

M-686

Formerly Utilized Sites Remedial Action Program (FUSRAP)

ADMINISTRATIVE RECORD

for the Maywood Site, New Jersey



**US Army Corps
of Engineers®**

***NOTE: BEST AVAILABLE COPY FROM BECHTEL
PROJECT MANAGEMENT RECORDS***

M-686

EE18344

MAY 17 1985

██████████
62 Avenue F
Lodi, New Jersey 07644

Dear ██████████

RESULTS OF RADIOLOGICAL SURVEY

This is to confirm the results of a radiological survey conducted on your property at 62 Avenue F on April 17, 1985. The survey was made by technicians from Eberline Analytical Corporation using two instruments: 1) an Eberline PRS-1 portable scaler with a SPA-3 sodium iodide detector, used to measure direct radiation in counts per minute; and 2) an SAC-4 alpha counter to measure radon gas.

Fourteen measurements were made in the yard, five in the house, and two in the garage with the SPA-3. Results ranged from 5,000 to 13,000 counts per minute, which is within the range of normal background radiation. The test for radon inside the house showed a "working level" of 0.003, which is also within the range of normal background radiation. ("Working level" is a unit of measurement used to express the concentration of radon.)

In summary, these tests did not indicate any radioactivity above normal, naturally occurring levels. If you have further questions, please contact Mr. Robert Atkin of my staff at (615) 576-1826.

Sincerely,

ORIGINAL SIGNED BY
/s/ E L KELLER

E. L. Keller, Director
Technical Services Division

CE-53:Atkin
bcc Whitman

CE-53:RGAtkin:jm:6-1826:5-16-85
ATKIN #2, B:MANFREDI.LTR

CONCURRENCES
RTG SYMBOL
CE-53
INITIALS/SIG
Atkin RJA
DATE
5/16/85
RTG SYMBOL
CE-53
INITIALS/SIG
Lampbell
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5/16/85
RTG SYMBOL
CE-53
INITIALS/SIG
Keller
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M-686

EE18663



Department of Energy
Oak Ridge Operations
P. O. Box E
Oak Ridge, Tennessee 37831

MAR 07 1986

[Redacted]
97 Bell Avenue
Maywood, New Jersey 07607

Dear [Redacted]

During November 1985, a survey was performed on your property to determine if radiation in excess of normal levels was present. The results of the analyses are now complete and we are pleased to inform you that all measurements are within normal "background" ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. The results of the radiation survey on your property are attached. Also included are normal background levels for the New Jersey areas as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Two different types of radiation measurements were taken. For surfaces such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

Once again, all of the measurements taken at your residence show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

ORIGINAL SIGNED BY
LOWELL F. CAMPBELL

E. L. Keller, Director
Technical Services Division

bcc w/encl.:
E. DeLaney, NE-23, GTN
D. Paley, NJDEP
J. Eng, NJDEP
Mayer Panas
Patricia Allison

Attachment
As Stated

DOE F 1325.10
(7-79)

CONCURRENCES	
RTG SYMBOL	CE-53
INITIALS/SIG.	Atkin R <i>RA</i>
DATE	3/6/86
RTG SYMBOL	CE-53
INITIALS/SIG.	<i>Yag</i>
DATE	All <i>Yag</i> 3/7
RTG SYMBOL	CE-53
INITIALS/SIG.	Campbell
DATE	3/7/86
RTG SYMBOL	CE-53
INITIALS/SIG.	Keller
DATE	3/7/86
RTG SYMBOL	
INITIALS/SIG.	
DATE	
RTG SYMBOL	
INITIALS/SIG.	
DATE	

RADIATION SURVEY RESULTS AT 97 BELL AVENUE
HAYWOOD, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma Survey	Microentgens per hour	Continuous scan of surfaces	12*	20**	7-15
Indoor air sample for radon	Picocuries per liter	1	0.5	3.0	0.10-0.90

*Highest measurement found on property.

**Above the normal background values.

EE18663

0 0 4 2 1 0



Department of Energy

Oak Ridge Operations

P. O. Box E

Oak Ridge, Tennessee 37831

40732
35047

Affiliated Packaging Co., Inc.
207 West Central Avenue
Maywood, New Jersey 07607

FOR 163D Central

ATTN: [REDACTED]

Dear [REDACTED]

During October 1985, a survey was performed on the property at 163D Central Avenue to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal "background" ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. The results of the radiation survey on the property are attached. Also included are normal background levels for the New Jersey area as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Radiation measurements capable of detecting gamma radiation emitted from materials handled by the Maywood Chemical Works were taken on ground surfaces of the property. To detect the presence of these radioactive materials on the property, a radiation probe was held just above, or in contact with, the surface to be surveyed.

Once again, all of the measurements taken at 163D Central Avenue show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment
As Stated

RADIATION SURVEY RESULTS AT 163D CENTRAL AVENUE
MAYWOOD, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma Survey	Microentgens per hour	Continuous scan of surfaces	11*	20**	7-15

*Highest measurement found on property.

**Above the normal background values.

409322
85077



35815

Department of Energy
Oak Ridge Operations
P. O. Box E
Oak Ridge, Tennessee 37831

March 20, 1986

[REDACTED]
136 East Central Avenue
Maywood, New Jersey
[REDACTED]

During December 1985, a survey was performed on your property to determine if radiation in excess of normal levels was present. All analyses are now complete and, except for radon concentrations in air, all measurements are within normal background ranges. Because radon concentrations are affected by changing atmospheric conditions, we feel it is advisable to collect additional air samples from your home. Also, radon concentrations in basements can be affected by building materials (concrete contains more radium-226 as compared to wood) and ventilation (basements are typically not well ventilated). Based on the other radiation measurement made in your home, we feel that the radon concentration originally measured in December may be artificially high. This can best be determined by the additional sampling suggested previously. You will be contacted prior to March 24, 1986 to arrange an appropriate time to collect these samples.

The results of the initial survey are enclosed. These results represent data collected using two different types of radiation measurements. For surfaces such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home may be an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works and, as mentioned earlier, naturally occurring in certain building materials.

If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller

E. L. Keller, Director
Technical Services Division

Enclosure:
As stated

cc: G. P. Crotwell, BNI

by

MAR 21 1986

PDCC

**RADIATION SURVEY RESULTS AT 136 EAST CENTRAL AVENUE
MAYWOOD, NEW JERSEY**

<u>Type of Measurement</u>	<u>Units</u>	<u>Number of Measurements</u>	<u>Range of Result</u>	<u>DOE Guideline</u>	<u>Normal Background Range</u>
Gamma survey	microroentgens per hour	Continuous scan of surfaces	11*	20**	7-15
Indoor air sample for radon	picocuries per liter	1	3.3	3.0	0.10-0.90

*Highest measurement found on property.

**Above the normal background values.



35413

Department of Energy

Oak Ridge Operations

P. O. Box E

Oak Ridge, Tennessee 37831

[REDACTED]
130 W. Central Avenue
Maywood, New Jersey 07607

Dear [REDACTED]

During November 1985, a survey was performed on your property to determine if radiation in excess of normal levels was present. All analyses are now complete.

Three different types of radiation measurements were taken. For surfaces such as ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The second measurement made consisted of collecting an air sample and analyzing it for radon. The third method consisted of collecting samples of soil which were analyzed for thorium and radium contamination.

Gamma surveys and soil sampling of your property indicate radioactive contamination on the back portion of your lot may exceed remedial action criteria. This must be substantiated by additional data collection. Gamma surveys in and around your house indicate no radioactive contamination is present in this area. The radon concentration measured in the basement of your home was 2.2 pCi/liter of air compared to background which normally fluctuates between 0.10 and 0.90 pCi/liter of air and the DOE guideline of 3.0 pCi/liter of air. The measured value, while slightly above background, is not unusual for basements. Radon concentrations in basements can be affected by building materials (concrete contains elevated radium-226 as compared to wood) and ventilation (basements are usually not as well ventilated as above-ground living areas).

35413

2


You will be contacted in the spring of 1986 to schedule additional surveys of your property. All radiation levels measured on your property are less than applicable limits for exposure to radiation and do not constitute a hazard to your family. The additional surveys will more adequately define contamination levels. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment
As Stated

cc: G. P. Crowell, BNI

RADIATION SURVEY RESULTS AT 130 WEST CENTRAL AVENUE
MAYWOOD, NEW JERSEY

<u>Type of Measurement</u>	<u>Units</u>	<u>Number of Measurements</u>	<u>Range of Result</u>	<u>DOE Guideline</u>	<u>Normal Background Range</u>
Gamma survey	microrentgens per hour	Continuous scan of surfaces	8-29	20*	7-15
Indoor air sample for radon	picocuries per liter	1	2.2	3.0	0.10-0.90
Soil sample	picocuries per gram	2	4.5-4.6	5	0.5-1.5

*Above the normal background values.

48732
35017



Department of Energy
Oak Ridge Operations
P. O. Box E
Oak Ridge, Tennessee 37831

[REDACTED]
142 West Central Avenue
Maywood, New Jersey 07607

Dear [REDACTED]

During December 1985, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal "background" ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. The results of the radiation survey are attached for your review. Also included are normal background levels for the New Jersey areas as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Two different types of radiation measurements were taken. For surfaces such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

Once again, all of the measurements taken at your residence show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment
As Stated

RADIATION SURVEY RESULTS AT 142 WEST CENTRAL AVENUE
MAYWOOD, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma Survey	Microentgens per hour	Continuous scan of surfaces	17*	20**	7-15
Indoor air sample for radon	Picocuries per liter	1	0.6	3.0	0.10-0.90

*Highest measurement found on property.

**Above the normal background values.

48732
35042



40732
35017

Department of Energy
Oak Ridge Operations
P. O. Box E
Oak Ridge, Tennessee 37831

[REDACTED]
Maywood, New Jersey 07607

For 161 W. Central

Dear [REDACTED]

During October 1985, a survey was performed at your request on the property at 161 West Central Avenue to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal "background" ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. The results of the radiation survey on the property are attached. Also included are normal background levels for the New Jersey area as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Radiation measurements capable of detecting gamma radiation emitted from materials handled by the Maywood Chemical Works were taken on ground surfaces of the property. To detect the presence of these radioactive materials on the property, a radiation probe was held just above, or in contact with, the surface to be surveyed.

Once again, all of the measurements taken at 161 West Central Avenue show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment
As Stated

RADIATION SURVEY RESULTS AT 161 WEST CENTRAL AVENUE
MAYWOOD, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma Survey	Microentgens per hour	Continuous scan of surfaces	10*	20**	7-15

*Highest measurement found on property.

**Above the normal background values.

40732
35017

40732
35017



Department of Energy
Oak Ridge Operations
P. O. Box E
Oak Ridge, Tennessee 37831

[Redacted]
584 Elm Street
Maywood, New Jersey 07607

Dear [Redacted]

During November 1985, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal "background" ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. The results of the radiation survey are attached for your review. Also included are normal background levels for the New Jersey areas as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Two different types of radiation measurements were taken. For surfaces such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

Once again, all of the measurements taken at your residence show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment
As Stated

RADIATION SURVEY RESULTS AT 584 ELM STREET
MAYWOOD, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma Survey	Microentgens per hour	Continuous scan of surfaces	10*	20**	7-15
Indoor air sample for radon	Picocuries per liter	1	0.6	3.0	0.10-0.90

*Highest measurement found on property.

**Above the normal background values.

4017302
35012

20059



Department of Energy

Oak Ridge Operations

P. O. Box E

Oak Ridge, Tennessee 37831

[REDACTED]
33 Grove Avenue
Rochelle Park, New Jersey 07662

Dear [REDACTED]:

During July, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal 'background' ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. Residents of Denver typically receive twice as much exposure from background radiation as New Jersey residents. The results of the radiation survey are attached for your review. Also included are normal background levels for the New Jersey area as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Two different types of radiation measurements were taken. For surface such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

Once again, all of the measurements taken at your residence show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely, .

E. L. Keller, Director
Technical Services Division

Attachment: As Stated

cc: R. G. Atkin

RADIATION SURVEY RESULTS AT 33 GROVE AVENUE
ROCHELLE PARK, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma survey	microroentgens per hour	Continuous scan of surfaces	11 *	20**	7-15
Indoor air sample for radon	picocuries per liter	1	0.2	3.0	0.10-0.90

*Highest measurement found on property.

**Above normal background values.

62003



Department of Energy

Oak Ridge Operations

P. O. Box E

Oak Ridge, Tennessee 37831

20059

[REDACTED]
41 Grove Avenue
Rochelle Park, New Jersey 07662

Dear [REDACTED]:

During July, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal 'background' ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. Residents of Denver typically receive twice as much exposure from background radiation as New Jersey residents. The results of the radiation survey are attached for your review. Also included are normal background levels for the New Jersey area as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Two different types of radiation measurements were taken. For surface such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

Once again, all of the measurements taken at your residence show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment: As Stated

cc: P. G. Atkin

RADIATION SURVEY RESULTS AT 41 GROVE AVENUE
ROCHELLE PARK, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma survey	microroentgens per hour	Continuous scan of surfaces	10 *	20**	7-15
Indoor air sample for radon	picocuries per liter	1	0.1	3.0	0.10-0.90

*Highest measurement found on property.

**Above normal background values.

62206



20059

Department of Energy

Oak Ridge Operations

P. O. Box E

Oak Ridge, Tennessee 37831

████████████████████
45 Grove Avenue
Rochelle Park, New Jersey 07662

Dear ████████████████████:

During July, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal 'background' ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. Residents of Denver typically receive twice as much exposure from background radiation as New Jersey residents. The results of the radiation survey are attached for your review. Also included are normal background levels for the New Jersey area as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Two different types of radiation measurements were taken. For surface such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

Once again, all of the measurements taken at your residence show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment: As Stated

cc: R. G. Atkin

RADIATION SURVEY RESULTS AT 45 GROVE AVENUE
ROCHELLE PARK, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma survey	microrentgen per hour	Continuous scan of surfaces	9 *	20**	7-15
Indoor air sample for radon	picocuries per liter	1	0.2	3.0	0.10-0.90

*Highest measurement found on property.

**Above normal background values.

622500



049096

725

Department of Energy
Oak Ridge Operations
P. O. Box E
Oak Ridge, Tennessee 37831

November 5, 1987

[REDACTED]
46 Grove Avenue
Rochelle Park, New Jersey 07662

Dear [REDACTED]

RADIOLOGICAL SURVEY RESULTS AT 46 GROVE AVENUE, ROCHELLE PARK,
NEW JERSEY

During September 1987, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete, and we are pleased to inform you that all measurements are within the Department of Energy's (DOE) guidelines.

Instruments capable of detecting external radiation exposure emitted from materials handled by the former Maywood Chemical Works (MCW) were used to measure the exposure over the ground surfaces of your property. In addition, systematic soil samples were analyzed for radioactivity associated with the MCW operation.

The results of the survey indicate a maximum radiation exposure level of 5.2 microrontgens per hour which is typical of the northern New Jersey area. The analyses of soil samples show maximum radionuclide concentrations of 2.9 and 1.0 picocurie per gram for thorium 232 and radium 226, respectively. These concentrations compare to levels significantly less than the current DOE surface soil guidelines. Uranium 238 concentrations were below the instrumentation detection limits, indicating normal levels.

Once again, all of the measurements taken at your property show that no radioactive contamination exceeds the DOE guidelines. If you have any questions concerning this information, please contact Mr. Robert Atkin of my staff at (615) 576-1826.

Sincerely,

S. W. Ahrends, Director
Technical Services Division

CE-53:Atkin

cc: J. A. Arenson, ENI





Department of Energy

Oak Ridge Operations

P. O. Box E

Oak Ridge, Tennessee 37831

20059

[REDACTED]
49 Grove Avenue
Rochelle Park, New Jersey 07662

Dear [REDACTED]

During July, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal 'background' ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. Residents of Denver typically receive twice as much exposure from background radiation as New Jersey residents. The results of the radiation survey are attached for your review. Also included are normal background levels for the New Jersey area as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Two different types of radiation measurements were taken. For surface such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

Once again, all of the measurements taken at your residence show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment: As Stated

cc: R. G. Atkin



30259

Department of Energy
Oak Ridge Operations
P. O. Box E
Oak Ridge, Tennessee 37831

[REDACTED]
57 Grove Avenue
Rochelle Park, New Jersey 07662

Dear [REDACTED]:

During July, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal 'background' ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. Residents of Denver typically receive twice as much exposure from the background radiation as New Jersey residents. The results of the radiation survey are attached for your review. Also included are the normal background levels for the New Jersey area as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Two different types of radiation measurements were taken. For surface such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

Once again, all of the measurements taken at your residence show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment: As Stated

c: R. G. Atkin



Department of Energy

Oak Ridge Operations

P O 'Box E

Oak Ridge, Tennessee 37831

30259

[REDACTED]
61 Grove Avenue
Rochelle Park, New Jersey 07662

Dear [REDACTED]:

During July, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal 'background' ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. Residents of Denver typically receive twice as much exposure from background radiation as New Jersey residents. The results of the radiation survey are attached for your review. Also included are normal background levels for the New Jersey area as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Two different types of radiation measurements were taken. For surface such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

Once again, all of the measurements taken at your residence show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment: As Stated

cc: R. G. Atkin

40732
35077



Department of Energy

Oak Ridge Operations

P. O. Box E

Oak Ridge, Tennessee 37831

[Redacted]

50 Howcroft Road
Maywood, New Jersey 07607

[Redacted]

During October 1985, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal "background" ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. The results of the radiation survey are attached for your review. Also included are normal background levels for the New Jersey areas as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Two different types of radiation measurements were taken. For surfaces such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

Once again, all of the measurements taken at your residence show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment
As Stated

RADIATION SURVEY RESULTS AT 50 HOWCROFT ROAD
MAYWOOD, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma Survey	Microentgens per hour	Continuous scan of surfaces	11*	20**	7-15
Indoor air sample for radon	Picocuries per liter	1	0.1	3.0	0.10-0.90

*Highest measurement found on property.

**Above the normal background values.

40732
35012



Department of Energy
Oak Ridge Operations
P. O. Box E
Oak Ridge, Tennessee 37831

22835

W-29635

[REDACTED]
65 East Hunter Avenue
Maywood, New Jersey 07470

Dear [REDACTED]:

On July 11, 1985, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal 'background' ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. Residents of Denver typically receive twice as much exposure from background radiation as New Jersey residents. The results of the radiation survey are attached for your review. Also included are normal background levels for the New Jersey area as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Several different types of radiation measurements were taken. For surfaces such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other two types of measurements made consisted of collecting air samples. Both involved analyzing for radon and its radioactive decay products. The presence of these radionuclides in your home would have been an indicator that radium-226 contamination was around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

Once again, all of the measurements taken at your residence show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at 615-576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment: As Stated

Radiation Survey Results at 65 East Hunter
Maywood, New Jersey

<u>Type of Measurement</u>	<u>Units</u>	<u>Number of Measurements</u>	<u>Average</u>	<u>Range</u>	<u>DOE Standard</u>	<u>Normal Background Range</u>
Outdoor Gamma Survey	Counts per Minute	12	8300	7,100-9,500	NA	6,000-12,000
Indoor Gamma Survey	Counts per Minute	7	9900	7,500-10,700	NA	6,000-12,000
Air Sample for Radon	Pico Curies per Liter	1	0.10	NA	3.0	0.10 - 0.90
Air Sample for Radon Decay Products	Working Levels	1	0.001	NA	0.020	0.001-0.009

29635

48732
35047



Department of Energy
Oak Ridge Operations
P. O. Box E
Oak Ridge, Tennessee 37831

[REDACTED]

330 Jaeger Avenue
Maywood, New Jersey 07607

Dear Mr. [REDACTED]

During November 1985, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal "background" ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. The results of the radiation survey are attached for your review. Also included are normal background levels for the New Jersey areas as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Two different types of radiation measurements were taken. For surfaces such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

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35037

Gamma surveys of your property indicated no radioactive contamination is present. These measurements would locate any deposits of radioactive materials. Radon concentration measured in the basement of your home was 1.1 pCi/liter of air compared to background which normally fluctuates between 0.10 and 0.90 pCi/liter of air and the DOE guideline of 3.0 pCi/liter of air. The measured value while slightly above background is not unusual for basements. Radon concentrations in basements can be affected by building materials (concrete contains elevated radium-226 as compared to wood) and ventilation (basements are usually not as well ventilated as above-ground living areas).

Measurements taken at your residence show that no radioactive materials which were handled by the Maywood Chemical Works is present. If you have any questions concerning this information please contact me at (615) 567-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment
As Stated

RADIATION SURVEY RESULTS AT 330 JAEGER AVENUE
MAYWOOD, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma Survey	Microentgens per hour	Continuous scan of surfaces	12*	20**	7-15
Indoor air sample for radon.	Picocuries per liter	1	1.1	3.0	0.10-0.90

*Highest measurement found on property.

**Above the normal background values.

44732
35017



40732
-35047

Department of Energy

Oak Ridge Operations

P. O. Box E

Oak Ridge, Tennessee 37831

334 Jaeger Avenue
Maywood, New Jersey 07607

Dear [REDACTED]

During December 1985, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal "background" ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. The results of the radiation survey are attached for your review. Also included are normal background levels for the New Jersey areas as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Two different types of radiation measurements were taken. For surfaces such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

Gamma surveys of your property indicated no radioactive contamination is present. These measurements would locate any deposits of radioactive materials. Radon concentration measured in the basement of your home was 1.1 pCi/liter of air compared to background which normally fluctuates between 0.10 and 0.90 pCi/liter of air and the DOE guideline of 3.0 pCi/liter of air. The measured value, while slightly above background, is not

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unusual for basements. Radon concentrations in basements can be affected by building materials (concrete contains elevated radium-226 as compared to wood) and ventilation (basements are usually not as well ventilated as above-ground living areas).

Measurements taken at your residence show that no radioactive materials which were handled by the Maywood Chemical Works are present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment
As Stated

RADIATION SURVEY RESULTS AT 334 JAEGER AVENUE
MAYWOOD, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma Survey	Microentgens per hour	Continuous scan of surfaces	12*	20**	7-15
Indoor air sample for radon	Picocuries per liter	1	1.1	3.0	0.10-0.90

*Highest measurement found on property.

**Above the normal background values.

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RSC/PH

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Department of Energy

Oak Ridge Operations

P. O. Box E

Oak Ridge, Tennessee 37831

[REDACTED]
717 Jersey Avenue
Maywood, New Jersey 07607

Dear [REDACTED]

During November 1985, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal "background" ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. The results of the radiation survey are attached for your review. Also included are normal background levels for the New Jersey areas as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Two different types of radiation measurements were taken. For surfaces such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

Gamma surveys of your property indicated no radioactive contamination is present. These measurements would locate any deposits of radioactive materials. Radon concentration measured in the basement of your home was 1.7 pCi/liter of air compared to background which normally fluctuates between 0.10 and 0.90 pCi/liter of air and the DOE guideline of 3.0 pCi/liter of air. The measured value, while slightly above background, is not

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unusual for basements. Radon concentrations in basements can be affected by building materials (concrete contains elevated radium-226 as compared to wood) and ventilation (basements are usually not as well ventilated as above-ground living areas).

Measurements taken at your residence show that no radioactive materials which were handled by the Maywood Chemical Works are present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment
As Stated

RADIATION SURVEY RESULTS AT 717 JERSEY AVENUE
MAYWOOD, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma Survey	Microentgens per hour	Continuous scan of surfaces	11*	20**	7-15
Indoor air sample for radon	Picocuries per liter	1	1.7	3.0	0.10-0.90

*Highest measurement found on property.

**Above the normal background values.

401932
35017



Department of Energy

Oak Ridge Operations

P. O. Box E

Oak Ridge, Tennessee 37831

40732
35017

[REDACTED]
36 Lenox Avenue
Maywood, New Jersey 07607

[REDACTED]
During November 1985, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal "background" ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. The results of the radiation survey are attached for your review. Also included are normal background levels for the New Jersey areas as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Two different types of radiation measurements were taken. For surfaces such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

Once again, all of the measurements taken at your residence show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment
As Stated

RADIATION SURVEY RESULTS AT 36 LENOX AVENUE
MAYWOOD, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma Survey	Microentgens per hour	Continuous scan of surfaces	11*	20**	7-15
Indoor air sample for radon	Picocuries per liter	1	0.3	3.0	0.10-0.90

*Highest measurement found on property.

**Above the normal background values.

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3504P



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Department of Energy

Oak Ridge Operations
P. O. Box E
Oak Ridge, Tennessee 37831

[REDACTED]
69, Lenox Avenue
Maywood, New Jersey 07607
[REDACTED]

During November 1985, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal "background" ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. The results of the radiation survey are attached for your review. Also included are normal background levels for the New Jersey areas as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Two different types of radiation measurements were taken. For surfaces such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

Once again, all of the measurements taken at your residence show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment
As Stated

RADIATION SURVEY RESULTS AT 69 LENOX AVENUE
MAYWOOD, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma Survey	Microentgens per hour	Continuous scan of surfaces	11*	20**	7-15
Indoor air sample for radon	Picocuries per liter	1	0.3	3.0	0.10-0.90

*Highest measurement found on property.

**Above the normal background values.

35017
409302



40732
35017

Department of Energy

Oak Ridge Operations

P. O. Box E

Oak Ridge, Tennessee 37831

[REDACTED]
845 Lincoln Avenue
Maywood, New Jersey 07607

Dear [REDACTED]

During October 1985, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal 'background' ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. The results of the radiation survey are attached for your review. Also included are normal background levels for the New Jersey areas as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Two different types of radiation measurements were taken. For surfaces such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

Once again, all of the measurements taken at your residence show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment
As Stated

RADIATION SURVEY RESULTS AT 845 LINCOLN AVENUE
MAYWOOD, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma Survey	Microentgens per hour	Continuous scan of surfaces	9*	20**	7-15
Indoor air sample for radon	Picocuries per liter	1	0.1	3.0	0.10-0.90

*Highest measurement found on property.

**Above the normal background values.

409312
-35017



Department of Energy
Oak Ridge Operations
P. O. Box E
Oak Ridge, Tennessee 37831

007105

FOR: 19 W. Magnolia

Mr. [REDACTED]
44 Chestnut Avenue
Rochelle Park, New Jersey 07662

Dear Mr. [REDACTED]:

During April 1986, a survey was performed at your request on the property at 19 West Magnolia Avenue to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal "background" ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. The results of the radiation survey on the property are attached. Also included are normal background levels for the New Jersey area as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Radiation measurements capable of detecting gamma radiation emitted from materials handled by the Maywood Chemical Works were taken on ground surfaces of the property. To detect the presence of these radioactive materials on the property, a radiation probe was held just above, or in contact with, the surface to be surveyed.

Once again, all of the measurements taken at 19 West Magnolia Avenue show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment: As Stated

RADIATION SURVEY RESULTS AT 19 WEST MAGNOLIA AVENUE
MAYWOOD, NEW JERSEY

Type of Type of Measurement	Units Units Microentgens per hour	Number of Measurements	Range of Results	DOE Guideline	Normal Background Range
Gamma Survey	Microentgens per hour	Continuous scan of	7-13	20*	7-15

*Above the normal background range of values.



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35017

Department of Energy

Oak Ridge Operations

P. O. Box E

Oak Ridge, Tennessee 37831

[REDACTED]
55 Maywood Avenue
Maywood, New Jersey 07607

Dear [REDACTED]

During November 1985, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal "background" ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. The results of the radiation survey are attached for your review. Also included are normal background levels for the New Jersey areas as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Two different types of radiation measurements were taken. For surfaces such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

Once again, all of the measurements taken at your residence show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment
As Stated

RADIATION SURVEY RESULTS AT 55 MAYWOOD AVENUE
MAYWOOD, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma Survey	Microentgens per hour	Continuous scan of surfaces	9*	20**	7-15
Indoor air sample for radon	Picocuries per liter	1	0.6	3.0	0.10-0.90

*Highest measurement found on property.

**Above the normal background values.

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35017



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Department of Energy

Oak Ridge Operations

P. O. Box E

Oak Ridge, Tennessee 37831

[REDACTED]
111 Maywood Avenue
Maywood, New Jersey 07607

Dear [REDACTED]

During November 1985, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal "background" ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. The results of the radiation survey are attached for your review. Also included are normal background levels for the New Jersey areas as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Two different types of radiation measurements were taken. For surfaces such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

Once again, all of the measurements taken at your residence show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment
As Stated

RADIATION SURVEY RESULTS AT 111 MAYWOOD AVENUE
MAYWOOD, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma Survey	Microentgens per hour	Continuous scan of surfaces	11*	20**	7-15
Indoor air sample for radon	Picocuries per liter	1	0.3	3.0	0.10-0.90

*Highest measurement found on property.

**Above the normal background values.

85047
200302



40732
35017

Department of Energy

Oak Ridge Operations

P. O. Box E

Oak Ridge, Tennessee 37831

[REDACTED]
133 Maywood Avenue
Maywood, New Jersey 07607

Dear [REDACTED]

During October 1985, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal "background" ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. The results of the radiation survey on your property are attached. Also included are normal background levels for the New Jersey area as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Radiation measurements capable of detecting gamma radiation emitted from materials handled by the Maywood Chemical Works were taken on ground surfaces of your property. To detect the presence of these radioactive materials on your property, a radiation probe was held just above, or in contact with, the surface to be surveyed. The radiation probe was moved to numerous points on your property to check for radioactive contaminants.

Once again, all of the measurements taken at your residence show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment
As Stated

RADIATION SURVEY RESULTS AT 133 MAYWOOD AVENUE
MAYWOOD, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma Survey	Microentgens per hour	Continuous scan of surfaces	9*	20**	7-15

*Highest measurement found on property.

**Above the normal background values.

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-35047

0041512



Department of Energy
Oak Ridge Operations
P. O. Box E
Oak Ridge, Tennessee 37831
MAR 20 1986

EE18646

██████████
Our Lady Queen of Peace
██████████
Maywood, New Jersey

Dear ██████████

During October 1985, a survey was performed on the church's property to determine if radiation in excess of normal levels was present. All analyses are now complete. In general measurements were within normal background levels. However, measurements on paved areas of the property were slightly elevated when compared to background levels. We feel it is appropriate to perform additional measurements to determine the source of these readings. You will be contacted prior to March 24, 1986 to arrange an appropriate time to collect these samples.

Results of the initial survey are attached. These results represent data collected using two different types of radiation measurements. For surfaces such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon.

If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

ORIGINAL FILED BY

TSD FILE NO.: 138.1

E. L. Keller, Director
Technical Services Division

Attachment
As Stated

cc: G. P. Crotwell, BNI

bcc: E. DeLaney, NE-23, GTN
D. Paley, NJDEP
J. Eng, NJDEP

OFFICIAL FILE COPY Mayor Panos
Patricia Allison

CONCURRENCES	
RTG SYMBOL	CE-53
INITIALS/SIG.	Atkin R
DATE	3/18/86
RTG SYMBOL	CE-53
INITIALS/SIG.	Campbell
DATE	
RTG SYMBOL	CE-53
INITIALS/SIG.	Wing
DATE	
RTG SYMBOL	CE-53
INITIALS/SIG.	Keller
DATE	3/19/86
RTG SYMBOL	
INITIALS/SIG.	
DATE	
RTG SYMBOL	
INITIALS/SIG.	
DATE	
RTG SYMBOL	
INITIALS/SIG.	
DATE	

EE18648

RADIATION SURVEY RESULTS AT 400 MAYWOOD AVENUE
MAYWOOD, NEW JERSEY

<u>Type of Measurement</u>	<u>Units</u>	<u>Number of Measurements</u>	<u>Range of Result</u>	<u>DOE Guideline</u>	<u>Normal Background Range</u>
Gamma survey	microroentgens per hour	Continuous scan of surfaces	7-22	20*	7-15
Indoor air sample for radon	picocuries per liter	2	0.2-0.6	3.0	0.10-0.90

*Above the normal background values.



Department of Energy
Oak Ridge Operations
P. O. Box E
Oak Ridge, Tennessee 37831

January 8, 1987

[Redacted]
61 Orchard Place
Maywood, New Jersey 07607

Dear [Redacted]:

During September 1986, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal "background" ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil.

Two different types of radiation measurements were taken. For surfaces such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by the former Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The results of these measurements ranged from 7 to 15 microrentgens per hour which are background levels.

The other measurement consisted of collecting an air sample and analyzing it for radon (Rn-222). The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the former Maywood Chemical Works. This measurement was 1.7 picocuries per liter which is slightly higher than normal background levels but typical of what is found in winter months when a structure is closed and relatively "air tight." As a comparison, the DOE guideline for radon in a habitable structure is 3 picocuries per liter.

Once again, all of the measurements taken at your property show that no radioactive contamination above guidelines is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

S. W. Ahrends, Director
Technical Services Division

cc: J. Kannard, BNI
J. Wagoner, NE-23, GTN

Received by

JAN 9 1987

FIS 1000



Department of Energy

Oak Ridge Operations

P. O. Box E

Oak Ridge, Tennessee 37831

40732
35017

[REDACTED]
80 Orchard Place
Maywood, New Jersey 07607

Dear [REDACTED]

During October 1985, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal "background" ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. The results of the radiation survey are attached for your review. Also included are normal background levels for the New Jersey areas as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Two different types of radiation measurements were taken. For surfaces such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

Gamma surveys of your property indicated no radioactive contamination is present. These measurements would locate any deposits of radioactive materials. Radon concentration measured in the basement of your home was 2.1 pCi/liter of air compared to background which normally fluctuates between 0.10 and 0.90 pCi/liter of air and the DOE guideline of 3.0 pCi/liter of air. The measured value, while slightly above background, is not

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unusual for basements. Radon concentrations in basements can be affected by building materials (concrete contains elevated radium-226 as compared to wood) and ventilation (basements are usually not as well ventilated as above-ground living areas).

Measurements taken at your residence show that no radioactive materials which were handled by the Maywood Chemical Works are present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment
As Stated

RADIATION SURVEY RESULTS AT 80 ORCHARD PLACE
MAYWOOD, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma Survey	Microentgens per hour	Continuous scan of surfaces	8*	20**	7-15
Indoor air sample for radon	Picocuries per liter	1	2.1	3.0	0.10-0.90

*Highest measurement found on property.

**Above the normal background values.

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Department of Energy
Oak Ridge Operations
P. O. Box E
Oak Ridge, Tennessee 37831

[REDACTED]
397 Palmer Avenue
Maywood, New Jersey 07607

Dear [REDACTED]

During October 1985, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal "background" ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. The results of the radiation survey on your property are attached. Also included are normal background levels for the New Jersey area as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Radiation measurements capable of detecting gamma radiation emitted from materials handled by the Maywood Chemical Works were taken on ground surfaces of your property. To detect the presence of these radioactive materials on your property, a radiation probe was held just above, or in contact with, the surface to be surveyed.

Once again, all of the measurements taken at your residence show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment
As Stated

RADIATION SURVEY RESULTS AT 397 PALMER AVENUE
MAYWOOD, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma Survey	Microcentgens per hour	Continuous scan of surfaces	8*	20**	7-15

*Highest measurement found on property.

**Above the normal background values.

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Department of Energy

Oak Ridge Operations
P. O. Box E
Oak Ridge, Tennessee 37831

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8.8.87

February 25, 1988

[REDACTED]
86 E. Spring Valley Avenue
Maywood, New Jersey 07607

Dear [REDACTED]

RADON, RADON AND THORON DAUGHTER AIR SAMPLING, AND GAMMA SURVEY CONDUCTED AT THE RESIDENCE OF 86 E. SPRING VALLEY AVENUE

At your request, on January 7, 1988, air sampling was performed in the basement of your residence to determine the concentrations of radon, radon daughters, and thoron daughters present. In addition, interior and exterior gamma surveys were also performed.

We are pleased to inform you that all the results were within applicable guidelines, and no further action is planned for your property.

Measurement of radon and radon and thoron daughter concentrations consisted of collecting an air sample in the basement and analyzing it. The presence of radon in your home would have been an indicator of possible radium - 226 contamination around or in your home. The radon measurement in your basement was 0.7 picocuries per liter of air which does not exceed normal background levels of 0.1 to 0.9 picocuries per liter. Areas such as basements, which are not well ventilated, typically have concentrations on the higher end of this range. No radon or thoron daughter concentrations were detected above natural background levels. Results of the interior and exterior gamma surveys were also within natural background levels.

If you have further questions, please contact Mr. Robert Atkin of my staff at (615) 576-1826.

Sincerely,

Peter J. Gross, Director
Technical Services Division

cc:

P. Allison, Maywood, Borough Clerk

~~J. J. Anderson~~ FBI



35017 40932

Department of Energy

Oak Ridge Operations

P.O. Box E

Oak Ridge, Tennessee 37831

[REDACTED]
113 Stone Avenue
Maywood, New Jersey 07607

Dear [REDACTED]

During October 1985, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal "background" ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. The results of the radiation survey are attached for your review. Also included are normal background levels for the New Jersey areas as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Two different types of radiation measurements were taken. For surfaces such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

Once again, all of the measurements taken at your residence show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,

E. L. Keller, Director
Technical Services Division

Attachment
As Stated

RADIATION SURVEY RESULTS AT 113 STONE AVENUE
MAYWOOD, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma Survey	Microentgens per hour	Continuous scan of surfaces	9*	20**	7-15
Indoor air sample for radon	Picocuries per liter	1	0.9	3.0	0.10-0.90

*Highest measurement found on property.

**Above the normal background values.

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Department of Energy
Oak Ridge Operations
P. O. Box E
Oak Ridge, Tennessee 37831

EE18667

MAR 07 1986

██████████
Maybrook Plaza Apartments
48 Windsor Court, P. O. Box 798.
Maywood, New Jersey 07607

Dear ██████████

During December 1985, a survey was performed on your property to determine if radiation in excess of normal levels was present. All of the analyses are now complete and we are pleased to inform you that all measurements are within normal "background" ranges. Background radiation is naturally occurring radiation which comes from the trace amounts of radioactive materials present in all soil. The results of the radiation survey are attached for your review. Also included are normal background levels for the New Jersey areas as well as applicable Department of Energy (DOE) standards. As you can see, all measurements are essentially equal to the background values and are substantially below the DOE guidelines.

Two different types of radiation measurements were taken. For surfaces such as the ground, floors, and walls, a detector capable of measuring gamma radiation was used. Gamma radiation is emitted from all of the radioactive materials which were handled by Maywood Chemical Works. To detect the presence of these radioactive materials in your yard and home, the radiation probe was held just above, or in contact with, the surface to be surveyed. The other measurement made consisted of collecting an air sample and analyzing it for radon. The presence of radon in your home would have been an indicator of possible radium-226 contamination around or in your home. Radium-226 is one of the radioactive materials present in waste from the Maywood Chemical Works.

Once again, all of the measurements taken at your residence show that no radioactive contamination is present. If you have any questions concerning this information, please contact me at (615) 576-0948.

Sincerely,
ORIGINAL SIGNED BY
LOWELL F. CAMPBELL
E. L. Keller, Director
Technical Services Division

bcc w/encl.:
E. Delaney, NE-23, GTN
D. Paley, NJDEPOFFICIAL FILE COPY
J. Eng NJDEP
Mayor P. 402
Patricia Allison

Attachment
As Stated
DOE F 1325.10
(7-75)

CONCURRENCES	
RTG SYMBOL	CE-53
INITIALS/SIG.	Atkin RLA
DATE	3/6/86
RTG SYMBOL	CE-53
INITIALS/SIG.	Wing
DATE	3/7/86
RTG SYMBOL	CE-53
INITIALS/SIG.	Campbell
DATE	3/7/86
RTG SYMBOL	CE-53
INITIALS/SIG.	Keller
DATE	3/7/86
RTG SYMBOL	
INITIALS/SIG.	
DATE	
RTG SYMBOL	
INITIALS/SIG.	
DATE	
RTG SYMBOL	
INITIALS/SIG.	
DATE	

RADIATION SURVEY RESULTS AT 48 WINDSOR COURT
MAYWOOD, NEW JERSEY

Type of Measurement	Units	Number of Measurements	Result	DOE Guideline	Normal Background Range
Gamma Survey	Microentgens per hour	Continuous scan of surfaces	11*	20**	7-15
Indoor air sample for radon	Picocuries per liter	1	<0.4	3.0	0.10-0.90

*Highest measurement found on property.

**Above the normal background values.

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