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*April 18, 1961*

Phillips Petroleum Company  
Bartlesville, Oklahoma

Attention: Mr. T. H. Hipp, Manager  
Mining and Milling Department

Gentlemen:

This refers to your letter of August 3, 1960, in which you submitted information in support of your application for renewal of License No. R-216, your letter dated November 14, 1960, commenting on the amendments to Part 20, and your letter of December 1, 1960, requesting Commission authorization to make allowances for respirators in determining if individuals have been exposed to airborne radiation in excess of the limits specified in 10 CFR 20.

We have reviewed the information submitted in your August 3, 1960, letter, and find it deficient with respect to the following: (The item is listed as in your application.)

Item 10 - Discharge stacks and atmospheric effluents -

Please submit exhaust port or exhaust stack air sampling results, representative of concentrations of radioactive materials in air effluents discharged from the two American Air Filter units, the two 40-foot ore dryer vent stacks, and the two 65-foot yellow cake area ventilation stacks.

We are enclosing a copy of our air survey guide, entitled, "A Basis for Surveying to Determine Concentrations of Radioactive Material Discharged as Air Effluents from Uranium Mills," which may be useful to you in determining compliance with 10 CFR 7, Section 20.106(b), "Concentrations in effluents to unrestricted areas," with respect to atmospheric effluents. In your reply to this letter, please describe your air survey program for determining compliance with Section 20.106(b).

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Phillips Petroleum Company

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*April 18, 1961*

We thank you for your letter of November 14, 1960, containing your comments on amended sections of 10 CFR 20. The comments, which were received after the publication of the regulations, will be considered in any future changes the Commission may make in its regulations and standards for protection against radiation. Please note Item No. 6 of the miscellaneous amendments to Part 20, effective January 1, 1961.

We have reviewed your application, dated December 1, 1960, pursuant to 10 CFR 20, Section 20.103(e) for Commission approval of your proposed program for using respiratory protective equipment.

Limits for exposure to airborne radioactivity are established in 10 CFR 20. As indicated in the "Statement of consideration" to amendments of 10 CFR 20, the adoption of these exposure limits should not be considered as a departure from the principle that unnecessary exposure to radiation should be avoided. To this end, respirators are frequently used in areas where airborne radioactive material is known to exist in such concentrations that exposure, even without respirators, is within acceptable 10 CFR 20 limits. The AEC encourages this practice as well as the practice of having respirators available for use in emergency situations. Such use of respirators need not have prior approval of the AEC.

The use of respirators in order to meet the exposure limits in 10 CFR 20 is justified only in those instances in which it is not feasible to provide more positive protective measures such as process and ventilation control. The Commission will not authorize, pursuant to Section 20.103(e)(3), the use of respirators as a substitute for feasible methods of adequate ventilation and control.

Your application should provide justification for reliance on respiratory protective equipment for preventing personnel exposure to airborne radioactivity in excess of MPC for those routine operations to which ventilation and process controls could be applied.

Phillips Petroleum Company

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Please describe the manner in which management will maintain central and supervision of the selection, fitting, maintenance, cleaning and use of respiratory protective equipment. Also describe the methods that will be used in thoroughly instructing your personnel in the proper fitting, maintenance and use of respirators, and in the limitations of such devices.

Please submit the above requested information in quadruplicate.

Very truly yours,

J. C. Delaney, Chief  
Nuclear Materials Branch  
Division of Licensing  
and Regulation

Enclosures:

1. 10 CFR 20
2. Air Survey Guide

bcc: Compliance Division, HQ (2) w/cpy. ltrs. 8/3, 11/14 & 12/1/60  
Public Document Room

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