

Atlantic Richfield Company

Harvey Technical Center
400 East Sibley Boulevard
Harvey, Illinois 60426
Telephone 312 333 3000

Products Division
Research & Engineering

Research & Development



November 28, 1977

Chief, Radioisotopes Licensing Branch
Division of Fuel Cycle and Material Safety
United States Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Sir:

In reply to your "Notice to All Licensees Authorized to Perform In-Air Irradiations -- Emergency Procedures", we submit the following information.

Attached is a letter to me from Mr. G. A. Uhl confirming our review of operating procedures.

Also attached is a copy of "Harvey Technical Center Radiation Emergency Procedures".

Also attached is a letter addressed to me from Ingalls Memorial Hospital detailing procedures for medical treatment of suspected or known overexposures to external gamma radiation.

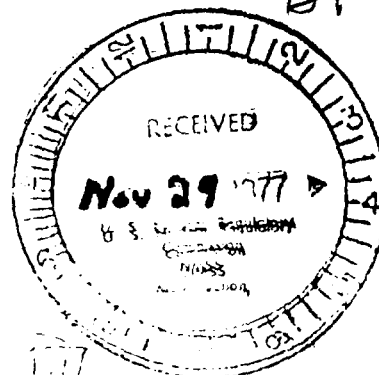
We trust that this letter and supporting documentation satisfies the intent of your Notice.

Sincerely,

ATLANTIC RICHFIELD COMPANY

Dr. A. I. Snow
Manager, Physical
and Environmental Research

AIS/ch
Attachments





Date: November 16, 1977
To: Dr. A. I. Snow
From: G. A. Uhl
Subject: Operating Procedures for N-Building Cave

The new Eberline Rams cave monitoring system is in operation, and will not allow access to the N-Building cave unless:

1. The source is in the well and hanging on the hoist cable.
2. The radiation level in the cave is 200 Mr/hr or less.
3. Proper keys are used, including one attached to a Geiger counter, which requires that the counter be physically present at the cave door when it is opened.

If the interlock is unoperative, it is our policy to remove the crank from the manual hoist mechanism, which makes it impossible to raise the source in the normal way.

Operating procedures have been reviewed to assure that the source cannot be raised out of the well unless the interlock system is operable. The key required to unlock the hoist mechanism cannot be retrieved unless the cave door is shut and mechanically locked.

G. A. Uhl

GAU:msk

HARVEY TECHNICAL CENTER RADIATION EMERGENCY PROCEDURES

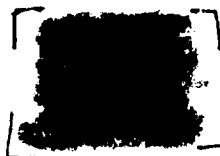
(For persons known or suspected of being overexposed to in-air radiations.)

- A. Notify the HTC First Aid Medical Dispensary immediately, i.e.,
- o Day Shift Monday thru Friday except holidays a Registered Nurse is on duty 7:30 a.m. to 4:00 p.m., phone extension 455.
 - o Evening/Night Shift plus Saturday, Sunday & Holidays a Shift Foreman is on duty around the clock, phone extension 454.
- B. The Registered Nurse or the Shift Foreman on duty shall attend to the exposed person(s) and they shall:
- a. Notify Ingalls Memorial Hospital of the in-air radiation exposure, number of persons involved, and the expected time of arrival at the hospital with the exposed person(s). Telephone 333-2300 and ask for the Emergency Room.
 - b. The Registered Nurse or the Shift Foreman on duty shall transport the exposed person(s) to the hospital.
 - c. They shall give the hospital personnel in attendance pertinent information as requested.
- C. The exposed person(s) Supervisor or his Co-worker shall immediately:
- a. Notify the HTC Radiation Officer of the overexposure. Phone 509 or 210.
 - b. Determine source of radiation (type).
 - c. Determine magnitude of accident by:
 - o Physical Measurements at the site.
 - o Take exposed persons personal film badge to the Landauer Laboratories in Glenwood, Illinois for immediate processing.
 - d. Information garnered from items b & c above should be relayed to Ingalls Memorial Hospital as soon as each becomes available. Said information will be valuable to the attending radiation specialists team administering to the exposed person(s).
- D. ARCO HTC Radiation Laboratory Personnel to be contacted in an emergency:

A. I. Snow, Radiation Officer
G. A. Uhl
L. A. Baillie
J. D. Phelps

Home Phone

Plant Phone



509 or 210
366
365
366

Exemption 6

E. Notification of Nuclear Regulatory Commission

In accordance with the Code of Federal Regulations Title 10 - Chapter 1, (copy available in N-Building), if radiation levels to which an individual is exposed is known to exceed or is suspected to exceed the following limits, notify the United States Regulatory Commission as indicated by phone (area code 312 -- 858-2660). In addition, immediate telegram, mailgram or facsimile notification should be made to:

US NRC
Office of Inspection and Enforcement
799 Roosevelt Road
Glen Ellyn, IL 60137

Notification will be made by the Radiation Safety Officer or designated alternates.

	<u>Immediately</u>	<u>Within 24 Hours</u>
Whole Body	25 Rems	5 Rems
Skin of Whole Body	150 Rems	30 Rems
Feet, ankles, hands or forearms	375 Rems	75 Rems

F. Additional Related Information

- o Refer to letter from Ingalls Memorial Hospital to A. I. Snow, dated 11/23/77, which is attached.
- o Ingalls Memorial Hospital phone 333-2300 (located 3 miles from HTC).
- o Radiation Specialists Team at Ingalls
 Dr. S. C. Sanwalani, MD - Radiation Oncologist - Director of Radio Therapy
 Mr. L. M. Klonowski - Medical Physicist
- o Film Badge Processing Lab Phone 755-7000 (located approximately 6 miles from HTC).

Landauer Services
R. S. Landauer, Jr. & Company
Glenwood Science Park
Glenwood, IL 60425



INGALLS MEMORIAL HOSPITAL
ONE INGALLS DRIVE, HARVEY, ILLINOIS 60426 - PHONE (312) 333-2300

November 23, 1977

Mr. A. I. Snow
Physical and Environmental Research
Atlantic Richfield Company
Harvey, Ill. 60426

Dear Mr. Snow

In response to your request for establishing a procedure for treatment of Atlantic Richfield employees who may require medical care for suspected or known overexposure to radiation, Ingalls Hospital will provide the following:

1. Emergency medical treatment as deemed necessary by the Emergency Room physician.
2. Dr. Sanwalani or his alternate will see and care for your employee. All medical care will be the responsibility of Dr. Sanwalani or his alternate.

The procedure to be followed is:

- A. Atlantic Richfield Company upon having knowledge of a possible overexposure or known overexposure to radiation to one of their employees will call Ingalls Memorial Hospital Emergency Room and tell them you are bringing a patient who has suspected or known overexposure to radiation.
- B. Ingalls Emergency Room will notify Dr. Sanwalani or his alternate and Mr. Larry Klonowski, Medical Physicist.
- C. The patient will be brought to Ingalls Hospital via Atlantic Richfield's own transportation or public transportation.
- D. The patient will be accompanied by a company representative.
- E. Upon arrival at the Emergency Room, the patient will be seen by the Emergency Room physician and Dr. Sanwalani or his alternate.
- F. All medical care and followup care will be the responsibility of Dr. Sanwalani or his alternate.

We feel that this procedure will provide the medical care necessary for your employee and that it will meet the requirements of the Nuclear Regulatory Commission.

Dr. Sanwalani

Carl Fitch

Paul Lyons