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JUL 9 1970

LYALL JOHNSON
ACTING DIRECTOR
DIVISION OF MATERIALS LICENSING
U. S. ATOMIC ENERGY COMMISSION
WASHINGTON, D. C. 20545

Original Signed by
Lyall Johnson

KERR-MCGEE CORPORATION
KERR-MCGEE BUILDING
OKLAHOMA CITY, OKLAHOMA 73102

ATTENTION: MR. GEORGE PARKS
EXECUTIVE VICE PRESIDENT

THE PROPOSED WASTE HANDLING AND TREATMENT CONCEPT DESCRIBED IN YOUR TWX
DATED JULY 7, 1970 APPEARS SATISFACTORY SUBJECT TO OUR REVIEW OF THE DETAILS
OF DESIGN AND OPERATION YOU PLAN TO SUBMIT IN THE NEAR FUTURE. THE CONCEPT
SHOULD HAVE THE OBJECTIVE OF REDUCING THE CONCENTRATION OF URANIUM IN THE
EFFLUENT TO THE LOWEST PRACTICABLE LEVEL. IN VIEW OF YOUR REFERENCES TO
YOUR PENDING DEEP WELL PROPOSAL, WE FEEL YOU SHOULD CLEARLY UNDERSTAND THAT
WE ARE IN NO POSITION TO PROVIDE YOU ANY DEGREE OF ASSURANCE THAT AEC ACTION
ON YOUR DEEP WELL PROPOSAL WILL BE TAKEN WITHIN THE NEXT TWELVE MONTHS OR
THAT, WHEN ACTION IS TAKEN, IT WILL NECESSARILY BE AFFIRMATIVE.

REFERENCE: DCL:DAN; 40-8027

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KERR-McGEE CORPORATION
INTERNAL CORRESPONDENCE

TO B. E. Brown
FROM D. K. Sly/F. J. Edwards
DATE July 28, 1970
SUBJECT Radioactive Contamination Control

In an effort to define problem areas so that action may be taken to reduce airborne contamination, a cursory inspection of the plant was made on July 24, 1970. A number of the problem areas at the time are itemized below:

1. HNO₃ Digestion Area

- (a) Leaks in both feed screws. Cover plates do not fit tightly and screw bearing seals leak. Should be repaired.
- (b) A large material spill by Miscellaneous Digestor. A plastic covering over the grating could have prevented most of this spill. Should be cleaned up.
- (c) Loose UO₃ powder over entire floor of second story storage area above electrical distribution rooms. This powder is blowing from denitrators. Should be vacuumed.
- (d) Overhead piping and ductwork covered with powder by west ventilation air handling unit.

2. Fourth Level

- (a) UF₄ powder on 3X4' plywood should be vacuumed.
- (b) UO₂ powder from UO₂ conveyor job should be vacuumed.
- (c) UO₃ leaking from pulverizer surge bin door. A new gasket should be installed.
- (d) UF₄ powder leaking at southwest corner of vertical transfer point of UF₄ conveyor. Repair seal.

3. Third Level

- (a) Loose powder on top of UO₃ storage bin.
- (b) UO₂ powder from conveyor work.
- (c) Loose UF₄ on Hydrofluorination Reactor.

Exhibit I

4. Second Level

- (a) Loose powder and scale on UNH tanks and denitrators.
- (b) UO_3 hopper screw leaking at south seal. Provide plastic on grating to prevent material from dripping thru to lower floor until seal is repaired.
- (c) UO_2 spill in seal bin area.
- (d) UO_2 - UF_4 filter bin drive covered with powder and leaking to first floor. Try to contain powder until seal is repaired. Vacuum powder already accumulated.
- (e) Leak in seal at north end of cleanup reactor. Vacuum up UF_4 powder in area.

5. First Level

- (a) Barrels of uncovered UF_4 in compressor area.
- (b) UF_4 spill below vertical UF_4 conveyor.
- (c) Leaks in conveyor inspection port.
- (d) Drums being filled from bin by valved spout without shroud.
- (e) Fluorination ash receiver being shoveled out and material being carried 15 feet across area and put in 55 gallon drum. A fresh air vent is blowing down into the drum area. Block off vent when this operation takes place.
- (f) Area not yet cleaned from changeout of last receiver over 16 hours ago.
- (g) Auger removed from UF_4 bins. Openings left uncovered. Tape plastic over openings.
- (h) Pile of UF_4 on 55 gallon drum lid below vertical conveyor.
- (i) UO_2 in first floor seal bin area from conveyor repair.
- (j) Spills on floor from UO_3 transfer to conveyor.
- (k) UO_3 being transferred to 55 gallon drum from vertical auger without shroud. Drums left uncovered.

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- (l) Auger drive leaking in this area. Air currents blowing material out of area. Repair auger seal.
- (m) UO_3 being transferred under denitrators without shroud to contain dust.
- (n) Loose powder in UNH area.
- (o) Loose powder from drum rupture in future denitration area.

A second inspection of the above areas was made on July 27. Of the above items, only items 1 (b), 2 (c), and 5 (f) were remedied.

DKS:FJE:tj *Ly*
cc: B. E. Brown
J. W. Craig
HP File

KERR-McGEE CORPORATION
INTERNAL CORRESPONDENCE

TO B. E. Brown

DATE August 11, 1970

FROM D. K. Sly

SUBJECT Progress Report

Re: July 28 memo, B. E. Brown from D. K. Sly
Subject: Radioactive Contamination Control.

The following is to summarize the progress in the problem areas mentioned in the above memo:

- Item 1 (a) Cover plates have been clamped on the feed screws and the bearing seals have been tightened.
We must secure the inspection plates on the feed screw to the digestion tank.
- (b) A steel floor has been installed in this area and a dust containment hood is soon to be installed.
- (c) We have not yet vacuumed up powder in the storage area.
- (d) West ventilation air handling unit area has not yet been cleaned.
- Item 2 (a) Completed.
- (b) Completed.
- (c) A new gasket was installed on surge bin door. A dust containment hood is planned for this area to help solve the problem of checking the bin level.
- (d) The inspection cover at the UF₄ - Redler 510 transfer point has not been secured.
- Item 3 (a) Loose powder was cleaned up but more powder has accumulated since cleanup.
- (b) Completed.
- (c) Loose UF₄ has not been cleaned from hydrofluorination reactor.



Exhibit T

NUCLEAR DIVISION

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- Item 4 (a) Loose powder and scale still remains on UNH tanks and denitrators.
- (b) The UO₃ hopper seal has not been repaired. A barrel has been provided below seal to prevent material from dropping to the first level.
- (c) Completed.
- (d) Nothing has been done to prevent UF₄-UO₂ filter bin drive from leaking and dropping material to the first level.
- (e) This equipment has not been run since inspection. The loose powder remains.
- Item 5 (a) No uncovered barrels observed during last few days.
- (b) Cleaned up but a recurring problem. A better way to sample Redler conveyors is needed.
- (c) Inspection glass leaks in the Redler conveyors have not been repaired.
- (d) A new shroud is needed on the UF₄ conveyor drumout leg.
- (e) More care is being exercised during ash receiver change-out.
- (f) Ash receiver area is still not being completely cleaned after change-out.
- (g) No covering has been placed over openings in UF₄ bin.
- (h) Cleaned but...item 5 (b) above.
- (i) Completed.
- (j) Cleaned up but recurring problem. Dust control hood planned for this area.
- (k) No shroud is installed on UO₃ elevator drumout leg.

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- (l) Auger seals have not been repaired in the U03 conveyor area.
- (m) Shrouds installed.
- (n) Still much loose powder in UNH area.
- (o) Completed.

The underlined items above are areas which require immediate attention. I believe when these are completed our air activities will fall below 1 MPC in most plant areas.

DKS:tj *with*

cc: J. W. Craig
A. M. Valentine
Howard Eberline
H. P. File