



AIR and WATER Pollution Patrol

BROAD AXE, PA.

Sept. 27, 1985

U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In The Matter Of
PHILADELPHIA ELECTRIC COMPANY
(Limerick Generating Station
Units 1 and 2)

Docket Nos. 50-352
and 50-353

AIR & WATER POLLUTION PATROL MOVES BOARD RE-OPENS RECORD ON ABOVE DOCKET BASED ON NEW PENNSYLVANIA DIVISION OF ENVIRON- MENTAL RESOURCES REGULATIONS RE GROSS ALPHA, RADIUM 226 AND RADIUM 228

The above contention concerns a significant new element being timely presented and having safety significance which can affect a previous Board decision which summarily dismissed previous submission. Because this element has a make-sense basis, and specifically involves radiological health, safety, and environmental concerns, reopening of the record is merited.

This contention arises out of the Aug. 16, 1985 Pa. Division of Environmental Resources (DER) notification to community drinking water suppliers of a reduction in permitted gross alpha with involvement of Radium 226 and Radium 228.

All water companies serving at least 10,000 people and drawing from the Schuylkill River are involved, companies like Norristown's Keystone Water Co., Philadelphia Suburban, City of Philadelphia Water Co., etc.

This change was found necessary because natural radioactive nuclides such as Radium 226 and Radium 228 in Pennsylvania water supplies were higher than previously thought to be present.

As per Section 2.714(a)(1) AWPP/Romano has filed timely in that I, being sick on Aug. 12 and in the hospital twice (Aug. 17 to 20th then back on Aug. 27 for major surgery). I was released on Sept. 7th with convalescence ordered for two to three weeks. Thus I did not get the Aug. 16, 1985 DER notice until approximately the last week of September. Contentions are Romano responsibility for AWPP.



AIR and WATER
Pollution Patrol
BROAD AXE, PA.

(2)

AWPP moves Board re-open record re gross alpha, Radium 226, Radium 228:

This contention is timely necessitated by the danger to the public from finding of higher natural radiation, which with increases in radioactive nuclides due to Limerick operation can push the radiological concentration in drinking water beyond the 2 pico-curies per liter (pCi/l) gross alpha which on checking for Radium 226 and Radium 228 could exceed the Maximum Radiological Contaminant Level to close off water supplies and thereby pose a health and safety problem.

This motion addresses a significant radiological, safety, and environmental issue. The DER notice, regarding a change in monitoring previous to Aug. 16, 1985, signed by Frederick A. Morrocco, Chief, Division of Water Supplies, DER Bureau of Community Environmental Control, states: "Since the occurrence of Radium 228 is not well documented, and Radium 228 is reportedly twice as radiotoxic as Radium 226, the public health is not adequately protected under the current monitoring procedures (Emphasis added).

Over a year ago, on June 26, 1984 AWPP/Romano sought to enter a new contention relating to findings within 10 to 15 miles of the Limerick reactor of well water at least borderline for gross alpha concentrations of 5 pCi/l (MCL at that time). AWPP indicated that any concentrations of nuclides that would increase the gross alpha activity would make wells, and also possibly the Schuylkill River, exceed the Maximum Contaminant Levels.

The Applicant (P.E.) responded that since gross alpha may be contributed to by Radium 226 the permissible range really was 15 pCi/l. This figure was based on the quantity of Radium 226 always being in excess of Radium 228. Also the effect of Radon was not entered.

However, the Aug. 16, 1985 newly installed MCL has taken into consideration that the need to cut the gross alpha activity also involved the new finding that Radium 228 can be substantially higher than Radium 226---and now must be safety-compensated by reducing the



AIR and WATER
Pollution Patrol
BROAD AXE, PA.
(3)

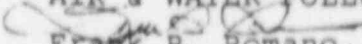
AWPP moves Board re-open record re gross alpha, Radium 226, Radium 228: permitted gross alpha to 2pCi/l.

As it relates to protecting the AWPP/Romano interest, and my capability to assist the record, this new radiological safety and environmental regulation has to do with my field of work, with no similar group contesting the effect of routinely released radioactive nuclides, as well as releases in unusual events at Limerick. Therefore, re the new regulation, no other means exists to protect the AWPP/Romano interest.

The Aug. 16, 1985 DER regulation also involves responsibility of water laboratories regarding results of radiological analyses and subsequent analyses when the MCL of 2 pCi/l gross alpha is exceeded.

My experience and information on borderline gross alpha in wells in Montgomery County enables me to witness that the new regulation, can place many wells beyond the maximum contaminant levels for gross alpha, Radium 226 and Radium 228. I can, with witnesses or even subpoenaed EPA and DER personnel familiar with the results of radiological tests on well water (and possible radon effect) in Montgomery County, assist in factual evidence re this contention.

Further, other existing parties, because of the very recent lowering of the gross alpha with requirements for testing Radium 226 and Radium 228, have not perhaps become familiar or expressed need for the Board to concern itself. AWPP/Romano, however, feels the higher than expected natural radioactivity in areas surrounding Limerick, coupled with releases from Limerick under full power operation, or accident, could result in closing many wells and water sources driven to exceed the MCL for gross alpha, Radium 226 and Radium 228, such closing due to higher than permitted radiological concentration would cause great health, safety and environmental damage. For all the above reasons AWPP/Romano seeks expeditious re-opening of the record re this contention, irrespective of broadening or delay.

Respectfully submitted,
AIR & WATER POLLUTION PATROL

Frank R. Romano, Chairman

The attached has been served on the latest Service List.