipment in use by NRC licensees after January 10, 1996, must comply with the requirements specified in Section 34.20 of 10 CFR Part 34. Section 34.20, and other changes to 10 CFR Part 34, were published in the Federal Register (55 FR 843) as a final rule on January 10, 1990. As stated in the Federal Register notice, the effective date of the final rule was January 10, 1991. Paragraph (d) of 10 CFR 34.20 provided that all newly-manufactured radiographic exposure devices and associated equipment (manufactured after January 10, 1992) acquired by NRC licensees must meet 10 CFR 34.20 requirements. The statement of considerations for the final rule provided notice that failure to implement the requirements for equipment by the required date may be considered a Severity Level III Violation. Such violations are considered for civil penalty assessments.

After publication of the final rule, NRC transmitted copies of the notice to each of its radiography licensees at that time. Copies of the notice were also provided to each of the Agreement States so that they might share the information with their radiography licensees. Further information identifying and explaining the effective dates of the various provisions of the rule was also provided in the March-June 1990 (NUREG/BR-0117 Nos. 90-1 and -2) issues of the NMSS Licensee Newsletter.

9512180076

Discussion:

The NRC reminds its industrial radiography licensees that after January 10, 1996, only radiographic exposure devices and associated equipment which complies with the requirements specified in 10 CFR 34.20 and is authorized by the license, shall be used in industrial radiography operations conducted within NRC's jurisdiction. NRC also reminds Agreement State licensees working in areas of NRC jurisdiction under reciprocity (10 CFR 150.20) that they are also subject to these requirements. The regulations in 10 CFR 34.20 apply to all radiography equipment. This includes portable, mobile, and fixed radiography cameras (both pipeliner and "crank-out" type devices), source changers, and other associated equipment used with radiography cameras, i.e., source assemblies, drive cables, guide tubes, control tubes, source stops, etc. Some provisions of 10 CFR 34.20 only apply to certain types of equipment. For example, 10 CFR 34.20(c) only applies to "crank-out" cameras, while 10 CFR 34.20(a) and (b) apply to all radiography cameras and all associated equipment. As another example, the criteria specified in 10 CFR 34.20(c)(9) only applies to the source changer used in conjunction with a "crank-out" device.

The requirements in 10 CFR 34.20 require licensees to ensure that all equipment they will use in radiographic operations after January 10, 1996, complies with the applicable requirements. Since publication of NRC's final rule, the radiography equipment manufacturers have worked to develop radiography devices and associated equipment that complies with 10 CFR 34.20 criteria. In some instances, existing equipment already complies with the regulatory requirements. Attachment 1 lists the radiography cameras, radiography systems, and sealed sources that have been recognized by NRC as meeting 10 CFR 34.20 requirements.

Traditionally, certain associated equipment has not been independently registered and/or evaluated by the NRC or the Agreement States. This includes drive cables, guide tubes, or source stops. With the new camera models introduced, the manufacturers and NRC have taken the system approach as denoted in the American National Standard N432-1980, "Radiological Safety for the Design and Construction of Apparatus for Gamma Radiography," now required by regulations. Therefore, information concerning the drive cables to be used with the devices was included as part of the overall system evaluation. However, older "associated equipment" items may not have been evaluated as part of a device registration process. Licensees are reminded that 10 CFR 34.20 makes the licensee responsible for ensuring that the equipment meets regulatory requirements. The licensee should obtain information from the equipment manufacturer which shows the equipment complies with 10 CFR 34.20 criteria, including any required testing. Equipment that has not been registered will, at minimum, require prototype testing to meet the requirements of 10 CFR 34.20. If a similar piece of equipment has already met the test requirements, then an engineering analysis may be used in lieu of actual testing. The engineering analysis can be performed by the user or the manufacturer and submitted to the appropriate regulatory authority for evaluation and approval.



Your present license may include equipment whose use must be discontinued after January 10, 1996. In this instance, the NRC regulations effective January 10, 1996, take precedent over authorizations previously provided in a license. For example, if your license contains an Amersham Model 900, you are not authorized to continue using this device after January 10, 1996. Please also note that you may need to amend your license to include additional equipment that complies with 10 CFR 34.20.

Exemptions will not normally be considered for portable radiographic devices that do not comply with 10 CFR 34.20. If uninterrupted use of a device which does not comply with 10 CFR 34.20 is intended, then an exemption request should be submitted prior to January 1, 1996, to allow the staff adequate time to process the request. Exemptions to 10 CFR 34.20 may be considered only for limited special or unique cases, where the licensee can demonstrate that the engineered safety features, use limitations, and procedures would compensate for not meeting the requirements and afford similar or increased radiation safety protection. An example of a limited special or unique case would include a nonportable device used in a fixed radiographic facility.

Performance of radiography after January 10, 1996, with equipment which does not comply with the requirements of 10 CFR 34.20 is a violation of Commission requirements. In accordance with example C.8 of Supplement VI of the Commission's Enforcement Policy, such violations are considered violations of significant regulatory concern and may be categorized at Severity Level III and subject to civil penalties. In light of the notice that has been given licensees to meet this regulation, the time that has been provided licensees to achieve compliance, and the importance of meeting the requirements of 10 CFR 34.20, the NRC intends to levy a civil penalty without considering the normal civil penalty assessment process pursuant to Section VII.A.1 of the Enforcement Policy. Accordingly, a civil penalty of \$5,000, the base Severity Level III civil penalty, may be assessed for each camera a licensee uses after January 10, 1996, that does not meet the requirements of 10 CFR 34.20. If during an inspection, the NRC identifies that a licensee is not meeting the regulation, the licensee will need to suspend any operation with nonconforming cameras. Failure to do so may be considered deliberate violations and may subject the licensee to significant civil action, including license revocation, and to criminal sanctions. Individuals responsible for such violations may be subject to sanctions for violating 10 CFR 30.10, rule on "Deliberate Misconduct."

However, the Commission intends to exercise its enforcement discretion for licensees who make a good faith effort to comply with 10 CFR 34.20 before the effective date of the rule. Therefore, a licensee who performs radiography after January 10, 1996, with equipment that does not meet 10 CFR 34.20 will not be subject to civil penalties or suspension of operations for such violations if the licensee has evidence that on or before January 10, 1996, it in good faith ordered equipment for prompt replacement that meets the requirements of 10 CFR 34.20. It should be noted that Agreement State licensees conducting radiography under reciprocity will be subject to these regulatory requirements and enforcement policy.

This information notice requires no specific action or written response. If you have any questions about the information in this notice, please contact one of the technical contacts listed below or the appropriate regional office.



Donald A. Cool, Director  
Division of Industrial and  
Medical Nuclear Safety  
Office of Nuclear Material  
Safety and Safeguards

Contacts: J. Bruce Carrico, NMSS (For general information)  
(301) 415-7826

Thomas W. Rich, NMSS (For device information)  
(301) 415-7893

Attachments: 1. List of Approved Equipment  
2. List of Recently Issued NMSS Information Notices  
3. List of Recently Issued NRC Information Notices

11/21/95

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List of Models That Meet 10 CFR Part 34 Requirements

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CAMERA(S)  
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<u>Model</u>	<u>Manufacturer</u>	<u>Status</u>	<u>Description</u>
660 A	AMERSHAM	ACTIVE	Co-60 110mCi, Cs-137 10.8Ci, Yb-169 20Ci, Tm-170 200Ci, Ir-192 120Ci
660 AE	AMERSHAM	ACTIVE	Co-60 110mCi, Cs-137 10.8Ci, Yb-169 20Ci, Tm-170 200Ci, Ir-169 120Ci
660 B	AMERSHAM	ACTIVE	Co-60 110mCi, Cs-137 10.8Ci, Yb-169 20Ci, Tm-170 200Ci, Ir-192 140Ci
660 BE	AMERSHAM	ACTIVE	Co-60 110mCi, Cs-137 10.8Ci, Yb-169 20Ci, Tm-170 200CI, Ir-192 140Ci
660 SYSTEM	AMERSHAM	ACTIVE	Co-60 110mCi, Cs-137 10.8Ci, Yb-169 20Ci, Tm-170 200Ci, Ir-192 140Ci
676 A	AMERSHAM	ACTIVE	Co-60 330Ci, DU 168 kg
676 AE	AMERSHAM	ACTIVE	Co-60 330Ci, DU 168 kg
676 B	AMERSHAM	ACTIVE	Co-60 330Ci, DU 168 kg
676 BE	AMERSHAM	ACTIVE	Co-60 330Ci, DU 168 kg
680 A	AMERSHAM	ACTIVE	Co-60 110Ci, DU 129 kg
680 AE	AMERSHAM	ACTIVE	Co-60 110Ci, DU 129 kg

11/21/95

List of Models That Meet 10 CFR Part 34 Requirements

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CAMERA(S) (continued)  
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<u>Model</u>	<u>Manufacturer</u>	<u>Status</u>	<u>Description</u>
680 B	AMERSHAM	ACTIVE	Co-60 110Ci, DU 129 kg
680 BE	AMERSHAM	ACTIVE	Co-60 110Ci, DU 129 kg
684 A	AMERSHAM	ACTIVE	Co-60 11Ci, Ir-192 240Ci, DU 68 kg
684 AE	AMERSHAM	ACTIVE	Co-60 11Ci, Ir-192 240Ci, DU 68 kg
684 B	AMERSHAM	ACTIVE	Co-60 11Ci, Ir-192 240Ci, DU 68 kg
684 BE	AMERSHAM	ACTIVE	Co-60 11Ci, Ir-192 240Ci, DU 68 kg
741 A	AMERSHAM	ACTIVE	Co-60 33Ci, Ir-192 240Ci, DU 90 kg
741 AE	AMERSHAM	ACTIVE	Co-60 33Ci, Ir-192 240Ci, DU 90 kg
741 B	AMERSHAM	ACTIVE	Co-60 33Ci, Ir-192 240Ci, DU 90 kg
741 BE	AMERSHAM	ACTIVE	Co-60 33Ci, Ir-192 240Ci, DU 90 kg
865	AMERSHAM	ACTIVE	Ir-192 240Ci, DU 18 kg
IR-100	INDUSTRIAL NUCLEAR	ACTIVE	Ir-192 120Ci, DU 14.5 kg
SPEC 150	SPEC	ACTIVE	Ir-192 150Ci, DU 17 kg
TITAN	NORDION	ACTIVE	Ir-192 140Ci

11/21/95

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List of Models That Meet 10 CFR Part 34 Requirements

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SOURCE(S) (continued)  
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<u>Model</u>	<u>Manufacturer</u>	<u>Status</u>	<u>Description</u>
32	INDUSTRIAL NUCLEAR	ACTIVE	Ir-192 120Ci
33	INDUSTRIAL NUCLEAR	ACTIVE	Ir-192 120Ci
702	RTS	ACTIVE	Ir-192 120Ci
848	AMERSHAM	INACTIVE	Cs-137 30Ci, Yb-169 200Ci, Tm-170 50Ci, Ir-192 240Ci
866	AMERSHAM	ACTIVE	Cs-137 30 Ci, Yb-169 200Ci, Tm-170 50Ci, Ir-192 240Ci
87702	AMERSHAM	INACTIVE	Ir-192 120Ci
87703	AMERSHAM	ACTIVE	Ir-192 120Ci
87704	AMERSHAM	INACTIVE	Ir-192 120Ci
88	INDUSTRIAL NUCLEAR	ACTIVE	IR-192 120CI
89911	AMERSHAM	ACTIVE	IR-192 240CI
89912	AMERSHAM	ACTIVE	IR-192 240CI
89913	AMERSHAM	ACTIVE	IR-192 240CI
89914	AMERSHAM	ACTIVE	IR-192 240CI
89916	AMERSHAM	ACTIVE	IR-192 240CI
89921	AMERSHAM	ACTIVE	IR-192 240CI
89922	AMERSHAM	ACTIVE	IR-192 240CI
89923	AMERSHAM	ACTIVE	IR-192 240CI
89924	AMERSHAM	ACTIVE	IR-192 240CI
90003	AMERSHAM	ACTIVE	Ir-192 240Ci



11/21/95

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List of Models That Meet 10 CFR Part 34 Requirements

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SOURCE(S) (continued)  
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<u>Model</u>	<u>Manufacturer</u>	<u>Status</u>	<u>Description</u>
91810	AMERSHAM	ACTIVE	Yb-169 20Ci
91811	AMERSHAM	ACTIVE	Co-60 20Ci
91812	AMERSHAM	ACTIVE	Tm-170 20Ci
91813	AMERSHAM	ACTIVE	Ir-192 20Ci
943	AMERSHAM	ACTIVE	Co-60 110Ci
A424-1	AMERSHAM	ACTIVE	Co-60 220Ci, Yb-169 200Ci, Tm-170 50 Ci, Ir-192 240Ci
A424-10	AMERSHAM	ACTIVE	Co-60 5Ci
A424-11	AMERSHAM	ACTIVE	Co-60 50Ci
A424-12	AMERSHAM	ACTIVE	Co-60 100Ci
A424-13	AMERSHAM	ACTIVE	Co-60 330Ci
A424-14	AMERSHAM	ACTIVE	Co-60 110Ci
A424-15	AMERSHAM	ACTIVE	Co-60 11Ci
A424-16	AMERSHAM	ACTIVE	Co-60 50Ci
A424-17	AMERSHAM	ACTIVE	Co-60 50Ci
A424-18	AMERSHAM	ACTIVE	Co-60 33Ci
A424-19	AMERSHAM	ACTIVE	Co-60 120mCi
A424-2	AMERSHAM	ACTIVE	Co-60 220Ci, Yb-169 200Ci, Tm-170 50Ci, Ir-192 240Ci
A424-20	AMERSHAM	ACTIVE	Cs-137 30Ci, Yb-169 200Ci, Tm-170 50Ci, Ir-192 240Ci

11/21/95

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List of Models That Meet 10 CFR Part 34 Requirements

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SOURCE(S) (continued)  
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<u>Model</u>	<u>Manufacturer</u>	<u>Status</u>	<u>Description</u>
A424-22	AMERSHAM	ACTIVE	Co-60 220Ci, Cs-137 10.8Ci, Yb-169 200Ci, Tm-170 50Ci, Ir-192 240Ci
A424-3	AMERSHAM	ACTIVE	Co-60 220Ci, Yb-169 200Ci, Tm-170 50Ci, Ir-192 240Ci
A424-4	AMERSHAM	ACTIVE	Co-60 220Ci, Yb-169 200Ci, Tm-170 50Ci, Ir-192 240Ci
A424-5	AMERSHAM	ACTIVE	Co-60 220Ci, Yb-169 200Ci, Tm-170 50Ci, Ir-192 240Ci
A424-6	AMERSHAM	ACTIVE	Co-60 220Ci, Yb-169 200Ci, Tm-170 50Ci, Ir-192 240Ci
A424-7	AMERSHAM	ACTIVE	Co-60 220Ci, Yb-169 200Ci, Tm-170 50Ci, Ir-192 240Ci
A424-8	AMERSHAM	ACTIVE	Co-60 220Ci, Yb-169 200Ci, Tm-170 50Ci, Ir-192 240Ci
A424-9	AMERSHAM	ACTIVE	Co-60 220Ci, Cs-137 30Ci, Yb-169 200Ci, Tm-170 50Ci, Ir-192 240Ci
A453-1	AMERSHAM	ACTIVE	Co-60 220Ci, Yb-169 200Ci, Tm-170 50Ci, Ir-192 240Ci
A453-2	AMERSHAM	ACTIVE	Co-60 220Ci, Yb-169 200Ci, Tm-170 50Ci, Ir-192 240Ci

11/21/95

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List of Models That Meet 10 CFR Part 34 Requirements

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SOURCE(S) (continued)  
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<u>Model</u>	<u>Manufacturer</u>	<u>Status</u>	<u>Description</u>
A58101-8	AMERSHAM	ACTIVE	Ir-192 240Ci
B-16F	SPEC	ACTIVE	Ir-192 100Ci
B-16T	SPEC	ACTIVE	Ir-192 100Ci
C-990	NORDION	ACTIVE	Ir-192 140Ci
G-11F	SPEC	UNKNOWN	
G-13F	SPEC	UNKNOWN	
G-15F	SPEC	UNKNOWN	
G-17F	SPEC	UNKNOWN	
G-19F	SPEC	ACTIVE	Co-60 110Ci
G-1F	SPEC	ACTIVE	Ir-192 240Ci
G-1T	SPEC	UNKNOWN	
G-21F	SPEC	ACTIVE	Co-60 110Ci
G-23	SPEC	ACTIVE	Ir-192 240Ci
G-36	SPEC	ACTIVE	Ir-192 240Ci
G-37F	SPEC	ACTIVE	Co-60 110Ci
G-38	SPEC	ACTIVE	Ir-192 240Ci
G-3F	SPEC	ACTIVE	Ir-192 240Ci
G-40F	SPEC	ACTIVE	Ir-192 240Ci
G-40T	SPEC	ACTIVE	Ir-192 240Ci
G-41F	SPEC	ACTIVE	Ir-192 240Ci
G-41T	SPEC	ACTIVE	Ir-192 240Ci
G-42	SPEC	UNKNOWN	
G-50F	SPEC	UNKNOWN	
G-50T	SPEC	UNKNOWN	
G-60	SPEC	ACTIVE	Ir-192 240Ci

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List of Models That Meet 10 CFR Part 34 Requirements

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SOURCE(S) (continued)  
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<u>Model</u>	<u>Manufacturer</u>	<u>Status</u>	<u>Description</u>
G-9F	SPEC	UNKNOWN	
N-23	SPEC	INACTIVE	Ir-192 100Ci
T-1	SPEC	ACTIVE	Ir-192 140Ci
T-1F	SPEC	ACTIVE	Ir-192 140Ci
T-2F	SPEC	INACTIVE	Ir-192 140Ci
T-5	SPEC	ACTIVE	Ir-192 140Ci
T-5F	SPEC	ACTIVE	Ir-192 140Ci
T-6	SPEC	ACTIVE	Ir-192 140Ci
T-7F	SPEC	INACTIVE	Ir-192 140Ci

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CHANGER(S)  
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<u>Model</u>	<u>Manufacturer</u>	<u>Status</u>	<u>Description</u>
500-SU	AMERSHAM	INACTIVE	IR-192 120CI, DU 18 KG
650L	AMERSHAM	ACTIVE	IR192 240CI, CO50 120mCI, CS137 10.8CI, YB100 40CI, TM170 400CI, DU 42 LBS
770	AMERSHAM	ACTIVE	CO-60 550CI, DU 161 KG
771	AMERSHAM	ACTIVE	CO-60 1100CI, DU 97 KG
820	AMERSHAM	ACTIVE	Ir-192 1000Ci, DU 100 kg

11/21/95

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List of Models That Meet 10 CFR Part 34 Requirements

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CHANGER(S) (continued)  
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<u>Model</u>	<u>Manufacturer</u>	<u>Status</u>	<u>Description</u>
850	AMERSHAM	ACTIVE	IR-192 240CI, DU 22 KG
855	AMERSHAM	ACTIVE	IR-192 960CI, DU 57 KG
C-1	SPEC	ACTIVE	IR-192 100CI, DU 17KG

LIST OF RECENTLY ISSUED  
NMSS INFORMATION NOTICES

Information Notice No.	Subject	Date of Issuance	Issued to
95-55	Handling Uncontained Yellowcake Outside of a Facility Processing Circuit	12/6/95	All Uranium Recovery Licensees.
95-51	Recent Incidents Involving Potential Loss of Control of Licensed Material	10/27/95	All material and fuel cycle licensees.
95-50	Safety Defect in Gammamed 12i Bronchial Catheter Clamping Adapters	10/30/95	All High Dose Rate Afterloader (HDR) Licensees.
95-44	Ensuring Combatible Use of Drive Cables Incorporating Industrial Nuclear Company Ball-type Male Conectors	09/26/95	All Radiography Licensees.
95-39	Brachytherapy Incidents Involving Treatment Planning Errors	09/19/95	All U.S. Nuclear Regulatory Commission Medical Licensees.
95-29	Oversight of Design and and Fabrication Activities for Metal Components Used in Spent Fuel Dry Storage Systems	06/07/95	All holders of OLs or CPs for nuclear power reactors.  Independent spent fuel storage installation designers and fabricators.
95-28	Emplacement of Support Pads for Spent Fuel Dry Storage Installations at Reactor Sites	06/05/95	All holders of OLs or CPs for nuclear power reactors
95-25	Valve Failure during Patient Treatment with Gamma Stereotactic Radiosurgery Unit	05/11/95	All U.S. Nuclear Regulatory Commission Medical Licensees.



LIST OF RECENTLY ISSUED  
NRC INFORMATION NOTICES

Information Notice No.	Subject	Date of Issuance	Issued to
95-57	Risk Impact Study Regarding Maintenance During Low-Power Operation and Shutdown	12/18/95	All holders of OLs or CPs for nuclear power reactors.
95-56	Shielding Deficiency in Spent Fuel Transfer Canal at a Boiling-Water Reactor	12/11/95	All holders of OLs or CPs for nuclear power reactors.
95-55	Handling Uncontained Yellowcake Outside of a Facility Processing Circuit	12/06/95	All Uranium Recovery Licensees.
95-54	Decay Heat Management Practices during Refueling Outages	12/01/95	All holders of OLs or CPs for nuclear power reactors.
95-53	Failures of Main Steam Isolation Valves as a Result of Sticking Solenoid Pilot Valves	12/01/95	All holders of OLs or CPs for nuclear power reactors.
95-47, Rev. 1	Unexpected Opening of a Safety/Relief Valve and Complications Involving Suppression Pool Cooling Strainer Blockage	11/30/95	All holders of OLs or CPs for nuclear power reactors.
94-13, Supp. 2	Control and Oversight of Contractors during Re- fueling Activities and Clarification of Applica- bility of Section 50.120 of Title 10 of The Code of Federal Regulations to Contractor Personnel	11/28/95	All holders of OLs or CPs for nuclear power reactors.

OL = Operating License  
CP = Construction Permit

11/10/96

## TELECOPIER TRANSMITTAL

TIME

12:35pm

WARNING: Most facsimile machines produce copies on thermal paper. The image produced is highly unstable and will deteriorate significantly in a few years. Reproduce copies onto plain paper prior to filing as a record.

TO

NAME

Blair / Jack

TELEPHONE

NAME AND LOCATION OF COMPANY (If other than NRC)

RIV; AO

TELECOPY NUMBER

(817) 860-8263

VERIFICATION NUMBER

FROM

NAME

Beth Prange

TELEPHONE

(510) 975-0250

MAIL STOP

RIV; WCFD

## TELECOPY DATA

NUMBER OF PAGES

THIS PAGE + 5 PAGES = 6 TOTAL

PRIORITY

IMMEDIATE

OTHER  
(Specify)

SPECIAL INSTRUCTIONS

Here is the recent message from CTI. They included their August submittal. This was sent back in a TAR on Sept. 25, 1995.

## PROBLEMS

If any problems occur or if you do not receive all the pages, call:

TELEPHONE

## DISPOSITION OF ORIGINAL

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RETURN TO SENDER

CALL AND SENDER WILL PICK UP

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VERIFIED BY (INITIALS)



## CTI Alaska, Inc.

## Facsimile Lead Sheet

DATE: 11/10/96ATTENTION: BethCOMPANY: NR C

LOCATION: \_\_\_\_\_

TELEPHONE: ( )FAX NO.: (510) 975-0381FROM: Pat fax Sandy Watson

CTI Alaska, Inc.

4831 Old Seward Highway, Suite 107

Anchorage, Alaska 99503

Confirmation No.: (907) 562-4442

Fax No.: (907) 562-5093

This transmission consists of \_\_\_\_\_ page(s), including this cover sheet. If there are any problems in receiving this fax, please contact the sender.

COMMENTS: Beth: Following is the

fax we have been trying to get  
to D.C. The telephone number  
(new) that I was given is 301-415-7000  
however there is no one in the  
office today to get a fax # from.

**CTI Alaska, Inc.****Facsimile Lead Sheet****DATE:** 01 / 09 / 96

**ATTENTION:** Dr. Don Cool, Division Director  
**COMPANY:** Nuclear Regulatory Commission  
Office of Safety & Safeguards  
**LOCATION:** Washington, D.C. 20555-0001  
**TELEPHONE:** ( 301 ) 415-7197 **FAX NO.:** ( 301 ) 415-5369  
**FROM:** Sandy N. Watson, Radiation Safety Officer

**CTI Alaska, Inc.**  
**4831 Old Seward Highway, Suite 107**  
**Anchorage, Alaska 99503**

**Confirmation No.:** (907) 562-4442 **Fax No.:** (907) 562-5093

This transmission consists of 4 page(s), including this cover sheet. If there are any problems in receiving this fax, please contact the sender.

**COMMENTS:** SUBJECT: Letter to USNRC dated April 18, 1995.  
Request to use braided exposure source tube

An answer to our request is critical to the operations  
in Alaska due to the effects of the extreme winter  
weather on the conventional source exposure tubes.  
Please consider our need for an immediate answer.

Thank you,

S.N. Watson

**Confidence Through Inspection**



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV

Walnut Creek Field Office  
1450 Maria Lane  
Walnut Creek, California 94596-5368

SEP 25 1995

Docket  
FILE COPY

MEMORANDUM TO: Donald A. Cool, Director  
Division of Industrial and Medical  
Safety, NMSS

FROM: *bat*  
*for FAW* Frank A. Wenslawski, Chief  
Materials Branch

SUBJECT: TECHNICAL ASSISTANCE REQUEST (TAR)

Enclosed is a TAR requesting an exemption to 10 CFR 34.20(a) and (c)(5) for source guide tubes used in industrial radiography. The licensee wishes to continue to use braided brass source guide tubes which can withstand the extremely cold temperatures encountered in Alaska. Your reply to the TAR is requested by December 8, 1995 to allow us time to incorporate the exemption into their license prior to the January 10, 1996 implementation date of the applicable regulations.

If questions arise or additional information is needed, please contact Beth Prange of my staff at (510) 975-0250.

Enclosure: TAR

bcc:

Docket File  
WCFO Inspection File  
LFDCB, T-9 E10

DOCUMENT NAME: G:\beth\CTI.mem

To receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

MB	N	MB BAP	C						
BPrange	BAP	FWenslawski							
09/25/95		09/25/95		09/ /95		09/ /95		09/ /95	

OFFICIAL RECORD COPY



REGIONAL TECHNICAL ASSISTANCE REQUEST FORM

Date: 9/7/95

Mail or E-Mail to: Donald A. Cool, Mail Stop: TWFN 8F5      If E-mail, cc: DAC  
Division of Industrial and Medical Nuclear Safety, NMSS

From: Frank A. Wenslawski (FAW) Region IV, WCFO  
Chief, Materials Branch

Licensee: CTI Alaska, Inc.      License No.: 50-19202-01

Control No. 572220

Letter dated: August 31, 1995

*X Problem/Issue:* The licensee has requested an exemption to 10 CFR 34.20 (a) and (c)(5) for source guide tubes used in industrial radiography. The licensee wishes to use braided brass source guide tubes which can endure the extreme cold temperatures this licensee encounters routinely. The currently approved guide tubes do not meet the licensee's needs.

*X Action Required:* Review request and determine whether exemption can be granted as requested.

Recommended Action (with revisions): X Approve

Remarks: The license renewal was processed separately (Mail Control 572193) so that the licensee could obtain new equipment meeting 10 CFR 34.20 requirements.

Headquarter Reviewer: (For HQ use)

Regional Reviewer: Beth Prange

Reviewer Code: W1

Reviewer Phone No.: (510) 975-0250

FAX No.: (510) 975-0381

Request Needed by: 12/08/95

Form TAR-10  
9/93

030-17129



CTI  
ALASKA

August 31, 1995

U.S. Nuclear Regulatory Commission  
Field Office  
1450 Maria Lane, Suite 210  
Walnut Creek, Ca 94596-5368

Attention: Kenneth E. Perkins, Director

Subject: Renewal of License No. 50-19202-01  
NRC Request for Additional Information

Gentlemen:

Please find attached two copies of CTI Alaska, Inc.'s revised "Radiation Safety Program" with attachments. All pages are denoted as revision number 26 and dated 06-01-95.

Included with the two copies of the Safety Program and license is a third copy which is red lined to illustrate changes made to the previous revision. This copy is only to assist the reviewer in identifying changes to the previously submitted written program and NRC issued license amendment.

*Confidence  
Through  
Inspection*

CTI Alaska, Inc.'s Radiation Safety Officer will review and approve each usage of the 300 curie Cobalt 60 source and exposure device (isotope item Q. in license amendment no. 25) to assure proper radiation safety procedures are utilized for exposure to personnel.

We request that you put isotope items B., E., F. and BB. on "storage only" status upon issue of license and item Z. to be noted as "storage only" after January 10, 1996.

CTI Alaska, Inc. also requests an exemption to the requirement that Source Guide Tube equipment must have passed ANSI N432 requirements [10 CFR, Paragraphs 34.20 (a) and (c)(5)].

CTI Alaska, Inc.  
4831 Old Seward Hwy  
Suite 107  
Anchorage, AK 99503  
Tel: 907-562-4442  
Fax: 907-562-5093

572220



The request for exemption is based on operational necessity in that:

1. CTI Alaska, Inc. performs radiography in the state of Alaska with work being performed on the North Slope (extreme northern end of North America). When conducting radiography outside ambient air temperature can exceed  $-60^{\circ}$ . When combined with wind the resulting wind chill effect on equipment can exceed  $-100^{\circ}$ .

2. As a result of such extreme temperature conditions CTI Alaska, Inc. has found that traditional Source Guide Tube materials literally freeze in position when used in this environment (even for short periods of time). The tube will then split or crack when attempts are made to reposition the tube or to roll the material up for storage back into vehicles.

3. Working in these conditions CTI Alaska, Inc. has had to use braided brass tubing material for Source Guide Tube (even though it is more expensive) purposes since the early 1980's. During that time we have never encountered any problems or incidents involving the use of this material. There have not been any malfunctions due to kinking, crushing nor lack of tensile strength or other effects as covered by ANSI N432.

4. Current ANSI N432 approved Source Guide Tube material that is available have not proven effective in harsh winter conditions. Source Guide Tubes freezing in a set position may not allow the source to be safely retracted.

We therefore request an exemption from the aforementioned requirements and request approval to utilize the following material for Source Guide Tube purposes. This material withstands extreme cold and remains flexible thus allowing safe radiography in the working conditions CTI Alaska, Inc. encounters.

The nomenclature of the material is as follows:

Manufacturer:	Co-Operative Industries
Telephone:	1-800-926-63384 (908) 879-5151
Contact:	Donna Bauer, Sales Manager
Description:	Duraflex pressure tight flexible braided bronze and intercore brass metal hose, .365" inside diameter
Catalog Number:	Type H-3 and Type H-6
Application	Type H-3 (Fluids/gases/explosion proof) Type H-6 (Fluids/gases/abrasion resistant)

Please be advised that CTI Alaska, Inc.'s name change on September 28, 1992 did not result in any changes in ownership, stock, radiation safety personnel or the company's commitment to its license or to the safety of its employees and the general public.



CTI  
ALASKA

Should additional information or clarification be needed, please contact the writer.

Sincerely,

*S. N. Watson*

Sandy N. Watson  
Radiation Safety Officer

Encl: Safety Program (2)  
Redlined Copy (1)  
Material License Conditions (2)

cc: G.E. Haugen  
W.F. Webb  
RSO File  
nRcLiCeN

State of Alaska  
Department of Commerce and Economic Development  
Division of Banking, Securities and Corporations

CERTIFICATE  
OF  
AMENDMENT

The undersigned, as Commissioner of Commerce and Economic Development of the State of Alaska, hereby certifies that duplicate originals of Articles of Amendment to the Articles of Incorporation, duly signed and verified pursuant to the provisions of the Alaska Corporations Code, have been received in this office and are found to conform to law.

ACCORDINGLY, the undersigned, as Commissioner of Commerce and Economic Development, and by virtue of the authority vested in him by law, hereby issues this Certificate of Amendment to the Articles of Incorporation of

CTI, INC.

and attaches hereto a duplicate original of the Articles of Amendment changing the corporate name to

CTI ALASKA, INC.

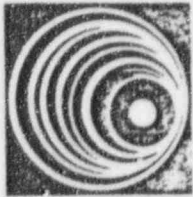


IN TESTIMONY WHEREOF, I execute this certificate and affix the Great Seal of the State of Alaska on September 28, 1992.

Paul Fuhs  
COMMISSIONER OF COMMERCE  
AND ECONOMIC DEVELOPMENT

08-129A (Rev. 9/88)  
5842M-2

030-17129



CTI  
ALASKA

August 31, 1995

U.S. Nuclear Regulatory Commission  
Field Office  
1450 Maria Lane, Suite 210  
Walnut Creek, Ca 94596-5368

Attention: Kenneth E. Perkins, Director

Subject: Renewal of License No. 50-19202-01  
NRC Request for Additional Information

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Through  
Inspection*

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CTI Alaska, Inc.  
4831 Old Seward Hwy  
Suite 107  
Anchorage, AK 99503

Tel: 907-562-4442  
Fax: 907-562-5093

572220





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Contact:	Donna Bauer, Sales Manager
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Catalog Number:	Type H-3 and Type H-6
Application	Type H-3 (Fluids/gases/explosion proof) Type H-6 (Fluids/gases/abrasion resistant)

Please be advised that CTI Alaska, Inc.'s name change on September 28, 1992 did not result in any changes in ownership, stock, radiation safety personnel or the company's commitment to its license or to the safety of its employees and the general public.



CTI  
ALASKA

Should additional information or clarification be needed, please contact the writer.

Sincerely,

*S.N. Watson*

Sandy N. Watson  
Radiation Safety Officer

Encl: Safety Program (2)  
Redlined Copy (1)  
Material License Conditions (2)

cc: G.E. Haugen  
W.F. Webb  
RSO File  
nRcLiCeN

State of Alaska  
Department of Commerce and Economic Development  
Division of Banking, Securities and Corporations

CERTIFICATE  
OF  
AMENDMENT

The undersigned, as Commissioner of Commerce and Economic Development of the State of Alaska, hereby certifies that duplicate originals of Articles of Amendment to the Articles of Incorporation, duly signed and verified pursuant to the provisions of the Alaska Corporations Code, have been received in this office and are found to conform to law.

ACCORDINGLY, the undersigned, as Commissioner of Commerce and Economic Development, and by virtue of the authority vested in him by law, hereby issues this Certificate of Amendment to the Articles of Incorporation of

CTI, INC.

and attaches hereto a duplicate original of the Articles of Amendment changing the corporate name to

CTI ALASKA, INC.



08-129A (Rev. 9/88)  
5842M-2

IN TESTIMONY WHEREOF, I execute this certificate and affix the Great Seal of the State of Alaska on September 28, 1992.

Paul Fuhs  
COMMISSIONER OF COMMERCE  
AND ECONOMIC DEVELOPMENT