

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

CTI Alaska, Inc.
Anchorage, Alaska

Docket No. 030-17129
License No. 50-19202-01
EA 96-232

During an NRC inspection conducted on January 17 through July 2, 1996, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-i600, the Nuclear Regulatory Commission proposes to impose civil penalties pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violation and associated civil penalties are set forth below:

I. Violations Assessed a Civil Penalty

- A. 1. 10 CFR 34.43(b) requires, in part, the licensee to ensure that a survey with a calibrated and operable radiation survey instrument is made after each radiographic exposure to determine that the sealed source has been returned to its shielded position.

Condition 17 of License 50-19202-01 requires, in part, that the licensee conduct its program in accordance with the statements, representations, and procedures contained in the letter, dated September 28, 1995, including the "Radiation Safety Program." Paragraph 1.2, Section 7.0, Part II of the "Radiation Safety Program" manual requires, in part, a radiation survey at the surface of an exposure device after completing each radiographic exposure by measuring the radiation levels and comparing them with the levels previously measured for the same source and exposure device. Paragraph 1.2 further states that if the levels do not correspond to previously measured levels, the source has not returned properly to a safe position.

Contrary to the above, on December 23, 1995, at the Endicott Island Project job site, a licensee radiographer did not perform an adequate survey with an operable radiation survey instrument after a radiographic exposure to determine that the sealed source had been returned to its shielded position. Specifically, using a malfunctioning survey meter, the radiographer failed to measure a radiation level exceeding 1 R/hr that was emitted near the surface of a Model IR-100 exposure device, and failed to compare the readings detected with those previously measured for the same source and device to evaluate whether the source had returned to its fully shielded and safe position. (01012)

2. 10 CFR 34.33(f)(1) requires that each alarm ratemeter be checked to ensure that the alarm functions (sounds) prior to use at the start of each shift.

Condition 17 of License 50-19202-01 requires, in part, that the licensee conduct its program in accordance with the statements, representations, and procedures contained in the letter dated September 28, 1995, with enclosures. Paragraph 3.5, Section 2.0, Part II of the "Radiation Safety Program," enclosed with the letter dated September 28, 1995, requires that each licensee radiographer check the operation of an alarm ratemeter before use during radiography by activating its battery and alarm tone test button, and requires that an alarm ratemeter not be used if either the LED battery light fails or the alarm fails to sound.

Contrary to the above, on approximately seven occasions during radiographic operations at the Endicott Island Project in December 1995, a licensee radiographer did not ensure that his alarm ratemeter functioned prior to its use at the start of each shift. Specifically, a Model RA-500 alarm ratemeter (S/N 5310) had been used without first activating the battery and alarm tone test button and checking the ratemeter's response by observing if the installed LED light failed and if the alarm failed to sound. (01022)

3. Condition 17 of License 50-19202-01 requires, in part, that the licensee conduct its program in accordance with the statements, representations, and procedures contained in the letter dated September 28, 1995, with enclosures.
 - a. Paragraph 1.0, Section 13.0, Part II of the enclosure, "Radiation Safety Program," requires immediate notification of the radiation safety officer, or in his absence, the radiation safety manager or appropriate NRC or State authorities in the event of an emergency arising from malfunction of an exposure device.
 - b. Paragraph 1.2 of Section 13.0, Part II requires that if there is any question as to whether a given situation constitutes an emergency, emergency procedures must be followed.

Paragraph 1.5, Section 2.0, Part II of the same enclosure also requires radiography personnel to stop work and notify the radiographic supervisor and the radiation safety officer who will send in the film badge(s) for immediate processing if a radiographer's pocket dosimeter goes off-scale.

Contrary to the above, on the night of December 23, 1995, during radiography at the Endicott Island Project, two licensee radiographers and a supervisor failed to:

- a. notify the radiation safety officer, the radiation safety manager, or appropriate NRC or State authorities immediately

following the apparent malfunction of a radiographic exposure device; and

- b. notify the radiation safety officer immediately following the off-scale discharge of a pocket dosimeter assigned to a radiographer. (The radiation safety officer was not notified until December 26, 1995, more than two days after the event.) (01032)
4. 10 CFR 34.33(d) requires that if an individual's pocket dosimeter is discharged beyond its range, his film badge or TLD be immediately sent for processing.

Contrary to the above, on December 23, 1995, during radiography performed at the Endicott Island Project, a radiographer's pocket dosimeter discharged beyond its range and the film badge worn by the individual was not immediately sent for processing. (The film badge was not sent for processing until December 27, 1995.) (01042)

These violations represent a Severity Level II problem (Supplement VI).
Civil Penalty - \$8,000.

- B. 1. 10 CFR 34.42 requires, notwithstanding any provisions in 10 CFR 20.1903, that areas in which radiography is being performed be conspicuously posted, as required by 10 CFR 20.1902(a) and (b). 10 CFR 20.1902(b) requires that each high radiation area be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words, "CAUTION, HIGH RADIATION AREA" OR "DANGER, HIGH RADIATION AREA."

Contrary to the above, on December 23, 1995, during radiography performed at the Endicott Island Project, the licensee did not post the high radiation area in which industrial radiography was being performed. (02013)

2. 10 CFR 30.9(a) requires, in part, that information required by license conditions to be maintained by the licensee be complete and accurate in all material respects. Condition 17 of License 50-19202-01 requires, in part, that the licensee conduct its program in accordance with the statements, representations, and procedures contained in the letter dated September 28, 1995, with enclosures. Paragraph 1.3, Section 6.0, Part I and paragraph 1.0, Section 1.1, Part II of the enclosure, "Radiation Safety Program" require that a radiographer complete a "Daily Radiation Job Sheet" with information that includes a check mark to indicate that high radiation area signs were posted, and that the licensee maintain the job sheet form records.

Contrary to the above, on December 23, 1995, the licensee failed to maintain an accurate record to indicate that a high radiation area was posted, as required by 10 CFR 34.42 and 10 CFR 20.1902(b). Specifically, a radiographer marked (checked) a "Daily Radiation Job Sheet" to indicate that a high radiation area was posted during industrial radiography when in fact the area was not posted. This record was material because, during an inspection, it could have influenced the NRC as to whether a violation had occurred. (02023)

These violations represent a Severity Level III problem (Supplement VI).
Civil Penalty - \$5,000.

II. Violation Not Assessed A Civil Penalty

Condition 17 of License 50-19202-01 requires, in part, that the licensee conduct its program in accordance with the statements, representations, and procedures contained in the letter dated September 28, 1995, with enclosures. The "Radiography Incident and Equipment Failure Report" form, enclosed with the September 28, 1995 letter requires licensee personnel to complete and submit (by facsimile) the report with attached information, as necessary, to the RSO within 8 hour after the incident/failure.

Contrary to the above, radiography personnel did not complete or submit the form or written report to the RSO following two radiography equipment incidents on January 9, 1996, each involving the apparent malfunction of a lock mechanism on a Model IR-100 exposure device. (03014)

This is a Severity Level IV violation (Supplement VI).

Pursuant to the provisions of 10 CFR 2.201, CTI Alaska, Inc., (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalties (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalties by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalties proposed above, or the cumulative amount of the civil penalties if more than one civil penalty is proposed, or may protest imposition of the civil penalties in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalties will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violations listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalties should not be imposed. In addition to protesting the civil penalties in whole or in part, such answer may request remission or mitigation of the penalties.

In requesting mitigation of the proposed penalties, the factors addressed in Section VI.B.2 of the Enforcement Policy should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalties.

Upon failure to pay any civil penalties due which subsequently has been determined in accordance with the applicable provisions of 10 CFR 2.205, this matter may be referred to the Attorney General, and the penalties, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to Section 234c of the Act, 42 U.S.C. 2282c.

The response noted above (Reply to Notice of Violation, letter with payment of civil penalties, and Answer to a Notice of Violation) should be addressed to: James Lieberman, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you

should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at Arlington, Texas,
this 31st day of October 1996