

U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.: 030-31302

License No.: 52-25066-01

Report No.: 52-25066-01/96-01

Licensee: San Juan Cement Company, Inc.

Location: Dorado, Puerto Rico

Date: July 22, 1996, onsite

Inspector: Héctor Bermúdez, Senior Radiation Specialist

Approved by: John P. Potter, Chief
Materials Licensing/Inspection Branch 2
Division of Nuclear Materials Safety

EXECUTIVE SUMMARY

San Juan Cement Company, Inc.
NRC Inspection Report No. 52-25066-01/96-01

This routine, unannounced inspection was conducted to review the licensee's implementation of the licensed radiation safety program. The inspection included discussions with cognizant licensee representatives, review of documents, review of the organization and scope of the licensee's program, and direct observations of activities associated with the licensee's use of its fixed nuclear gauges.

Within the scope of the inspection, three apparent violations of NRC requirements were identified. The violations involved (1) the transfer of control of licensed activities without prior NRC approval, (2) the failure to perform a radiation exposure evaluation to ensure that workers do not receive exposures in excess of regulatory limits, and (3) the creation of radiation levels in unrestricted areas in excess of regulatory limits. This is the third consecutive time during an NRC inspection in which the licensee has failed to maintain radiation levels in unrestricted areas within regulatory limits.

LIST OF PERSONS CONTACTED

Licensee

R. Jolivet, Vice President for Operations
V. Medina, Radiation Safety Officer
A. Ramos, Instrumentation Supervisor

REPORT DETAILS

1. Background

License No. 52-25066-01 was originally issued on October 20, 1989, and was most recently amended on December 14, 1995. Due to rulemaking, on March 1, 1996, the license's expiration date was extended to December 31, 2004. The license authorizes the possession and use of cesium-137 sealed sources contained in fixed gauging devices for controlling industrial processes in accordance with conditions specified therein.

Prior to this inspection, the licensee had been inspected on January 9, 1990 and August 1, 1991. Each time the licensee was cited for creating radiation levels in unrestricted areas in excess of regulatory limits.

2. Inspection Results

2.1 Radiation Levels

10 CFR 20.1301(a)(2) requires that the licensee conduct operations so that the dose in any unrestricted area from external sources does not exceed 2 millirems in any one hour. While touring the licensee's facility, the inspector performed radiation surveys in the vicinity of the licensee's nuclear gauges with his radiation survey instrument. The instrument used was a Xetex Model 305B survey instrument, serial No. 23378, last calibrated on August 28, 1996. The inspector measured radiation levels between 2 and 16 millirems per hour in accessible areas. The inspector noted that, in most instances, there were chains in the vicinity of the gauges which were not in place to prevent accidental or unauthorized access. In one instance, the inspector saw no means of access control to one gauge. When questioned why such areas were accessible without restriction, a cognizant licensee representative indicated that it was their intention to restrict access by means of chains or similar devices. The licensee representative further indicated that it was apparent that the chains had not been replaced since the last time someone accessed the areas. The licensee representative further indicated that in the instance in which there was no evidence of attempt to restrict access was due to the creation of a new access to the area as a result of system modification, and that they neglected to provide the required access controls. The creation of radiation levels in unrestricted areas in excess of regulatory limits was identified as an apparent violation of 10 CFR 20.1301(a)(2). This is an apparent second repeat violation, since a similar violation was issued on NRC report Nos. 52-25066-01/91-01 and 52-25066-01/90-01.

2.2 Evaluation of Personnel Radiation Exposures

10 CFR 20.1501 requires that each licensee make or cause to be made surveys that may be necessary for the licensee to comply with the regulations in Part 20 and that are reasonable under the

circumstances to evaluate the extent of radiation levels, concentrations or quantities of radioactive materials, and the potential radiological hazards that could be present. Pursuant to 10 CFR 20.1003, *survey* means an evaluation of the radiological conditions and potential hazards incident to the production, use, transfer, release, disposal, or presence of radioactive material or other sources of radiation.

10 CFR 20.1301(a)(1) requires that the licensee conduct operations so that the total effective dose equivalent to individual members of the public from the licensed operation does not exceed 100 millirems in a year. In addition to the areas in which radiation levels exceeded 2 millirems per hour, the inspector measured 1.5 millirems per hour in an area at ground level which licensee representatives indicated was frequented by custodial and other employees. The inspector indicated to licensee representatives that licensee employees must be considered members of the public since their work is not supposed to involve exposure to radiation. The inspector then inquired as to the possibility that any employee may have received exposures in excess of 100 millirems in a year. Licensee representatives indicated that it was difficult to ascertain whether any employee may have received greater than 100 millirems in a year since an exposure evaluation had not been performed. Licensee representatives indicated that the required exposure evaluation will be performed shortly after the inspection, and that the NRC will be notified of the results of the evaluation. As of September 4, 1996, the results have not been provided to the NRC. The failure to perform an evaluation to ensure that licensee employees were not receiving radiation exposures in excess of the limit was identified as an apparent violation of 10 CFR 20.1501.

2.3. Transfer of Control of the NRC License

10 CFR 30.34(b) provides that no license issued by the Commission, nor any right under a license, be transferred through the transfer of control of a license to any person unless the Commission, after securing full information, finds that the transfer is in accordance with the provisions of the Atomic Energy Act and gives its consent in writing. While discussing the licensee's organization and lines of authority regarding the implementation of the licensed program the inspector learned that, on or about March 1991, ownership of the licensee transferred, through a sale of the licensee, from Empresas Díaz to ESSROD Material, Inc. The inspector indicated he did not recall reviewing any documentation regarding such transfer of control of the NRC license when preparing for the inspection and that the licensee appeared to be in violation of 10 CFR 30.34(b). The inspector indicated that he would research NRC records to confirm the apparent violation. The results of the review are discussed in Section 3 of this report. Licensee representatives indicated they would also research their

records and would notify the inspector if they found evidence that NRC approved the change in control of the NRC license. Nevertheless, the inspector noted that there were no changes in key personnel or operating procedures associated with the licensed program, and continuity was maintained during the transfer of the licensee's ownership. Therefore, the inspector concluded that the transfer of control of the license had minimal impact on safety. The transfer of control of the NRC license without the NRC's prior consent was identified as an apparent violation of 10 CFR 30.34(b).

3. Exit Meeting Summary

An exit meeting was held with licensee representatives at the conclusion of the inspection on July 22, 1996. The overall findings from the inspection, including the apparent violations were discussed. No dissenting comments were received from the licensee, and the licensee did not identify any information reviewed during the inspection as proprietary in nature.

Research of NRC records conducted through September 4, 1996, did not reveal any evidence that NRC approved the transfer of control of the NRC license. On September 5, 1996, the inspector notified the licensee's Radiation Safety Officer of this finding and she also indicated that the licensee was still researching their records to find any evidence that NRC approved the transfer of control of the license.

ITEMS OPENED AND DISCUSSED

OPENED

96001-01	VIO	CREATION OF EXCESSIVE RADIATION LEVELS IN UNRESTRICTED AREAS
96001-02	VIO	FAILURE TO EVALUATE RADIATION EXPOSURES TO ENSURE THEY DO NOT EXCEED REGULATORY LIMIT
96001-03	VIO	FAILURE TO OBTAIN NRC APPROVAL PRIOR TO THE TRANSFER OF CONTROL OF AN NRC LICENSE