

## Office Memorandum • UNITED STATES GOVERNMENT

TO : H. L. Price, Director, Division of  
Licensing and Regulation, Headquarters

FROM : *Donald I. Walker*  
Donald I. Walker, Director, Division of  
Licensee Inspection, Idaho Operations Office

DATE: March 19, 1959

SUBJECT: FOLLOW-UP INSPECTION REPORT, UNION CARBIDE NUCLEAR COMPANY, GREEN  
RIVER, UTAH, SOURCE MATERIAL LICENSE NO. R-105

SYMBOL: LI:DIW

Transmitted herewith is one copy of the subject report.

You will note that the licensee has been cited for the following items of noncompliance:

## 10 CFR 20.201 Surveys

- (b) A survey to adequately evaluate concentrations of airborne uranium in the mill has not been made.
- (b) A survey to determine whether or not radioactive materials are being released into unrestricted areas has not been made.

License Condition: The entrance to the mill has not been conspicuously posted with a radiation caution sign as required by the provisions of the licensee's exemption from the pertinent sections of 10 CFR 20.203.

I have included a compilation of the licensee's air sampling results as Appendix A to the report and a copy of their current analytical procedures for uranium analysis of the air samples as Appendix B for your information.

During the last follow-up inspection at one of the licensee's uranium mills, Uravan, it was determined that the method of analysis used on the air samples collected was not adequate to detect airborne uranium in concentrations equivalent to that of the MPC, since a total of only 4 cubic feet of air was passed through the sampler. At the conclusion of that visit to the Uravan mill on January 7, 1959, this problem was discussed with both Schaefer and Moore, the chief chemist at the UCN Grand Junction laboratory. It was rather disheartening, therefore, to find that Mr. Schaefer had employed the same procedures for determining the concentrations of uranium in airborne dusts on February 18, 1959. It was primarily for this reason that I requested the opportunity to

(Continued)

9808240135 590319  
PDR ADOCK 04001112  
C PDR

March 19, 1959

talk with UCN's management in Grand Junction the day following this inspection. It is my opinion that the results obtained from these air samples are not consistent with the amount of dust visible in the plant. I am also of the opinion that the number of samples taken at a six-month interval has not been sufficient to really inform either UCN or the Commission that employees throughout the mill are not being subjected to concentrations above those permissible.

Because of the proximity of the mill to the Green River, I feel it necessary that the licensee make a study to determine the concentration of radium seeping through the tailings pond dike and into the small stream immediately adjacent to the pond. You will recall that the same recommendation was made in the follow-up inspection report of the UCN mill at Uravan, and will undoubtedly be made in the reports on the Slick Rock and Rifle mills.

The licensee has been cited for inadequate posting of the entrance to the Green River mill. I am sure that Mr. George and I would have driven by the sign without noticing it, as we did at the Maybell mill, had not Mr. Schaefer called it to our attention as we drove to the mill. In my opinion, the sign should be of a size sufficient to comply with the intent of the provision accompanying the exemption from posting of all areas and containers in and around the mill, that of cautioning personnel entering the area.

In view of the above comments and the enclosed copy of the inspection report, I recommend that the licensee be contacted through Mr. Nelson, with a carbon copy to Mr. Brenton, to:

1. Inform the licensee of the cited items of noncompliance.
2. Require that the sign at the mill entrance be of a larger size, suggesting that the 30" x 36" signs which were originally prepared by the licensee for this purpose, be used.

You may or may not wish to comment, on what I feel to be inadequate, their procedures for air sampling in the UCN facilities. I am of the opinion that some specific mention should be made concerning the air sampling program and of their lack of any program concerning the release, through seepage, of liquid wastes into an unrestricted area.

Their corrective action on these items will be reviewed during a follow-up inspection.

Enclosure:

Inspection Report

Union Carbide Nuclear Co. (Green River, Utah) (1 cy)

CC: M. M. Mann, Div. of Inspection, Wash. w/orig & 2 cys rpt

W. S. Hutchinson, Div. of Source Material Procure., GJ w/1 cy rpt



Green River (V in Carbide)

Recommended Notice of Violation

1. First inspection May 21, 58
2. Notice of Violation Nov 18
3. Follow up Feb 25

- 
1. Had made surveys  
but analytical procedures  
were inadequate.
  2. Survey results  
indicated compliance.