

Environmental Health Department

October 23, 1973

File - Pb in Ceramics  
XF LH-86

Ms. Paulene A. Littlewood  
Staff Potter  
The Fulham Pottery & Cheavin Filter Company Limited  
210, New Kings Road  
London, S.W.6., England

Dear Ms. Littlewood:

LH-86, Lead Glazes for Dinnerware

I apologize for not having responded sooner to your letter of July 30th, and I also thank you for your letter of September 24th which jogged my memory.

I tried to obtain a number of opinions regarding your paper, and, unfortunately, during the circulation period, the letter got mislaid. I have received it back however, and I wish to offer the following comments:

First of all, in a general nature, I would like to congratulate you for what I feel is a comprehensive review of the subject. Certainly, you have highlighted the keypoints of concern. I would like to criticize, however, your use of the word "harmless" on several occasions in the article. There really is no such thing as a harmless lead containing frit, but such frits are relatively safe if handled properly. I do not believe that your readers should be lulled into a state of non-concern just because they are using fritted material. One still needs to use caution and certainly for any person handling lead compounds, be they fritted or not, we would recommend that they have a periodic blood lead test, so as to insure that they are not absorbing undue amounts of lead. While I urge a little more caution in this case, I also feel that perhaps in some other cases in the article you became very close to sounding alarmist. Certainly, under the Poisonous Fired Glazes heading, the last two sentences of the first paragraph are definitely alarmist. There is absolutely no evidence that the inhalation of lead from general ambient air is in any way harmful nor even is it a significant contributor to the overall lead burden in the body.

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I believe that these sentences detract from the general tone of your article. Also, it is well-known that the pieces of dinnerware which have caused problems have leached relatively enormous quantities of lead. If a leaded glaze is used, some lead will be leached out, but this is not necessarily harmful.

I also feel that some of your absolute statements regarding the effects of various glaze constituents and firing temperatures on lead release should be made a little more cautiously. For example, it is not necessarily axiomatic that the addition of unfitted fluxes to the glaze will make it less resistant to acid attack. This could happen, but it is not inevitable. Also, off-coloring oxides do not necessarily upset the balance to the glaze to a dangerous level, though some do. Underfiring can produce glazes which are easily attacked by acid, but they do not necessarily do so. I believe that you are calling attention to these factors which commonly cause problems, and this is correct. However, there are exceptions to even these warnings.

Question, footnote number 2, in which you plan to list materials which improve glaze resistance to acid attack. We do not see how this can be done, without knowing the other glaze ingredients, since the interactions of specific glaze ingredients may well affect acid solubility.

With regard to our publication, Facts About Lead Glazes for Art Potters and Hobbyists, it is not presently available in the United Kingdom. Also, the list of laboratories included on the backpage of the booklet are U.S. laboratories, and it is unlikely that such a list would be benefit to the potters in the U.K. I might suggest, however, that you give consideration to reprinting the booklet and include a list of laboratories in the U.K. Certainly, if there is desire on your part to reprint the booklet, we will arrange to give you the proper permission to do so. Again, I am sorry that I did not write to you earlier, but I hope that this letter reaches you in time to meet your deadline.

Sincerely,

Jerome F. Cole, Sc.D.  
Director, Environmental Health

cc: Mr. P.E. Robinson  
Mr. J.F. Smith  
✓ Dr. D.R. Lynam

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