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**REMOVAL ACTION MEMORANDUM: SILOS 1 &
2 REMOVAL ACTION**

10-29-90

DOE/WMCO

DOE-159-91

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LETTER



Department of Energy

FMPC Site Office
P.O. Box 398705
Cincinnati, Ohio 45239-8705
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OCT 29 1990
DOE-159-91

Mr. W. H. Britton, President
Westinghouse Materials Company
of Ohio
P. O. Box 398704
Cincinnati, OH 45239-8704

Dear Mr. Britton:

SILOS 1 & 2 REMOVAL ACTION - REMOVAL ACTION MEMORANDUM

- References:
- 1) Engineering Evaluation/Cost Analysis (EE/CA) for the K-65 Silos Removal Action, dated August 1, 1990
 - 2) Letter, C. A. McCord to B. J. Davis, "EE/CA K-65 Removal #4 U. S. DOE Fernald OH6 890 008 976," dated September 4, 1990
 - 3) Letter, A. P. Avel to C. A. McCord and G. E. Mitchell, "K-65 Silos Removal Action," dated September 27, 1990
 - 4) Letter, R. C. Robertson to Jack Craig, "Bentonite Cover Thickness," dated September 29, 1990

An Engineering Evaluation/Cost Analysis (EE/CA), listed as Reference 1, for the K-65 Silos Removal Action has been prepared to evaluate removal action alternatives, using preliminary RI/FS data, to support the selection of a preferred alternative. DOE, as the lead Agency at the FMPC, has selected an alternative for this removal action that consists of covering the K-65 residues with a material that will retard the emanation of radon gas into the space between the residues and the silos domes. The material will be bentonite due to bentonite's plasticity and the relative ease by which it can be placed into the silos. The application of the bentonite to cover the K-65 residues offers the immediate protection from the effects of tornado-induced or spontaneous dome failures as well as a reduction in the chronic radon released from Silos 1 and 2.

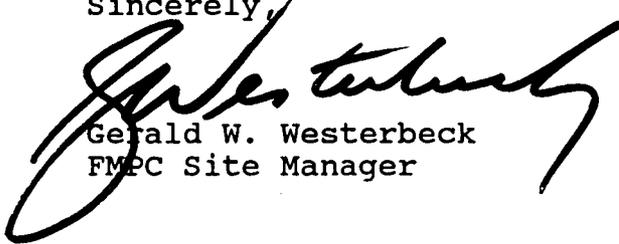
The selected alternative for Silos 1 and 2 Removal Action will also include the modifications to the selected alternative as stated in Reference 3. Modifications to the selected alternative include:

- o A minimum of one (1) foot of bentonite to be installed to cover the K-65 residues as opposed to the four (4) feet of bentonite as stated in the EE/CA. Reference 4 includes information on radon attenuation.
- o Additional radon monitoring as listed in Reference 2.
- o Due to the level of bentonite to be installed to cover the K-65 residues, the volume of the silo atmospheres displaced will be reduced considerably. Therefore, an air tight enclosure will not be constructed over Silos 1 and 2 to contain the volume of air inside the silos displaced by the installation of the bentonite.

A work plan for implementation of the selected alternative, as stated in the EE/CA, with the above mentioned modifications should be prepared and submitted to the DOE Site Office for approval on or before October 30, 1990.

If your staff has any questions, please ask them to contact Jack Craig at extension 6159.

Sincerely,



Gerald W. Westerbeck
FMPC Site Manager

DP-84:Craig

cc:

S. W. Coyle, WMCO

D. A. Nixon, WMCO

Administrative Record File