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**APPROVAL OF THE REVISED SILO 1 AND 2
REMOVAL ACTION BENTONITE
EFFECTIVENESS ENVIRONMENTAL
MONITORING PLAN**

4-21-92

USEPA/DOE

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LETTER



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

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APR 21 1992

REPLY TO THE ATTENTION OF:

Mr. Jack R. Craig
United States Department of Energy
Feed Materials Production Center
P.O. Box 398705
Cincinnati, Ohio 45239-8705

HRE-8J

RE: Approval of the Revised Silo 1
and 2 Removal Action
Bentonite Effectiveness
Environmental Monitoring Plan

Dear Mr. Craig:

The United States Environmental Protection Agency (U.S. EPA) has completed its review of the revised Silo 1 and 2 Removal Action Bentonite Effectiveness Environmental Monitoring Plan. On April 3, 1992, U.S. EPA submitted draft responses on the Plan to the United States Department of Energy (U.S. DOE), and on April 4, 1992, U.S. DOE submitted responses to U.S. EPA comments. Comments on the Plan were further discussed on April 6 and April 8, 1992.

Based upon the above submittals and discussions U.S. EPA hereby approves the plan pending incorporation of the attached comments.

Please contact Mr. James Benetti at (312/FTS) 886-6175, or Mr. James Saric at (312/FTS) 886-0992 if you have any questions.

Sincerely,

James C Benetti

James Benetti, Chief
Radiation Section

James A. Saric

James A. Saric
Remedial Project Manager

Enclosure

cc: Graham Mitchell, OEPA-SWDO
Pat Whitfield, U.S. DOE-HDQ

(allen)
partial
action 1
response
to doe-1015-9-
(4085)

[REDACTED]

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: APR 03 1992

3108

SUBJECT: Comments on Revised Silo 1 and 2 Removal Action Bentonite Effectiveness Environmental Monitoring Plan, March 13, 1992

FROM: Larry Jensen, CHP
Regional Radiation Expert
Radiation Section

TO: James Saric, RMP
RCRA Enforcement Branch

I have reviewed the above document. My comments follow.

GENERAL COMMENTS

1. Diffusion release calculations follow the method of Borak and Colle' while free air exchange calculations follow the method of the Fernald Dosimetry Reconstruction Project (FDRP). One major observation is that while the latter uses a range for silo parameters, this monitoring plan selects a single value (from the FDRP range) but without justification for the selection. Either the specific parameter used should be justified or the most conservative parameter from each range should be used.
2. This monitoring plan includes temperature driven ventilation while the FDRP includes both temperature and wind driven ventilation. Justification should be given as to why wind driven effects are not also included in this plan, especially in terms of consistency.

SPECIFIC COMMENTS

1. It would be helpful to number the equations. Also equations which are tucked into paragraphs, but which are major culminating equations, should be separated from the text like the other equations. Specifically, this is referring to Q_{diff} on page 2 and Q_{total} on page 4.
2. For the equation $PV = nRT$ on page 3, the definitions can be improved. Specifically, (1) state units on pressure, volume, and temperature, (2) decide whether the calculation will be in °K or °R, and (3) state whether the volume is of the silo or just the headspace.
3. For the second equation on page 3, clarify the definitions also.