



70-36

FCLB

September 13, 1996

Docket No. 70-0036

License No. SNM-33

Director, Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: NRC INFORMATION NOTICE 96-47

In accordance with NRC Informational Notice 96-47 dated August 19, 1996, Combustion Engineering (CE) is reporting a Section 20.304 burial area located to the east of our production facility in Hematite, Missouri. The burials were conducted in accordance with applicable NRC regulations, and are the subject of NRC report NUREG/CR-3387.

Pursuant to 10 CFR 70.38 (e) CE hereby requests that the decommissioning of the 20.304 burial area located at Hematite, MO be postponed until the end of plant life. The burial area currently does not pose a threat to public health or safety, and it would not be in the public interest to decommission the burial area at this time. The justification for this request may be found in the enclosure to this letter.

We will be glad to discuss any questions you have concerning our response. If you have any questions or need further information, please contact me or Dr. Earl Saito of my staff at (314)937-4691.

Very truly yours,

COMBUSTION ENGINEERING, INC.

Robert W. Sharkey
Director, Regulatory Affairs

Enclosure

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20.304 Burial Area

History:

The CE Hematite Site is located in Jefferson County, MO which is approximately 35 miles south of St. Louis. Radioactive materials have been handled at the site since 1956 with Combustion Engineering holding the license since 1974.

The burial area is located to east of the current operations (see NUREG/CR-3387 for details). The majority of the burial area is located outside of the current security fence with the entire burial area well within the property boundary. The burial area was closed prior to Combustion Engineering taking possession of the site in 1974. Geotechnical studies performed to support construction projects [1, 2, 3 and 4] consistently indicate that sub surface soil at the site is approximately 30' of silty clay over a foot of gravelly sand which covers limestone bedrock. Ground water flow from the southern portion of the burial area intersect monitoring wells WS-15 and WS-16 [5].

Justification for Postponement:

1) The material presents no risk in its current configuration. The burial area contains uranium contaminated materials. The burial area currently has monitoring wells surrounding it which are sampled and tested monthly. The flow of ground water intersects WS-15 and WS-16 to the east. These monitoring wells have not shown any significant levels of uranium [7]. Without a ground water path there is no credible scenario which would place the public at risk. This assessment was also reached in NUREG/CR-3387 [6] which stated:

The overall conclusions of the NRC sponsored study are that relatively small quantities of uranium have been buried and that the buried material is essentially stable at this time. The burial pits have little or no effect on the population or the surrounding environment.

2) The removal of material at this time is not ALARA. Since the current dose from the burial pits is essentially zero, there is no cost, no matter how small, which could be justified on an ALARA basis.

3) The removal of material from the burial area would increase risk to both the worker and to the general public. The risk to the general public would be increased by the possibility of transportation accident during movement. A transportation accident could spread radioactive material as well as cause immediate physical injury. The risk to the worker arises from exposure to contaminated material and general construction accidents.

Conclusion:

The conclusion reached in NUREG/CR-3387 that there is not a detriment to public health and safety is still valid. Further the risk of exhuming this material would likely exceed the benefit and is therefore not in the public interest.

References:

- 1) Shannon & Wilson, Inc., Geotechnical Investigation Industrial Warehouse and Office Building Hematite, MO, 1991
- 2) Shannon & Wilson, Inc., New Pelletizing Storage/Utilities and Warehouse Facilities Hematite, MO, 1988
- 3) Woodward-Clyde Consultants, Oxide Expansion Hematite, MO, 1978
- 4) Woodward-Clyde Consultants, Subsurface Investigation Semi-Works Oxide & Pellet Plant United Nuclear Corporation Hematite, MO, 1967
- 5) Bogner, J.L. and Neustadt, R.G., Summary of Groundwater Monitoring Installation, 1996, Gateway Environmental Associates, Inc., 1996
- 6) Booth L. F., et. al., NUREG/CR-3387 Radiological Survey of the Combustion Engineering Burial Site Hematite, Missouri, 1983, Radiation Management Corporation for the NRC.
- 7) NRC License Renewal Application Part II Safety Demonstration, 1989