

U. S. NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT  
REGION IV

License: State of Texas License 12-2103 (Activities conducted under  
the General License established by Section 150.20 of 10 CFR 150)

Licensee: Southwest X-Ray Corporation  
Rocky Mountain Division  
712 Soulsby  
Rock Springs, Wyoming 82901

Home Office:  
Post Office Box 273  
Kermit, Texas 79745

Investigation At: Rock Springs, Wyoming

Investigation Conducted: May 19, 1981

Inspector:

*Enzo Wilborn*  
Enzo Wilborn, Radiation Specialist

*6/20/81*  
Date

Approved by:

*R. J. Everett*  
R. J. Everett, Materials Radiation Protection Section

*6/20/81*  
Date

Summary:

Investigation on May 19, 1981 (Report 99990004/81-02)

Areas Investigated: Special, unannounced investigation of allegations by a concerned citizen on May 5, 1981, regarding activities of Southwest X-Ray Corporation's radiographers in Rock Springs, Wyoming, that are considered to be radiological hazards. This investigation involved four inspector-hours by one NRC inspector.

Results: The investigation did not confirm any of the allegations. No violations of NRC requirements were identified.

### REASON FOR INVESTIGATION

Region IV received a telephone call on May 5, 1981, from a concerned citizen alleging that there are radiological hazards associated with radiographic operations of Southwest X-Ray while conducting activities in Rock Springs, Wyoming.

### SCOPE OF INVESTIGATION

On May 19, 1981, a Region IV Radiation Specialist interviewed certain radiographers of Southwest X-Ray Corporation and an individual of Mountain Fuel, a company that contracts Southwest X-Ray Corporation to conduct radiographic operations, concerning allegations of radiological hazards associated with radiographic operations of Southwest X-Ray Corporation. The allegations were evaluated to determine if they could be confirmed.

### ALLEGATIONS

1. On numerous occasions, Southwest X-Ray radiographers would arrive at a jobsite with no key to the camera and would open the camera with a screwdriver and hammer. Specifically, on May 5, 1981, the radiographer had no key to a camera that contained a 102 curie iridium-192 sealed source and opened the camera with a screwdriver and hammer at the Mountain Fuel Supply Company facility.
2. On May 5, 1981, a Southwest X-Ray radiographer performed radiographic operations at Mountain Fuel with a 102 curie iridium-192 sealed source for about 30 minutes with the alleged eating lunch approximately 20 feet away.
3. On May 5, 1981, a radiographer performing radiographic operations neither surveyed the area, posted radiation warning signs nor asked the alleged, eating lunch in the area, to leave.
4. On May 5, 1981, when questioned about the radiological hazards associated with these radiographic operations, the radiographer replied that there were no hazards for he was not required to wear a film badge.

CONCLUSION

The investigation did not confirm any of the allegations.

Several attempts were made to contact the alleged by telephone prior and subsequent to the investigation. An attempt was also made to personally contact the alleged during the investigation. All attempts to contact the alleged were futile. During one of the telephone attempts, an acquaintance of the alleged informed the inspector that the alleged works by contract on a near daily basis and he lives in a mobile fashion. The inspector requested that the acquaintance, during his next contact with the alleged, inform him that he should contact the inspector at his earliest convenience. No further contact from the alleged has been made to this date.

DETAILS1. Persons ContactedSouthwest X-Ray Corporation

\*J. T. Smith, Manager, Rocky Mountain Division and Radiographer

\*John Madison, Assistant Manager, Rocky Mountain Division and Radiographer

Mountain Fuel Supply Company

Robert J. Ramsey, Assistant Superintendent, Pipeline

Concerned Citizen

Anonymous (Not contacted during investigation - whereabouts unknown)

\*Denotes those attending the exit interview on May 19, 1981.

2. Interview with Allegor

- a. On May 5, 1981, the allegor was interviewed by the NRC inspector by telephone. The allegor expressed concern and requested that his name be kept confidential.
- b. The allegor stated that the main office for Southwest X-Ray is located in Little Rock, Arkansas. As long as radiographic operations are being conducted in the State of Arkansas, the company's name is Davis X-Ray, however, while the company is in Wyoming the name is Southwest X-Ray Corporation and this has led him to believe there is something fishy about it.
- c. The allegor stated that Southwest X-Ray Corporation was conducting radiographic operations in the Rock Springs, Wyoming area in a manner that he believes are radiological hazards.
- d. The allegor stated that on numerous occasions, Southwest X-Ray radiographers have shown up at jobsites with no key to the camera and open the camera with a screwdriver and hammer. Specifically, on May 5, 1981, at Mountain Fuel Supply Company, the radiographer had no key to a camera that contained a 102 curie iridium-192 sealed source and opened the camera with a screwdriver and hammer.

- e. The allegor stated that on May 5, 1981, at Mountain Fuel, a Southwest X-Ray radiographer performed radiographic operations with a 102 curie iridium-192 sealed source for about 30 minutes with the allegor eating lunch approximately 20 feet away.
- f. The allegor stated that on May 5, 1981, the radiographer neither surveyed the area, posted radiation warning signs nor asked the allegor to leave the area, approximately 20 feet away.
- g. The allegor stated that when questioned about the radiological hazards associated with these radiographic operations, the radiographer replied that there were no hazards for he was not required to wear a film badge.
- h. The allegor stated that he had contacted the Wyoming Radiological Health Services and the Arkansas Department of Health, but no action was initiated out of either office and he hoped that the NRC would not follow suit. He could not recall any names of any of his contacts.

### 3. Interview with Southwest X-Ray Corporation Personnel

- a. On May 19, 1981, two Southwest X-Ray Corporation radiographers, whose names had been referenced by the allegor, were interviewed. It was explained that if a lock on a camera is opened with a hammer and screwdriver, the lock is rendered useless and must be replaced. The inspector did not observe any locks that appeared to have been replaced recently.
- b. The radiographers stated and the inspector observed from radiographer's source decay charts that the maximum strength sealed source on hand on May 5, 1981, was approximately 58 curies.
- c. The radiographers acknowledged performing radiographic operations at Mountain Fuel on May 5, 1981, and the operations were conducted during the noon break, however, it is the policy of Mountain Fuel to vacate the building in which radiography is scheduled and apparently the policy had been rigorously enforced because no one has ever been observed in the area when radiography is being conducted.
- d. The radiographers stated and the inspector observed from review of utilization logs that the area in which radiography is performed is always surveyed. The inspector observed that the radiographers possessed immediately available warning signs and the radiographers vowed that they were being used.

- e. The radiographers stated that they always wear a film badge and a dosimeter. The inspector observed from utilization logs that a recording is made for dosimeter readings each day that radiography is performed.
- f. The inspector observed that a utilization log is completed each day whether the seal sources are used or just stored.
- g. The radiographers stated that they always work in pairs as a precautionary measure against incidents.
- h. The radiographers stated that radiographic operations had been conducted in Wyoming since about June of 1980. The inspector informed them that activities conducted in Non-Agreement States under the General License 10 CFR 150.20 are limited to a total of 180 days in any calendar year.

4. Interview with Mountain Fuel Supply Company Personnel

- a. On May 19, 1981, an individual employed by Mountain Fuel, who purportedly has as part of his responsibilities the contracting of radiographic operations, was interviewed by the inspector.
- b. The individual stated that he had contracted several radiography companies in the past, however, Southwest X-Ray has been the only one under contract since about June 1980 because of their quality of work and safety record.
- c. The individual stated that it is a policy of Mountain Fuel to permit radiographic operations after duty hours when the premises are vacated, however, there are times when emergencies do come up and Mountain Fuel will permit radiographic operations during the lunch break at which time the building where the radiography is being conducted will be vacated. He further stated that any employee who does not follow the policy of Mountain Fuel relieves Mountain Fuel of all liability, therefore, is personally responsible and the result is likely dismissal.
- d. The individual stated that it is also a policy of Mountain Fuel that unsafe working conditions or potential safety hazards be reported to Mountain Fuel Management. Mountain Fuel Management was not aware of the allegations.

5. Telephonic Communication

The Wyoming Radiological Health Services and the Arkansas Department of Health were contacted by telephone and they verified that they could

neither recollect any contact from the alleged nor find any record of contact by the alleged.

6. Exit Interview

The inspector met with representatives denoted in paragraph 1 on May 19, 1981, and discussed the general nature of this investigation.