

COMPLY: V1.6.

3/18/ 2 9:18

40 CFR Part 61  
National Emission Standards  
for Hazardous Air Pollutants

REPORT ON COMPLIANCE WITH  
THE CLEAN AIR ACT LIMITS FOR RADIONUCLIDE EMISSIONS  
FROM THE COMPLY CODE - V1.6.

Prepared by:

NIST  
NBSR  
Gaithersburg, MD

D.R. Brown  
x5810

Prepared for:

U.S. Environmental Protection Agency  
Office of Radiation and Indoor Air  
Washington, DC 20460

*Reviewed  
DR Brown  
3-18-02*

COMPLY: V1.6.

3/18/ 2 9:18

2001 effluents

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SCREENING LEVEL 4  
-----

DATA ENTERED:  
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Nuclide	Release Rate (curies/YEAR)
AR-41	8.810E+02
H-3	V 1.197E+03

Release height 30 meters.

Building height 20 meters.

The source and receptor are not on the same building.

Building width 100 meters.

Building length 100 meters.

STACK DISTANCES, FILE: wind2001

DIR	Distance (meters)
N	1950.0
NNE	1410.0
NE	1380.0
ENE	1320.0
E	720.0
ESE	540.0
SE	495.0
SSE	615.0
S	1260.0
SSW	1350.0
SW	480.0
WSW	400.0
W	400.0
WNW	400.0
NW	500.0
NNW	870.0

## WINDROSE DATA, FILE: wr2001

Source of wind rose data: from NBSR-9 1960-1986  
Dates of coverage: 1960-1986  
Wind rose location: nat'l airport  
Distance to facility: 20 mi

Percent calm: 0.03

Wind FROM	Frequency	Speed (miles/hr)
N	0.050	10.00
NNE	0.050	11.00
NE	0.050	10.00
ENE	0.040	10.00
E	0.030	9.00
ESE	0.020	9.00
SE	0.030	9.00
SSE	0.050	9.00
S	0.110	10.00
SSW	0.120	10.00
SW	0.060	8.00
WSW	0.040	8.00
W	0.040	9.00
WNW	0.090	13.00
NW	0.110	11.00
NNW	0.080	11.00

He produces his own VEGETABLES at home.

He produces his own MILK at home.

He produces his own MEAT at home.

## NOTES:

The receptor exposed to the highest concentration is located  
495. meters from the source in the SE sector.

He produces his own VEGETABLES at his home.

He produces his own MEAT at his home.

He produces his own MILK at his home.

Input parameters outside the "normal" range:

Stack file distance is unusually FAR.

COMPLY: V1.6.

3/18/ 2 9:18

RESULTS:

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Effective dose equivalent: 0.6 mrem/yr.

\*\*\* Comply at level 4.

This facility is in COMPLIANCE.

It may or may not be EXEMPT from reporting to the EPA.

You may contact your regional EPA office for more information.

\*\*\*\*\* END OF COMPLIANCE REPORT \*\*\*\*\*

COMPLY: V1.6.

2/11/2003 11:28

40 CFR Part 61  
National Emission Standards  
for Hazardous Air Pollutants

REPORT ON COMPLIANCE WITH  
THE CLEAN AIR ACT LIMITS FOR RADIONUCLIDE EMISSIONS  
FROM THE COMPLY CODE - V1.6.

Prepared by:

NIST  
NBSR  
Gaithersburg, MD

D.R. Brown  
x5810

*Handwritten:*  
2-11-03

Prepared for:

U.S. Environmental Protection Agency  
Office of Radiation and Indoor Air  
Washington, DC 20460

COMPLY: V1.6.

2/11/2003 11:28

CY 2002

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SCREENING LEVEL 4  
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DATA ENTERED:  
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Nuclide	Release Rate (curies/YEAR)
AR-41	1.171E+03
H-3	V 7.470E+02

Release height 30 meters.

Building height 20 meters.

The source and receptor are not on the same building.

Building width 100 meters.

Building length 100 meters.

STACK DISTANCES, FILE: wind2001

DIR	Distance (meters)
N	1950.0
NNE	1410.0
NE	1380.0
ENE	1320.0
E	720.0
ESE	540.0
SE	495.0
SSE	615.0
S	1260.0
SSW	1350.0
SW	480.0
WSW	400.0
W	400.0
WNW	400.0
NW	500.0
NNW	870.0

## WINDROSE DATA, FILE: wr2001

Source of wind rose data: from NBSR-9 1960-1986  
Dates of coverage: 1960-1986  
Wind rose location: nat'l airport  
Distance to facility: 20 mi

Percent calm: 0.03

Wind FROM	Frequency	Speed (miles/hr)
N	0.050	10.00
NNE	0.050	11.00
NE	0.050	10.00
ENE	0.040	10.00
E	0.030	9.00
ESE	0.020	9.00
SE	0.030	9.00
SSE	0.050	9.00
S	0.110	10.00
SSW	0.120	10.00
SW	0.060	8.00
WSW	0.040	8.00
W	0.040	9.00
WNW	0.090	13.00
NW	0.110	11.00
NNW	0.080	11.00

He produces his own VEGETABLES at home.

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## NOTES:

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The receptor exposed to the highest concentration is located  
495. meters from the source in the SE sector.

He produces his own VEGETABLES at his home.

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He produces his own MILK at his home.

Input parameters outside the "normal" range:

Stack file distance is unusually FAR.

COMPLY: V1.6.

2/11/2003 11:28

RESULTS:  
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Effective dose equivalent: 0.8 mrem/yr.

\*\*\* Comply at level 4.

This facility is in COMPLIANCE.

It may or may not be EXEMPT from reporting to the EPA.

You may contact your regional EPA office for more information.

\*\*\*\*\* END OF COMPLIANCE REPORT \*\*\*\*\*



COMPLY: V1.6.  
12:04

1/12/2004

40 CFR Part 61  
National Emission Standards  
for Hazardous Air Pollutants

REPORT ON COMPLIANCE WITH  
THE CLEAN AIR ACT LIMITS FOR RADIONUCLIDE EMISSIONS  
FROM THE COMPLY CODE - V1.6.

Prepared by:

NIST  
NCNR / 485  
Bldg 235

D. Brown  
301-975-5810

*Reviewed*  
*1-12-04*  
*DN Brown*

Prepared for:

U.S. Environmental Protection Agency  
Office of Radiation and Indoor Air  
Washington, DC 20460

COMPLY: V1.6.  
12:04

1/12/2004

NBSR 2003

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SCREENING LEVEL 4  
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DATA ENTERED:  
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Nuclide		Release Rate (curies/YEAR)
H-3	V	1.030E+03
AR-41		1.078E+03

Release height 30 meters.

Building height 20 meters.

The source and receptor are not on the same building.

Building width 100 meters.

Building length 100 meters.

STACK DISTANCES, FILE: wind2001

DIR	Distance (meters)
N	1950.0
NNE	1410.0
NE	1380.0
ENE	1320.0
E	720.0
ESE	540.0
SE	495.0
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SSW	1350.0
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COMPLY: V1.6.  
12:04

1/12/2004

WINDROSE DATA, FILE: wr2001

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Wind rose location: nat'l airport  
Distance to facility: 20 mi

Percent calm: 0.03

Wind FROM	Frequency	Speed (miles/hr)
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NNE	0.050	11.00
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ENE	0.040	10.00
E	0.030	9.00
ESE	0.020	9.00
SE	0.030	9.00
SSE	0.050	9.00
S	0.110	10.00
SSW	0.120	10.00
SW	0.060	8.00
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NOTES:

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Input parameters outside the "normal" range:

Stack file distance is unusually FAR.

COMPLY: V1.6.  
12:04

1/12/2004

RESULTS:  
-----

Effective dose equivalent: 0.7 mrem/yr.

\*\*\* Comply at level 4.

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\*\*\*\*\* END OF COMPLIANCE REPORT \*\*\*\*\*

COMPLY: V1.6.

1/13/2006 12:23

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Prepared by:

NIST  
NBSR  
Gaithersburg, MD

D. Brown  
x5810

*Review  
sub  
1-13-06*

Prepared for:

U.S. Environmental Protection Agency  
Office of Radiation and Indoor Air  
Washington, DC 20460

COMPLY: V1.6.

1/13/2006 12:23

2005 NBSR Releases

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SCREENING LEVEL 4  
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DATA ENTERED:  
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Nuclide		Release Rate (curies/YEAR)
H-3	V	7.870E+02
AR-41		1.163E+03

Release height 30 meters.

Building height 20 meters.

The source and receptor are not on the same building.

Building width 100 meters.

Building length 100 meters.

STACK DISTANCES, FILE: wind2001

DIR	Distance (meters)
N	1950.0
NNE	1410.0
NE	1380.0
ENE	1320.0
E	720.0
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SSE	615.0
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SSW	1350.0
SW	480.0
WSW	400.0
W	400.0
WNW	400.0
NW	500.0
NNW	870.0

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1/13/2006 12:23

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Dates of coverage: 1960-1986

Wind rose location: nat'l airport

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N	0.050	10.00
NNE	0.050	11.00
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ENE	0.040	10.00
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Input parameters outside the "normal" range:

Stack file distance is unusually FAR.

COMPLY: V1.6.

1/13/2006 12:23

RESULTS:

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Effective dose equivalent: 0.8 mrem/yr.

\*\*\* Comply at level 4.

This facility is in COMPLIANCE.

It may or may not be EXEMPT from reporting to the EPA.

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\*\*\*\*\* END OF COMPLIANCE REPORT \*\*\*\*\*



COMPLY: V1.6.

1/27/2005 9:49

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NIST  
NBSR  
Bldg 235

D. Brown  
301-975-5810

*Reviewed  
1-27-05  
D. Brown*

Prepared for:

U.S. Environmental Protection Agency  
Office of Radiation and Indoor Air  
Washington, DC 20460

COMPLY: V1.6.

1/27/2005 9:49

NBSR CY2005

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SCREENING LEVEL 4  
-----

DATA ENTERED:  
-----

Nuclide	Release Rate (curies/YEAR)
H-3	V 1.358E+03
AR-41	9.470E+02

Release height 30 meters.

Building height 20 meters.

The source and receptor are not on the same building.

Building width 100 meters.

Building length 100 meters.

STACK DISTANCES, FILE: wind2001

DIR	Distance (meters)
N	1950.0
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SE	495.0
SSE	615.0
S	1260.0
SSW	1350.0
SW	480.0
WSW	400.0
W	400.0
WNW	400.0
NW	500.0
NNW	870.0

COMPLY: V1.6.

1/27/2005 9:49

RESULTS:  
-----

Effective dose equivalent:

0.7 mrem/yr.

\*\*\* Comply at level 4.

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You may contact your regional EPA office for more information.

\*\*\*\*\* END OF COMPLIANCE REPORT \*\*\*\*\*

*OK*  
*1-27-05*