

NATIONAL LEAD COMPANY

111 BROADWAY

NEW YORK 6, N.Y.

NUCLEAR METALS DIVISION

August 24, 1960

Mr. Nathan Bassin
Isotope Branch
Division of Licensing & Regulation
U. S. Atomic Energy Commission
Washington 25, D. C.

Dear Mr. Bassin:

- Reference: (1) Letter, G.L.Stukenbroeker to Isotope Branch, dated December 11, 1959
(2) Application for Byproduct Material License by the National Lead Company, Perth Amboy, New Jersey dated December 10, 1959
(3) License Number 29-6033-1 (L61), dated December 31, 1959
(4) Letter, G.L.Stukenbroeker to Mr. Nathan Bassin, Isotope Branch, dated March 21, 1960

The National Lead Company, Perth Amboy, New Jersey requests to have their Byproduct License No. 29-6033-1 (L61) amended to permit the transporting of their two sealed cobalt-60 sources to field locations in the states of Pennsylvania, Delaware, Maryland, Ohio, Indiana, Illinois, New York and the District of Columbia.

Please find attached, additional radiation protection procedures which will supplement those procedures submitted in our application for a Byproduct Material License on December 10, 1959. These additional radiation protection procedures are directed at control when the cobalt-60 sources are used at locations other than Perth Amboy, New Jersey.

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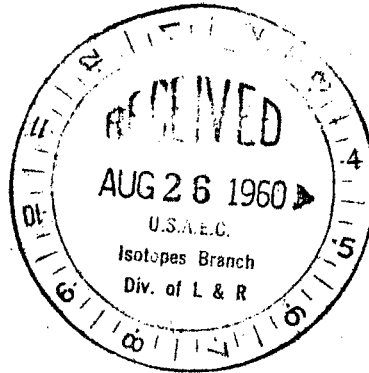
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Thank you for your attention to this application for changes in our byproduct license. If additional information is desired, please contact me.

Yours very truly,

G. L. Stukenbroeker
G. L. Stukenbroeker

GLS:FK
Attach.3 cps.



Supplement to Byproduct Material License
No. 29-6033-1 (L61) National Lead Company

Item 13 Facilities and Equipment

The vehicle which will be used to transport the two sources to various locations in the states of Pennsylvania, Delaware, Maryland, Ohio, New York, Indiana, Illinois and District of Columbia is of a van type. This van has double door on the rear, which permits the loading and unloading of the Model 446 radiographic wagon and Model 488 Source Changer, both of Technical Operations design. A side door to the van enters into the laboratory, which contains the desired counting equipment and health physics survey instrumentation. Both the Source Changer and Radiographic wagon will be properly secured to the vehicle during transit, by anchors to the vehicle frame.

Item 14 Radiation Protection Program

1. Vehicle

- (a) The vehicle will be labelled on each side and rear with lettering not less than three (3) inches high on a contrasting background with words "Dangerous - Radioactive Materials." This is in conformity with Interstate Commerce Commission Regulation, Tariff No. 10, Section 77.823.
- (b) The vehicle's rear doors and side doors shall be locked during transporting and when sources are not in use. The keys for these doors shall be in the possession of the Health Physics Officer or the Deputy Health Physics Officer.
- (c) A licensed radiographer shall be in attendance at all times while the vehicle is transporting the sources.

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- (d) The doors to the van of the vehicle shall be equipped with a control device which shall, upon entry by an unauthorized person, sound an audible alarm signal.

2. Operational Procedures

- (a) The radiographic wagon and source changer are provided with lock devices, which prevents unauthorized or accidental removal or exposure of our sealed sources. These sources will be kept in a locked condition at all times except when in use and under direct surveillance of a radiographer.
- (b) At night when the sources are not being used, they will be returned to the van section of the vehicle and secured. A survey will be made to make certain the sources are in "safe" storage. The van will be locked, as stated above in 1(d). The plant security police will be instructed on the proper procedures if the audible alarm or visible alarm were to sound. The location and whereabouts of the radiographer will be known to the plant security police. Records shall be kept of these surveys of "safe" source conditions.
- (c) In case of an accident to the vehicle during transit of the sources, the radiographer shall immediately survey the area and place restrictive ropes and proper signs at distances which will reduce the radiation level to 2 milliroentgens per hour. The local police or State Patrol shall be notified immediately.
- (d) At the radiographic testing area, the Health Physics Officer or Deputy Health Physics Officer shall conduct a survey of the radiation level and post restrictive ropes at a distance where the level is at least 2 milliroentgens per hour or less. Such areas shall be conspicuously posted with signs bearing the radiation symbol and the words CAUTION HIGH RADIATION AREA - PERSONNEL MONITORING REQUIRED. The survey shall be conducted with a Baird-Atomic, Model 414 instrument, which has a 3 to 3000 mr/hr. range.

- (e) Only authorized personnel may be admitted to the restricted area. Each authorized person will wear a film badge and direct reading dosimeter, as stated in original radiation protection procedure.
- (f) The test area shall have continuous surveillance to protect against unauthorized entry. During the testing, this shall be done by the radiographer and his assistance. At all other hours, the sources shall be stored in "safe" storage in the van with audible alarm and under control of the plant security police.
- (g) The plant managers and supervisory personnel will be given an orientation talk concerning the gamma inspection operations. Their assistance will support the radiation protection program outlined here.
- (h) In every phase of our proposed program for testing by using sealed cobalt sources, we shall conform to 10 CFR Part 31, Radiation Safety Requirements For Radiographic Operations.