

**APPENDIX A**  
**RECORDS BEING RELEASED IN THEIR ENTIRETY**  
**(If copyrighted identify with \*)**

<u>NO.</u>	<u>DATE</u>	<u>DESCRIPTION/(PAGE COUNT)</u>
1.	04/28/80	Letter from W.T. Crow, Division of Fuel Cycle & Material Safety, NMSS to Dr. W.E. Mott, DOE regarding radiological survey of the Former Vulcan Steel Company and the Former Blockson Chemical Company (2 pages)



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

APR 28 1980

Copy: Aerospace  
Whitman (A)

Dr. William E. Mott, Director  
Environmental Control Technology Division  
Office of Environment  
Department of Energy  
Washington, D. C. 20545

Dear Dr. Mott:

We have reviewed the two Radiological Survey Reports sent to us with your letter of March 27, 1980, and have the following comments:

1. Radiological Survey of the Former Vulcan Steel Company  
Radiological Survey of the Former Blockson Chemical Company

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Both reports (Vulcan, Pg. 13 and Blockson, Pg. 12) contain a comparison, which we believe is incorrect, of NRC contamination guidelines and ANSI Standard N13.12. Specifically, we believe the statement, "The proposed ANSI standard is more restrictive for uranium in that its limits include both alpha and beta activity and the NRC guideline includes only alpha activity.", is in error. The intent of the ANSI standard, for natural uranium contamination, is to specify disintegrations per minute of the U-238, U-235 and U-234 isotopes present. This is normally determined by measurement of the alpha activity, but can be inferred by beta measurements. It is incorrect to use the total of alpha plus beta, if that is the meaning of the sentence, because this would, in effect, result in overestimating the quantity of uranium isotopes present.

We also disagree with the interpretation of the NRC guideline given in both reports (Vulcan, Pg. 14, Blockson, Pg. 12) that a contaminated surface covered by dust, dirt, water, wax, etc., so that alpha activity would not be detectable, would meet the release criteria given in the guideline. The proper interpretation is that any such surface in a plant area likely to be contaminated would be assumed to be contaminated in excess of the guideline limits. We believe this interpretation is clearly supported by numbered paragraphs 2. and 3. in the NRC guideline (see Appendix 5, either report).

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2. Radiological Survey of the Former Blockson Chemical Company

The fact that Olin Chemical is processing phosphoric acid, which contains elevated levels of uranium, and that it is impossible to distinguish between contamination from current operations and MED/AEC work, is not mentioned in the report until Page 17. This fact is of primary importance in

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understanding the body of the report and should be in the Preface and Executive Summary Section. In addition, more details of the current Olin operation should be provided to support the conclusion that it is impossible to relate existing contamination to past MED/AEC work.

We trust these comments will be useful.

Sincerely,



W. T. Crow, Section Leader  
Uranium Process Licensing Section  
Uranium Fuel Licensing Branch  
Division of Fuel Cycle and  
Material Safety