Formerly Utilized Sites Remedial Action Program (FUSRAP)

## ADMINISTRATIVE RECORD

for Maywood, New Jersey



U.S. Department of Energy



## Department of Energy

Field Office, Oak Ridge
P.O. Box 2001
Oak Ridge, Tennessee 37831—8723

April 23, 1993

Ms. Jeanette Angelone 565 Edmund Terrace Paramus, NJ 07652

Dear Ms. Angelone:

## MAYWOOD SITE -- RESULTS OF RADIOLOGICAL STUDIES FOR 70 W. HUNTER AVENUE

This letter is in response to your request for information concerning the radiological status of your property located at 70 W. Hunter Avenue in Maywood, New Jersey. Your property was characterized in 1990 and the results of the studies indicated that there is no radioactive contamination above DOE guidelines.

During characterization, two types of surveys were performed. The first was a gamma survey using an unshielded gamma radiation detector. The same type of survey was then repeated using a gamma radiation detector with a lead-lined shield. The shield ensures that the instrument detects gamma radiation directly beneath it and is not influenced by radiation from nearby sources.

These surveys were performed to identify areas where gamma radiation was at levels greater than twice background. Surface soil samples (top six inches) were collected from these locations. In addition, five boreholes were drilled and subsurface soil samples were collected. All the samples were shipped to a laboratory and analyzed for thorium-232, radium-226, and uranium-238. Thorium-232 is the primary radioactive contaminant at the Maywood site.

Results of the laboratory analyses showed concentrations of thorium-232 in the surface soils that ranged from 0.5 to 3.2 picocuries per gram of soil (pCi/g). Radium-226 results ranged from 0.4 to 1.2 pCi/g and uranium-238 results ranged from less than 3.5 to less than 7.1 pCi/g ("less than" indicates the lower detection limit of the analytical equipment). The DOE cleanup guideline for thorium-232 and radium-226 is 5 pCi/g above background. The cleanup guideline for uranium-238 is a site specific number which is considerably higher than the 5 pCi/g. The laboratory analyses include background concentrations; background for thorium-232 in soil in the Maywood area is about 1 pCi/g.

In subsurface soils laboratory results showed concentrations of thorium-232 ranging from 0.7 to 4.4 pCi/g, radium-226 ranging from 0.5 to 1.6 pCi/g, and uranium-238 ranging from less than 1.8 to less than 9.2 pCi/g. The DOE cleanup guideline for thorium-232 and radium-226 in subsurface soils is 15 pCi/g above background. Again, the site specific guideline for uranium-238 is higher than this limit.

Ms. Jeanette Angelone

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April 23, 1993

These results indicate that none of the soil samples collected on your property exceed DOE cleanup guidelines. If you have any questions please call me at 615-576-5724 or you may leave a message on our toll free number, 800-253-9759 and someone will promptly return your call.

Sincerely,

Susan M. Cange, Site Manager Former Sites Restoration Division

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