

7/7-205

ALLGEIER, MARTIN & ASSOCIATES, INC.

CONSULTING ENGINEERS AND ARCHITECTS

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JOPLIN, MISSOURI 64801

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May 19, 1980

U.S. Nuclear Regulatory Commission
Regional Licensing Section
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Attn: Mr. Samuel L. Pettijohn

RE: Byproduct Material Application
Control No. 03200

Gentlemen:

In accordance with your letter of May 12, 1980 on the above referenced application, please find enclosed the following information:

- I. Duties of Radiation Protection Officer
- II. Radiation Protection Program
- III. In-House Training
- IV. Methods of Sampling & Testing

We trust you will find the above in compliance with your request.

Very truly yours,

ALLGEIER, MARTIN & ASSOCIATES, INC.

By

C. C. Davidson

C. C. Davidson
Vice President

DEW/CCD/th

Enclosures

(8008120133)

MAY 21 1980

ALLGEIER, MARTIN & ASSOCIATES, INC.

2820 Range Line
Joplin, Missouri 64801

BYPRODUCT MATERIAL APPLICATION

Control No. 03200

ADDITIONAL DUTIES
OF
RADIATION PROTECTION OFFICER

MAY - 1980

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ALLGEIER, MARTIN & ASSOCIATES, INC.

ADDITIONAL DUTIES OF RADIATION PROTECTION OFFICER

NAME: Carson Crouse

I. The Radiation Protection Officer will be responsible for compliance with the requirements of Title 10, Code of Federal Regulations, Parts 19, 20, 30, 71 and applicable Department of Transportation Regulations.

These duties will include:

- a. To assure that byproduct materials possessed under the license conform to the materials listed on the license.
- b. To assure that use of the devices, particularly in the field, is only by individuals authorized by the license.
- c. To assure that all users wear personnel monitoring equipment, such as film badges or thermoluminescence dosimeters (TLD), when required.
- d. To assure that gauges are properly secured against unauthorized removal at all times when they are not in use.
- e. To serve as a point of contact and give assistance in case of emergency (gauge damage in the field, fire, theft, etc.) to assure that proper authorities, for example, NRC, local police, and State personnel, are notified promptly in case of accident or damage to gauges.
- f. To assure that the terms and conditions of the license, such as periodic leak tests, are met and that the required records, such as personnel exposure records, leak test records, etc., are periodically reviewed for compliance with Nuclear Regulatory Commission regulations, requirements and license conditions.

II. RADIATION PROTECTION PROGRAMS:

The instruction manual that is provided with each instrument is complete. However it has been decided that supplemental information be provided to our personnel in the area of personnel radiation protection. This protection instruction covers field use, transporting the gauge, and its storage when not in use.

Each operator will be provided a special film badge that is to be worn at all times when working with or transporting the gauge. This badge will detect radiation and when the film is developed each month, will indicate the dosage, if any, during the aforementioned period. The film from the badge is to be mailed to Soil Test, Inc. for forwarding to an appropriate laboratory specializing in reading the radiation exposure of the film.

The film badge is not transferable to other personnel but remains with the individual that it was originally assigned to. If other compaction inspectors are to be trained by experienced inspectors then the Radiation Protection Officer will request additional badges for each individual.

Once per month, inspectors that are assigned to operate the nuclear gauges will receive new film inserts for their badges. They are to remove the old film and mail it to Soil Test, Inc., 2205 Lee Street, Evanston, Illinois 60202. It is imperative that this function be performed without fail since it provides the most reliable protection that we have at the present time.

Film badges are not to be laid on the top of vehicle control panels where they are exposed to direct sunlight. In addition, they are not to be placed next to a radium-dial clock, on top of a television set, or worn when the inspector is near medical x-ray or other gamma-ray producing equipment. Also they should not be stored near the gauge.

In the event that a nuclear gauge is damaged or stolen please notify the office in Joplin, Missouri. If the instrument is damaged on the job site where there is a possibility that the radioactive probe is broken or cracked, it is advisable to keep all persons 20' to 30' from the instrument until the Radiation Protection Officer can determine the extent of the damage and possible area contamination.

In the event of an accident involving a vehicle transporting a nuclear gauge on a public roadway, the gauge should be taken immediately to an isolated spot where 30' of unoccupied space is available and the area secured until the Radiation Protection Officer can arrive and monitor possible emission.

When a nuclear gauge is transported, it should be stored in trunk of a passenger car or near the tailgate when transported by pickup truck. The gauge should be transported with the bottom of gauge pointed to the side of the vehicle. When the gauge is to be stored for an appreciable period of time, it should be placed at least 10' from any work area. If the storage area is a single story with no basement, the gauge should be placed in the upright position. In the event the storage area is on the second floor or a basement is located under the area, the instrument should be stored on its side with the bottom facing an exterior wall.

At six month intervals each instrument will be inspected by the Radiation Protection Officer. At this time, a wipe test of the source will be performed and the gauge housing will be checked for radiation levels.

III. The Radiation Protection Officer will conduct In-House training for additional personnel on an "As Needed" basis and will follow the training program as outlined by the manufacturer's training program (Soil Test, Inc.).

IV. Methods of Sampling and Testing will be as shown in the attached AASHTO Designation: T239-73 and (ASTM Designation: D3017-72).