

STANDARD FORM NO. 64

# Office Memorandum • UNITED STATES GOVERNMENT

TO : Harold L. Price, Director  
Division of Licensing and Regulation

DATE: December 1, 1959

FROM : Forrest Western, Deputy Director  
Office of Health and Safety *FW*

SUBJECT: LICENSING OF URANIUM FOR USE IN COLOR COMPOUNDS FOR CERAMIC TILE AND  
GLASS BUILDING BLOCKS

SYMBOL: HS:FW

Several months ago on the basis of preliminary measurements of radiation levels from small samples of ceramic tile, applications for the use of uranium in color compounds to be used in ceramic tile and glass building blocks were held in abeyance pending further study of this subject.

Following conversations with representatives of manufacturers of color compounds, arrangements were made for samples of ceramic tile from two manufacturers and the building blocks from one manufacturer to be submitted to the Health and Safety Laboratory, NYOO, for more accurate radiation measurements.

A report on the first of these uranium glazed tiles from Vitro was made by W. B. Harris, HABL, July 29, 1959 and copies were sent by us to Mr. Rogers and Mr. Delaney, September 8, 1959. An additional copy is attached to this memorandum.

During the past month we have received reports on the second batch of tile and the glass building blocks. Copies are attached.

It is of interest to note that in the second batch of tile the alpha radiation at the surface was found to be 9,000 dpm/100 sq. cm. as compared to no measurable activity from the first batch of tile and from the glass building blocks. This observation indicates that any over-glaze covering the coloring material on this tile must have been very thin and that the beta radiation was higher than it would have been with a relatively thick over-glaze.

It is the recommendation of the Office of Health and Safety that in consideration of the levels of radiation observed from these tile and the possibility that ceramic tile containing uranium would be used in solid color on bathroom walls and possibly on bathroom floors, that licensing of uranium for this purpose be held in abeyance until a definitive Commission and, preferably, a definitive Federal policy in this field can be established. It is suggested that all color manufacturers with applications pending be advised that this is the present position of the Commission.

(Continued)

December 2, 1959

In regard to the glass building blocks we are less certain as to the position which should be taken. We believe that they probably involve less hazard than the tile not only because the radiation levels are somewhat lower but because a large portion of their use would probably be in industrial buildings rather than in homes or schools. We would like to discuss this subject further before making a definite recommendation.

(1) Copy memo W. E. Harris to H. Allan Lough, dated 7/29/59  
(2) Copy " " " " , dated 11/10/59  
(3) Copy " " " " , dated 11/12/59  
(4) Copy of Tile Council of America, Inc. letter to WPAAC, dated 10/9/59  
(5) Copy draft letter to Tile Council of America, Inc.

cc: C. L. Dunham, M.D., Director, IHS  
R. L. Kirk, Dep. Dir., IHS  
J. C. Melaney, IHS  
P. O. Jacques, Chief, Information Service Branch, IHS