

TWX AEC-154

P R I O R I T Y

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FM USAEC IDAHO FALLS IDA

60 JUNE 30/2052Z

TO USAEC WASHINGTON DC

INFO L E SNYDER, IDO LIAISON OFFICER, DRD

46-2038

FOR W E KRIEGSMAN, DIVISION OF COMPLIANCE, FROM DONALD I WALKER...
ON JUNE 27, 1960, WILLIS B JOHNSTON AND GEROGE H SMITH, ID,
LICENSEE INSPECTION DIVISION, MET IN OKLAHOMA CITY, OKLAHOMA,
WITH THE FOLLOWING OFFICERS OF KERR-MCGEE OIL INDUSTRIES, INC. CLN
DEAN A MCGEE, PRESIDENT, OKLAHOMA CITY, OKLAHOMA SMCLN V L MATTSON,
GENERAL MANAGER, MINERALS DIVISION, OKLAHOMA CITY, OKLAHOMA SMCLN
AND WAYNE C HAZEN, DIRECTOR, METALLURGICAL RESEARCH LABORATORIES,
GOLDEN COLORADO. THE PURPOSE OF THIS MEETING WAS TO DISCUSS WITH
TOP MANAGEMENT THE RESULTS OF THE JUNE 13-16, 1960, INSPECTION OF
THEIR SHIPROCK, NEW MEXICO, URANIUM MILL. THE INSPECTORS DISCUSSED
THE FOLLOWING WITH MR MATTSON AND MR HAZEN CLN

I. INADEQUATE SURVEYS - THE INSPECTORS ARE OF THE OPINION THAT
THE PERSONNEL OF THE SHIPROCK MILL ARE CONDUCTING INADEQUATE
INTERNAL AND ENVIRONMENTAL SURVEYS.

A. ONLY SIX SURVEYS IN THE MILL HAVE BEEN MADE AND THESE DURING
THE PERIOD 12-20-58 TO 8-17-59. THESE SURVEYS CONSISTED OF
A TOTAL OF 185 SAMPLES FROM 16 LOCATIONS.

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PAGE TWO

- B. NO BREATHING ZONE SAMPLES HAVE BEEN TAKEN.
- C. AREAS WHICH HAVE HAD EXTREMELY HIGH CONCENTRATIONS OF AIRBORNE URANIUM /ONE GREATER THAN 900 X MPC/ DURING THE AEC SAMPLING PROGRAM HAVE NOT BEEN SAMPLED BY THE LICENSEE.
- D. NO SAMPLES HAVE BEEN TAKEN TO DETERMINE AMOUNTS OF AIRBORNE LICENSED MATERIALS RELEASED TO UNRESTRICTED AREAS. THE INSPECTORS DISCUSSED THE POSSIBILITY OF AIRBORNE CONCENTRATIONS OF RADIOACTIVE MATERIAL BLOWING FROM THEIR DISCONTINUED TAILINGS AREA. THE SHIPROCK MILL HAS BUILT A NEW TAILINGS POND AND THE OLD POND HAS DRIED UP.
- E. INSPECTION FINDINGS INDICATE THE SHIPROCK MILL IS RELEASING TAILINGS LIQUORS TO UNRESTRICTED AREAS BY WAY OF SEEPAGE INTO SAN JUAN RIVER SMCLN AT PRESENT THERE ARE FOUR SEEPAGE AREAS. LICENSEE SAMPLING OF THIS SEEPAGE SHOWS THAT ONE OF THESE AREAS IS 2.75 X MPC FOR RA/226. LICENSEE PERSONNEL SEEM TO BE IN DISAGREEMENT ON THE POSSIBLE EFFECTS OF THIS SEEPAGE ON UNRESTRICTED AREAS. THERE IS A U S GOVERNMENT HELIUM PLANT LOCATED APPROXIMATELY 1 MILE DOWNSTREAM FROM THE SHIPROCK MILL. MR HANAGARNE, AN EMPLOYEE AT THE SHIPROCK MILL, TOLD THE INSPECTOR IN A TELEPHONE CONVERSATION THAT THE HELIUM PLANT OBTAINED THEIR DRINKING WATER FROM THE SHIPROCK MUNICIPAL WATER PROCESSING PLANT. MR MATTSON,

END OF PAGE TWO

PAGE THREE

ON THE OTHER HAND, TOLD THE INSPECTORS THAT THE HELIUM PLANT PUMPED THEIR WATER DIRECTLY FROM THE SAN JUAN RIVER DOWNSTREAM FROM THE SHIPRICK URANIUM MILL.

F. THE LICENSEE HAS NOT MADE ANY TIME STUDIES TO RELATE AIRBORNE CONCENTRATIONS OF URANIUM TO INDIVIDUAL EXPOSURES.

II. DETERMINATION OF CONCENTRATIONS OF AIRBORNE URANIUM - THE INSPECTORS DISCUSSED MR HAZEN'S METHOD OF DETERMINING URANIUM CONCENTRATIONS BY GROSS ALPHA COUNTING. IT WAS NOTED BY THE INSPECTORS THAT ONE SET OF AIR SAMPLES HAD BEEN RUN BY BOTH GROSS ALPHA COUNTING AND FLUORIMETRIC ANALYSIS METHODS. MR HAZEN AGREED THAT THE CORRELATION BETWEEN THE TWO SETS OF RESULTS WAS VERY POOR. MR HAZEN STATED THAT IN THE FUTURE, THEY PLANNED TO DETERMINE ALL CONCENTRATIONS OF AIRBORNE URANIUM BY FLUORIMETRIC ANALYSIS.

III. ACTIONS TO BE TAKEN AS A RESULT OF SURVEYS - THE INSPECTORS INFORMED THE LICENSEE THAT AS A RESULT OF AIR SURVEYS MADE, THE LICENSEE MUST, WHERE NECESSARY, TAKE APPROPRIATE ACTION TO REDUCE DUST CONCENTRATIONS TO MPC OR BELOW OR TO RESTRICT THE OCCUPANCY OF SUCH AREAS IN SUCH A MANNER THAT EMPLOYEES ARE NOT BEING EXPOSED TO QUANTITIES OF AIRBORNE URANIUM IN EXCESS OF THOSE LIMITS SPECIFIED IN 10 CFP 20.

END OF PAGE THREE

PAGE FOUR

IV. POSTING REQUIREMENTS - THE INSPECTORS DISCUSSED THE POSTING REQUIREMENTS FOR AIRBORNE RADIOACTIVITY AREAS. IT WAS BROUGHT TO MR MATTSON'S ATTENTION THAT THEIR SURVEYS INDICATED MANY MILL AREAS TO BE IN EXCESS OF 25 PER CENT OF MPC FOR AIRBORNE URANIUM IN A RESTRICTED AREA. HOWEVER, NO AREAS ARE POSTED AS SPECIFIED IN 10 CFR 20.203/D/ 121. THE POSSIBILITY OF POSTING THE ENTRANCES TO CERTAIN MILL BUILDINGS WITH STANDARD SIGNS BEARING THE WORDING, "CAUTION - AIRBORNE RADIOACTIVITY" WAS DISCUSSED. THE INSPECTORS, MR MATTSON AND MR HAZEN MET WITH MR MCGEE TO SUMMARIZE THE RESULTS OF THEIR DISCUSSION. MR MCGEE ASSURED THE INSPECTORS THAT ALL DEFICIENCIES IN THE SHIPROCK MILL WOULD BE CORRECTED. MR MATTSON INFORMED THE GROUP THAT HE HAD CONTACTED MR C L WISE, MANAGER OF THE SHIPROCK MILL, AND HAD INSTRUCTED HIM TO HAVE COMPLETE SURVEYS MADE OF THE MILL ONCE A MONTH. THESE SURVEYS ARE TO INCLUDE BREATHING ZONE SAMPLES, SAMPLES TO DETERMINE AMOUNTS OF AIRBORNE LICENSED MATERIAL RELEASED TO UNRESTRICTED AREAS, AND SAMPLES FROM AREAS PREVIOUSLY NOT SURVEYED. CONCERNING THE AREAS FOUND TO BE EXCESSIVELY HIGH AS A RESULT OF THE AEC SAMPLING PROGRAM, MR MATTSON SAID THAT HE WOULD CONTACT MR WISE AND TELL HIM TO INSTITUTE ENGINEERING STUDIES SO THAT ADEQUATE DUST COLLECTION APPARATUS COULD BE INSTALLED. MR MATTSON STATED THAT A PROGRAM WAS IN THE PLANNING STATE WHEREBY THEY WOULD DETERMINE THE DRAINAGE OF THE TAILINGS SEEPAGE AND ITS POSSIBLE EFFECTS

END OF PAGE FOUR

PAGE FIVE

ON LOCAL WATER USERS. MR MATTSON SAID THAT HE FELT THERE WAS NO
POTENTIAL DANGER OF THE OLD TAILINGS MATERIAL BLOWING AWAY FROM THE
POND BECAUSE OF THE VERY HARD CRUST THAT HAS FORMED ON THE SURFACE
OF THE OLD TAILINGS POND. MR MCGEE REQUESTED THAT COPIES OF ALL FUTURE
CORRESPONDENCE BETWEEN DLR AND THE LICENSEE BE SENT TO MR DEAN A
MCGEE, PRESIDENT, KERR-MCGEE OIL INDUSTRIES, INC., OKLAHOMA CITY,
OKLA. END REF LY CLN GHS

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CORRECTION SECOND LINE FROM END SHOULD BE MCGEE, PRESIDENT

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