

U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION V

Report No. 79-23
Docket No. 99990005 License No. DOE Contractor Safeguards Group
Facility Name: Biomass Research Facility
2300 Liberty Street
Albany, Oregon
Operated By: Rust Engineering Company

Inspection conducted: October 22, 1979

Inspectors: *R. D. Thomas* 12/17/79
for F. T. Fong, Radiation Specialist Date Signed

Approved by: *R. D. Thomas* 12/17/79
R. D. Thomas, Chief, Materials Radiation Date Signed
Safety Section

Approved By: *H. E. Book* 12/18/79
H. E. Book, Chief, Fuel Facility and Materials Date Signed
Safety Branch

Summary:

Inspection on October 22, 1979 (Report No. 99990005/79-23)
An Oregon state safety compliance officer requested NRC assistance to determine the adequacy of radiation health and safety at the Biomass Research Facility, Albany, Oregon. The source of concern was four level gauges, each containing 1 curie of cesium-137. An onsite inspection was conducted, and 0.5 manday was expended for this effort by one NRC inspector.

Results: There were no radiation health and safety problems because the level gauges were never in operation and the radioactive materials were returned on September 26, 1979 to the supplier. The facility operator is a prime contractor of DOE; therefore, no NRC license was issued for the possession of these byproduct materials pursuant to 10 CFR 30.12.

No items of noncompliance were identified.

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DETAILS

1. Persons Contacted

William G. Beckham	Acting Facility Manager Process Development Manager Biomass Facility Rust Engineering Company Albany, Oregon
Thomas L. Scroggins,	Process Analyst Rust Engineering Albany, Oregon
Elmore Holerman	Former Biomass Facility Manager Bechtel International San Francisco, California
Thomas Lindemuth	Former Biomass Project Manager Bechtel International San Francisco, California
Alan Peterson	Radiation Safety Officer Kay Ray Inc. Arlington Heights, Illinois
Lloyd Bolling	U.S. NRC Office of State Programs
Gerald L. Welch	State of Oregon Department of Workers' Compensation Accident Prevention Division Eugene, Oregon

2. Background

Mr. Gerald Welch requested NRC assistance to determine the adequacy of radiation health and safety at the Biomass Research Facility, Albany, Oregon (Appendix A). NRC/OIE requested Region V to conduct an inspection of the subject facility (Appendix B). On October 22, 1979, the Region V inspector arrived unannounced onsite.

3. Inspection Results

Mr. W. Beckham stated that the radioactive materials were contained in four fill level gauges, located at Hopper I and II. Since raw material presently requires preheating and a different avenue of loading the facility, Rust Engineering requested the supplier to

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remove the radioactive materials. On September 26, 1979, Kay Ray completed this operation (Appendix C) and acknowledged receipt of the material on November 4, 1979 at Arlington Heights, Illinois (Appendix D).

A visual observation was made of the area where the gauges were located. Two metal conduits, each about two feet in diameter, rose vertically from the ground level.

At the 35-foot platform level, which is not normally a work station except when specific maintenance is required, Mr. Beckham pointed out the location of interest. The detector housings on each conduit were observed; and the metal plates listing Kay Ray Source Holder Model 7063 and S/N 3111, 3112, 3113 and 3114 were barely visible. The radioactive sources and their associated housings appeared to have been removed. A radiation survey with NRC 005340 (Xetex 303A) showed no detectable radiation.

The question of authority to have possessed the byproduct material gauges were discussed with Mr. Beckham. He related that Maecon, Incorporated built the facility for DOE, and Bechtel International was the first contracted operator. When DOE awarded the contract in September, 1978 to Rust Engineering, Rust Engineering submitted an application with the NRC for a byproduct material license on October 19, 1978 (Appendix E). On January 11, 1979, the NRC, Office of Administration, notified the applicant to contact the State of Oregon, Department of Health for licensing. Upon contacts with the Oregon Health Department, Rust Engineering was asked to contact the NRC because the facility was located in an area under federal jurisdiction. No request for radioactive material licensing was further attempted.

Mr. T. Scroggins stated that even without a radioactive material license, they have been responsive to the presence of these radioactive material gauges. Using a radiation detection instrument, borrowed from the Bureau of Mines, Mr. Scroggins conducted and recorded radiation surveys around the gauges. A wire enclosure was also built around the gauges to maintain radiation exposure to personnel, if any, as low as reasonable achievable.

It was agreed that health and safety was not a problem since the radioactive materials had been removed. There should be no health and safety problem between September 1978 and September 1979 since no operation with the gauges had taken place. The question of licensing remained outstanding and further study was required.

Messrs. T. Lindemuth and E. Holerman were individually contacted by telephone and they stated that the level gauges were not used under their management. They have no information about the authority to possess the radioactive materials except that they were aware of their presence.

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Mr. A. Peterson was telephoned and requested to provide the authority for the installation of the Kay Ray gauges at the subject facility. A copy of the pertinent letters was received (Appendix G); and it was noted that the authority was based on the August 22, 1975 letter from Mr. F. F. McConnell to Mr. Ray Lull (Appendix G-3).

With the question of jurisdiction addressed to NRC:SP, Mr. L. Bolling stated that the Bureau of Mines, Albany, Oregon is located on land under exclusive federal jurisdiction. The Biomass Research Facility, as verbally stated to Mr. Bolling by Mr. Stephen Miller, DOE Office of General Counsel, is operated by a prime contractor of DOE; therefore, the exemption authorized under 10 CFR 30.12 should apply.

4. Conclusions

There was no health and safety problem associated with the storage of four level gauges, each containing a sealed source of 1 curie of cesium-137, at the Biomass Research Facility, Albany, Oregon, which is presently operated by the Rust Engineering Company. This conclusion is based on statements made by the former plant manager from Bechtel International, the acting manager from Rust Engineering, and on the responsible actions taken by the management of Rust Engineering.

The Rust Engineering Company operates the Biomass Research Facility as a prime contractor of DOE. Therefore, the byproduct material at this facility is exempt from NRC rules and regulations pursuant to 10 CFR 30.12. This conclusion is based upon a verbal statement from representatives of DOE and NRC, and which was confirmed on August 22, 1975 by a letter from ERDA to Maecon, Inc.

Enclosures:
As Stated

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