
Formerly Utilized Sites Remedial Action Program (FUSRAP)

ADMINISTRATIVE RECORD

for Maywood, New Jersey



U.S. Department of Energy

135490



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

Oct 10 1 32 PM '95

Ms. Susan Cange
New Jersey Site Manager
Former Sites Restoration Division
U.S. Department of Energy
P.O. Box 2001
Oak Ridge, TN 37831-8273

Re: Maywood Site - Thoron Testing

Dear Ms. Cange:

Enclosed is a copy of fax from Michael Nolan, Environmental Chairman, Concerned Citizens of Maywood to Kathleen Callahan, Director, Emergency and Remedial Response Division, concerning several issues. At Ms. Callahan's request I am forwarding this to you for your review of the thoron measurement issues raised by Dr. Marvin Reshnikoff, consultant to the Concerned Citizens of Maywood.

I have enclosed Dr. Reshnikoff's letter and would appreciate a copy of any response you might have.

Sincerely,

Angela Carpenter, Project Manager
Federal Facilities Section

Enclosures

cc: N. Marton, NJDEP (w/encl.)
M. Nolan, Concerned Citizens of Maywood (w/o encl.)

To: 1-212-637-4439

CONCERNED
CITIZENS
of MAYWOOD



August 31st 1995
Tel. 201-845-5593
Fax 201-587-0997

To file 135490
Pages 3

FOR IMMEDIATE RELEASE

To: KATHLEEN C. CALVERTON, Director, ERRD.
From: MICHAEL J. NOURAN, ENV. Committee CHAIR.
69 LENOX AVE. - MAYWOOD, N.J. 07607

Re: Enclosed copy of DR. MARVIN RESNIKOFF'S
Letter of August 14th, 1995 To M. NOURAN.

MAY WE PLEASE HAVE YOUR COMMENTS AND
ACTION YOU PLAN TO TAKE ON THE CONTENTS
OF DR. RESNIKOFF'S LETTER AT YOUR EARLIEST
CONVENIENCE?

MAY I ALSO COMMENT ON YOUR JANUARY
22, 1995 LETTER, AS I DID IN MY
AUGUST 15th, 1995 COMMENTS TO DOE ON
THEIR LATEST NON COMPLIANT LE/CA.
COPY IS BEING FORWARDED TO YOUR
ADMINISTRATOR, CAROL BROWNER.

MS. CARMENTER (OCT 12th 1994) WROTE THAT
THE DRAFT PROPOSED PLAN SUBMITTED TO
EPA HAD BEEN DELAYED BUT DOE/EPA
WAS WORKING TO SET REVISED SCHEDULES.

AND ON 7/6/95 J. FROG (DOE) TO S. PORTANOVA,
WAYNE AND 7/18/95 J. M. JAPP (DOE) BOTH
(TO SENATOR BRADLEY)

SAID A SCHEDULE FOR FS-PP-ROD RELEASE HAS
NOT BEEN SCHEDULED. BUT ON JUNE 22, 1995
YOU WROTE ME THAT "DOE IS PRESENTLY
EVALUATING ALTERNATIVES FOR THE
REMEDICATION OF THE SITE". ???

CC: A-LIST

95 SEP - 1 PM 11:35



135490

Vince

RADIOACTIVE WASTE MANAGEMENT ASSOCIATES

August 14, 1995

Michael Nolan
Concerned Citizen of Maywood
69 Lenox Ave
Maywood, NJ 07607

Re: Thoron Measurements in Maywood and Lodi

Dear Mike:

This letter comments on the June 22, 1995 letter to you by Ms. Kathleen Callahan, EPA Region II Director, Emergency and Remedial Response Division. As we have pointed out to you and EPA on several occasions, the Department of Energy has not properly measured for thoron in the external environment at the residential and municipal properties.

The purpose of the DOE program for the 19 commercial and governmental properties of the Maywood site¹ was to measure for indoor radon. Only 10% of the samples were analyzed for thoron. No sampling of thoron was conducted outdoors at empty lots. Buildings near the Maywood site were closed for 12 hours before indoor sampling with charcoal canisters. Canisters were kept at locations for 7 days, then closed and shipped within 10 hours and counted within 6 hours after receipt by Teledyne. This time period is too long and it is not clear by the sparse description whether thoron actually made it into the canisters. This depends on the filter area and opening size.² Since thoron has a short half-life, it will not pass through concrete foundations and into indoor locations. Thoron is not expected to be found under these circumstances and was not detected. The study expected no thoron, did not look at places where thoron would be located and did not use measurement techniques that could find thoron. It is no surprise no thoron was detected.

At Reed-Keppler Park, West Chicago, Illinois, thoron flux was measured using an accumulator device which allowed the rate of decay to equal the production rate. The

¹ Department of Energy, "Plan for Radon and Gamma Radiation Measurements at the Commercial Properties of the Maywood Site," DOE/OR/21949-372, January 1994 and

Department of Energy, "Results of Radon and Gamma Radiation Measurements at 19 Commercial and Governmental Properties of the Maywood Site," DOE/OR/21949-385, August 1994.

² The new measurement techniques being used at Wayne also involve E-perm detectors. In that case, the openings to the measurement cavity used for radon-222 had to be altered for thoron because the filter size and openings were impeding the capture of thoron.

Marvin Resnikoff, Ph.D. ♦ Senior Associate

306 West 38th Street, Room 1601 ♦ ~~526 WEST 25th STREET RM. 517~~ NEW YORK, NY 10001 Telephone (212) 629-5612 ♦ Fax (212) 239-8373
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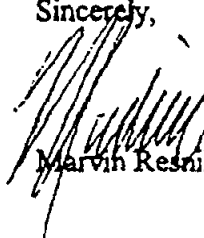
equilibrium activity of thoron in the accumulator was related to the thoron flux.³ This is a much more sensitive technique. Envirocare will be using a similar technique at Wayne.

In addition to thoron flux measurements, thorium concentrations were determined at Reed-Keppler Park, West Chicago, Illinois, using charcoal canisters in dry ice. These canisters were measured almost immediately by placing the entire canister within the measuring device. The thoron concentrations were up to 56 pCi/L and higher. We encourage DOE to investigate EPA's methods in West Chicago, Illinois and employ these same methods at the empty lots and contaminated grassy areas in Maywood.

Ms. Callahan mentions thoron flux (not air concentrations) measurements on the MISS storage pile July 1990. These are obviously not measurements near residential nor municipal properties. The May 1991 measurements were only radon, not thoron, flux. The March 1994 measurements discussed above could not have measured thoron near residential properties since all measurements were taken indoors where thoron is not expected.

I hope this is helpful. Please send this on to Ms. Callahan. Call if you have any questions.

Sincerely,



Marvin Resnikoff

³ Booth, LF et al, *Radiological Survey of the Reed-Keppler Park Site, West Chicago, Illinois*, NUREG/CR-3035, November 1982.