

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**BNE Background Location
Concentrations of Iodine-131 in Bi-Weekly Air Iodine Samples**

BNE Office (COAI01)

<u>Collection Period</u>	<u>I-131 (pCi/m³)</u>
01/14/11 - 01/31/11	< 0.012
01/31/11 - 02/08/11	< 0.029
02/08/11 - 02/23/11	< 0.007
02/23/11 - 03/09/11	< 0.006
03/09/11 - 03/21/11	< 0.013
03/21/11 - 03/28/11*	0.065 ± 0.024
03/28/11 - 04/05/11*	0.087 ± 0.022
04/05/11 - 04/12/11*	0.028 ± 0.013
04/12/11 - 04/19/11*	< 0.013
04/19/11 - 04/26/11*	< 0.019
04/26/11 - 05/04/11*	< 0.013
05/04/11 - 05/17/11	< 0.007
05/17/11 - 05/31/11	< 0.009
05/31/11 - 06/14/11	< 0.010
06/14/11 - 06/27/11	< 0.013
06/27/11 - 07/13/11	< 0.012
07/13/11 - 07/26/11	< 0.007
07/26/11 - 08/09/11	< 0.007
08/09/11 - 08/22/11	< 0.007
08/22/11 - 09/06/11	< 0.008
09/06/11 - 09/21/11	< 0.007
09/21/11 - 10/03/11	< 0.010
10/03/11 - 10/18/11	< 0.012
10/18/11 - 10/31/11	< 0.015
10/31/11 - 11/15/11	< 0.021
11/15/11 - 11/29/11	< 0.006
11/29/11 - 12/14/11	< 0.011
12/14/11 - 12/28/11	< 0.014

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 4, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**BNE Background Location
Concentrations of Iodine-131 in Bi-Weekly Air Iodine Samples**

Brendan T. Byrne State Forest (COAI02)

<u>Collection Period</u>	<u>I-131 (pCi/m³)</u>
01/11/11 - 01/24/11	< 0.038
01/24/11 - 02/08/11	< 0.017
02/08/11 - 02/22/11	< 0.011
02/22/11 - 03/09/11	< 0.017
03/09/11 - 03/21/11	< 0.014
03/21/11 - 03/28/11*	0.064 ± 0.023
03/28/11 - 04/05/11*	0.088 ± 0.027
04/05/11 - 04/12/11*	0.039 ± 0.019
04/12/11 - 04/19/11*	< 0.016
04/19/11 - 04/26/11*	< 0.019
04/26/11 - 05/02/11*	< 0.026
05/02/11 - 05/16/11	< 0.009
05/16/11 - 05/31/11	< 0.011
05/31/11 - 06/14/11	< 0.013
06/14/11 - 06/28/11	< 0.005
06/28/11 - 07/11/11	< 0.017
07/11/11 - 07/25/11	< 0.017
07/25/11 - 08/09/11	< 0.008
08/09/11 - 08/23/11	< 0.011
08/23/11 - 09/06/11	< 0.009
09/06/11 - 09/19/11	< 0.007
09/19/11 - 10/03/11	< 0.010
10/03/11 - 10/18/11	< 0.010
10/18/11 - 10/31/11	< 0.013
10/31/11 - 11/14/11	< 0.022
11/14/11 - 11/28/11	< 0.007
11/28/11 - 12/12/11	< 0.010
12/12/11 - 12/26/11	< 0.023

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 2, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Iodine-131 in Bi-Weekly Air Iodine Samples**

Waretown Municipal Building (OCAI01)

<u>Collection Period</u>			<u>I-131</u> <u>(pCi/m³)</u>
01/11/11	-	01/24/11	< 0.032
01/24/11	-	02/08/11	< 0.019
02/08/11	-	02/22/11	< 0.012
02/22/11	-	03/09/11	< 0.011
03/09/11	-	03/21/11	< 0.015
03/21/11	-	03/28/11*	0.067 ± 0.022
03/28/11	-	04/05/11*	0.069 ± 0.026
04/05/11	-	04/12/11*	< 0.014
04/12/11	-	04/19/11*	< 0.013
04/19/11	-	04/26/11*	< 0.017
04/26/11	-	05/02/11*	< 0.023
05/02/11	-	05/16/11	< 0.024
05/16/11	-	05/31/11	< 0.011
05/31/11	-	06/14/11	< 0.009
06/14/11	-	06/28/11	< 0.013
06/28/11	-	07/11/11	< 0.020
07/11/11	-	07/25/11	< 0.007
07/25/11	-	08/09/11	< 0.012
08/09/11	-	08/23/11	< 0.010
08/23/11	-	09/06/11	< 0.007
09/06/11	-	09/19/11	< 0.009
09/19/11	-	10/03/11	< 0.009
10/03/11	-	10/17/11	< 0.014
10/17/11	-	10/31/11	< 0.010
10/31/11	-	11/14/11	< 0.037
11/14/11	-	11/28/11	< 0.007
11/28/11	-	12/12/11	< 0.017
12/12/11	-	12/26/11	< 0.014

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 2, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Iodine-131 in Bi-Weekly Air Iodine Samples**

Sands Point Harbor (OCAI02)

<u>Collection Period</u>			<u>I-131</u> <u>(pCi/m³)</u>
01/11/11	-	01/24/11	< 0.014
01/24/11	-	02/08/11	< 0.031
02/08/11	-	02/22/11	< 0.007
02/22/11	-	03/09/11	< 0.016
03/09/11	-	03/21/11	< 0.019
03/21/11	-	03/28/11*	0.073 ± 0.025
03/28/11	-	04/05/11*	0.081 ± 0.021
04/05/11	-	04/12/11*	< 0.013
04/12/11	-	04/19/11*	< 0.024
04/19/11	-	04/26/11*	< 0.027
04/26/11	-	05/02/11*	< 0.019
05/02/11	-	05/16/11	< 0.015
05/16/11	-	05/31/11	< 0.008
05/31/11	-	06/14/11	< 0.011
06/14/11	-	06/28/11	< 0.013
06/28/11	-	07/11/11	< 0.020
07/11/11	-	07/25/11	< 0.012
07/25/11	-	08/09/11	< 0.007
08/09/11	-	08/23/11	< 0.009
08/23/11	-	09/06/11	< 0.011
09/06/11	-	09/19/11	< 0.010
09/19/11	-	10/03/11	< 0.011
10/03/11	-	10/17/11	< 0.016
10/17/11	-	10/31/11	< 0.011
10/31/11	-	11/14/11	< 0.022
11/14/11	-	11/28/11	< 0.008
11/28/11	-	12/12/11	< 0.011
12/12/11	-	12/26/11	< 0.012

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 2, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Iodine-131 in Bi-Weekly Air Iodine Samples**

Forked River Marina (OCAI03)

<u>Collection Period</u>			<u>I-131</u> <u>(pCi/m³)</u>
01/11/11	-	01/24/11	< 0.043
01/24/11	-	02/08/11	< 0.017
02/08/11	-	02/22/11	< 0.009
02/22/11	-	03/09/11	< 0.012
03/09/11	-	03/21/11	< 0.016
03/21/11	-	03/29/11*	0.100 ± 0.029
03/29/11	-	04/05/11*	0.061 ± 0.023
04/05/11	-	04/12/11*	0.042 ± 0.022
04/12/11	-	04/19/11*	< 0.019
04/19/11	-	04/26/11*	< 0.015
04/26/11	-	05/02/11*	< 0.023
05/02/11	-	05/16/11	< 0.012
05/16/11	-	05/31/11	< 0.008
05/31/11	-	06/14/11	< 0.014
06/14/11	-	06/28/11	< 0.011
06/28/11	-	07/11/11	< 0.015
07/11/11	-	07/25/11	< 0.008
07/25/11	-	08/09/11	< 0.009
08/09/11	-	08/23/11	< 0.007
08/23/11	-	09/06/11	< 0.008
09/06/11	-	09/19/11	< 0.007
09/19/11	-	10/03/11	< 0.009
10/03/11	-	10/17/11	< 0.007
10/17/11	-	10/31/11	< 0.008
10/31/11	-	11/14/11	< 0.017
11/14/11	-	11/28/11	< 0.005
11/28/11	-	12/12/11	< 0.010
12/12/11	-	12/26/11	< 0.017

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 2, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Iodine-131 in Bi-Weekly Air Iodine Samples**

Lacey Township Recreation Building (OCAI04)

<u>Collection Period</u>			<u>I-131</u> <u>(pCi/m³)</u>
01/11/11	-	01/24/11	< 0.031
01/24/11	-	02/08/11	< 0.017
02/08/11	-	02/22/11	< 0.008
02/22/11	-	03/09/11	< 0.018
03/09/11	-	03/21/11	< 0.009
03/21/11	-	03/29/11*	0.063 ± 0.021
03/29/11	-	04/05/11*	0.098 ± 0.038
04/05/11	-	04/12/11*	< 0.015
04/12/11	-	04/19/11*	< 0.019
04/19/11	-	04/26/11*	< 0.022
04/26/11	-	05/02/11*	< 0.028
05/02/11	-	05/16/11	< 0.011
05/16/11	-	05/31/11	< 0.011
05/31/11	-	06/14/11	< 0.017
06/14/11	-	06/28/11	< 0.009
06/28/11	-	07/11/11	< 0.026
07/11/11	-	07/25/11	< 0.010
07/25/11	-	08/09/11	< 0.011
08/09/11	-	08/23/11	< 0.011
08/23/11	-	09/06/11	< 0.009
09/06/11	-	09/20/11	< 0.017
09/20/11	-	10/03/11	< 0.010
10/03/11	-	10/17/11	< 0.014
10/17/11	-	10/31/11	< 0.015
10/31/11	-	11/14/11	< 0.015
11/14/11	-	11/28/11	< 0.007
11/28/11	-	12/12/11	< 0.008
12/12/11	-	12/26/11	< 0.014

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 2, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Iodine-131 in Bi-Weekly Air Iodine Samples**

JCP&L Substation (OCAI05)

<u>Collection Period</u>		<u>I-131</u> <u>(pCi/m³)</u>
01/11/11	- 01/24/11	< 0.060
01/24/11	- 02/08/11	< 0.030
02/08/11	- 02/22/11	< 0.011
02/22/11	- 03/09/11	< 0.015
03/09/11	- 03/21/11	< 0.021
03/21/11	- 03/28/11*	0.074 ± 0.030
03/28/11	- 04/05/11*	0.085 ± 0.024
04/05/11	- 04/12/11*	< 0.024
04/12/11	- 04/19/11*	< 0.019
04/19/11	- 04/26/11*	< 0.019
04/26/11	- 05/02/11*	< 0.014
05/02/11	- 05/16/11	< 0.015
05/16/11	- 05/31/11	< 0.016
05/31/11	- 06/14/11	< 0.016
06/14/11	- 06/28/11	< 0.012
06/28/11	- 07/11/11	< 0.016
07/11/11	- 07/25/11	< 0.010
07/25/11	- 08/09/11	< 0.007
08/09/11	- 08/23/11	< 0.009
08/23/11	- 09/06/11	< 0.009
09/06/11	- 09/20/11	< 0.010
09/20/11	- 10/03/11	< 0.009
10/03/11	- 10/17/11	< 0.012
10/17/11	- 10/31/11	< 0.012
10/31/11	- 11/14/11	< 0.015
11/14/11	- 11/28/11	< 0.006
11/28/11	- 12/12/11	< 0.018
12/12/11	- 12/26/11	< 0.015

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 2, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Iodine-131 in Weekly* Air Iodine Samples**

Finninger Farm, OC Dredge Site (OCAI06)

<u>Collection Period</u>		<u>I-131</u> <u>(pCi/m³)</u>
01/05/11	- 01/11/11	< 0.031
01/11/11	- 01/19/11	< 0.035
01/19/11	- 01/25/11	< 0.030
01/25/11	- 02/01/11	< 0.028
02/01/11	- 02/09/11	< 0.014
02/09/11	- 02/16/11	< 0.042
02/16/11	- 02/23/11	< 0.039
02/23/11	- 03/02/11	< 0.030
03/02/11	- 03/09/11	< 0.045
03/09/11	- 03/16/11	< 0.029
03/16/11	- 03/23/11	< 0.060
03/23/11	- 03/30/11	< 0.035
03/30/11	- 04/06/11	< 0.036
04/06/11	- 04/13/11	< 0.070
04/13/11	- 04/20/11	< 0.049
04/20/11	- 04/27/11	< 0.037
04/27/11	- 05/04/11	< 0.021
05/04/11	- 05/11/11	< 0.051
05/11/11	- 05/18/11	< 0.035
05/18/11	- 05/25/11	< 0.029
05/25/11	- 06/01/11	< 0.036
06/01/11	- 06/08/11	< 0.031
06/08/11	- 06/15/11	< 0.035
06/15/11	- 06/22/11	< 0.061
06/22/11	- 06/29/11	< 0.025
06/29/11	- 07/06/11	< 0.032

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* Air Iodine samples are collected by the licensee on a weekly basis

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Iodine-131 in Weekly* Air Iodine Samples**

Finninger Farm, OC Dredge Site (OCAI06) - continued

<u>Collection Period</u>		<u>I-131</u> <u>(pCi/m³)</u>
07/06/11	- 07/13/11	< 0.044
07/13/11	- 07/20/11	< 0.041
07/20/11	- 07/27/11	< 0.021
07/27/11	- 08/03/11	< 0.041
08/03/11	- 08/10/11	< 0.030
08/10/11	- 08/17/11	< 0.036
08/17/11	- 08/24/11	< 0.019
08/24/11	- 08/31/11	< 0.035
08/31/11	- 09/07/11	< 0.025
09/07/11	- 09/14/11	< 0.052
09/14/11	- 09/21/11	< 0.039
09/21/11	- 09/28/11	< 0.047
09/28/11	- 10/05/11	< 0.043
10/05/11	- 10/12/11	< 0.030
10/12/11	- 10/19/11	< 0.033
10/19/11	- 10/26/11	< 0.018
10/26/11	- 11/02/11	< 0.034
11/02/11	- 11/09/11	< 0.045
11/09/11	- 11/16/11	< 0.057
11/16/11	- 11/22/11	< 0.051
11/22/11	- 11/30/11	< 0.015
11/30/11	- 12/07/11	< 0.057
12/07/11	- 12/14/11	< 0.031
12/14/11	- 12/20/11	< 0.040
12/20/11	- 12/28/11	< 0.043

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* Air Iodine samples are collected by the licensee on a weekly basis

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Iodine-131 in Weekly Air Iodine Samples***

Access Road to Finninger Farm Property (ENE Sector) (OCAI07)

<u>Collection Period</u>	<u>I-131 (pCi/m³)</u>
01/11/11 - 01/24/11	< 0.022
01/24/11 - 02/08/11	< 0.014
02/08/11 - 02/22/11	< 0.008
02/22/11 - 03/09/11	< 0.014
03/09/11 - 03/21/11	< 0.017
03/21/11 - 03/28/11*	0.073 ± 0.023
03/28/11 - 04/05/11*	0.068 ± 0.026
04/05/11 - 04/12/11*	< 0.010
04/12/11 - 04/19/11*	< 0.014
04/19/11 - 04/26/11*	< 0.016
04/26/11 - 05/02/11*	< 0.017
05/02/11 - 05/16/11	< 0.010
05/16/11 - 05/31/11	< 0.008
05/31/11 - 06/14/11	< 0.009
06/14/11 - 06/28/11	< 0.010
06/28/11 - 07/11/11	< 0.019
07/11/11 - 07/25/11	< 0.008
07/25/11 - 08/09/11	< 0.008
08/09/11 - 08/23/11	< 0.007
08/23/11 - 09/06/11	< 0.007
09/06/11 - 09/19/11	< 0.009
09/19/11 - 10/03/11	< 0.010
10/03/11 - 10/17/11	< 0.013
10/17/11 - 10/31/11	< 0.008
10/31/11 - 11/14/11	< 0.021
11/14/11 - 11/28/11	< 0.010
11/28/11 - 12/12/11	< 0.007
12/12/11 - 12/26/11	< 0.018

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 2, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Salem/Hope Creek
Concentrations of Iodine-131 in Bi-Weekly Air Iodine Samples**

Fort Elfsborg Road (AIAI01)

<u>Collection Period</u>	<u>I-131 (pCi/m³)</u>
01/14/11 - 01/31/11	< 0.009
01/31/11 - 02/08/11	< 0.046
02/08/11 - 02/23/11	< 0.010
02/23/11 - 03/09/11	< 0.013
03/09/11 - 03/21/11	< 0.015
03/21/11 - 03/28/11*	0.082 ± 0.036
03/28/11 - 04/05/11*	0.114 ± 0.030
04/05/11 - 04/12/11*	0.041 ± 0.022
04/12/11 - 04/19/11*	< 0.013
04/19/11 - 04/26/11*	< 0.024
04/26/11 - 05/03/11*	< 0.024
05/03/11 - 05/17/11	< 0.010
05/17/11 - 05/31/11	< 0.013
05/31/11 - 06/14/11	< 0.013
06/14/11 - 06/28/11	< 0.011
06/28/11 - 07/12/11	< 0.016
07/12/11 - 07/25/11	< 0.007
07/25/11 - 08/09/11	< 0.010
08/09/11 - 08/22/11	< 0.009
08/22/11 - 09/06/11	< 0.005
09/06/11 - 09/20/11	< 0.007
09/20/11 - 10/03/11	< 0.009
10/03/11 - 10/18/11	< 0.010
10/18/11 - 10/31/11	< 0.007
10/31/11 - 11/14/11	< 0.044
11/14/11 - 11/28/11	< 0.011
11/28/11 - 12/13/11	< 0.021
12/13/11 - 12/27/11	< 0.012

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 3, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Salem/Hope Creek
Concentrations of Iodine-131 in Bi-Weekly Air Iodine Samples**

Plant Access Road (AIAI02)

<u>Collection Period</u>	<u>I-131 (pCi/m³)</u>
01/14/11 - 01/31/11	< 0.007
01/31/11 - 02/08/11	< 0.026
02/08/11 - 02/23/11	< 0.008
02/23/11 - 03/09/11	< 0.016
03/09/11 - 03/21/11	< 0.024
03/21/11 - 03/28/11*	0.061 ± 0.022
03/28/11 - 04/05/11*	0.089 ± 0.023
04/05/11 - 04/12/11*	< 0.034
04/12/11 - 04/19/11*	< 0.016
04/19/11 - 04/26/11*	< 0.023
04/26/11 - 05/03/11*	< 0.029
05/03/11 - 05/17/11	< 0.011
05/17/11 - 05/31/11	< 0.006
05/31/11 - 06/14/11	< 0.024
06/14/11 - 06/28/11	< 0.013
06/28/11 - 07/12/11	< 0.020
07/12/11 - 07/25/11	< 0.007
07/25/11 - 08/09/11	< 0.010
08/09/11 - 08/22/11	< 0.010
08/22/11 - 09/06/11	< 0.008
09/06/11 - 09/20/11	< 0.008
09/20/11 - 10/03/11	< 0.010
10/03/11 - 10/18/11	< 0.011
10/18/11 - 10/31/11	< 0.008
10/31/11 - 11/14/11	< 0.022
11/14/11 - 11/28/11	< 0.007
11/28/11 - 12/13/11	< 0.007
12/13/11 - 12/27/11	< 0.011

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 3, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Salem/Hope Creek
Concentrations of Iodine-131 in Bi-Weekly Air Iodine Samples**

Lower Alloways Creek School (AIAI03)

<u>Collection Period</u>	<u>I-131 (pCi/m³)</u>
01/14/11 - 01/31/11	< 0.011
01/31/11 - 02/08/11	< 0.029
02/08/11 - 02/23/11	< 0.006
02/23/11 - 03/09/11	< 0.011
03/09/11 - 03/21/11	< 0.022
03/21/11 - 03/28/11*	0.058 ± 0.022
03/28/11 - 04/05/11*	0.083 ± 0.024
04/05/11 - 04/12/11*	0.031 ± 0.014
04/12/11 - 04/19/11*	< 0.015
04/19/11 - 04/27/11*	< 0.020
04/27/11 - 05/03/11*	< 0.020
05/03/11 - 05/17/11	< 0.012
05/17/11 - 05/31/11	< 0.008
05/31/11 - 06/14/11	< 0.009
06/14/11 - 06/28/11	< 0.013
06/28/11 - 07/12/11	< 0.004
07/12/11 - 07/25/11	< 0.010
07/25/11 - 08/09/11	< 0.013
08/09/11 - 08/22/11	< 0.009
08/22/11 - 09/06/11	< 0.013
09/06/11 - 09/20/11	< 0.008
09/20/11 - 10/03/11	< 0.009
10/03/11 - 10/18/11	< 0.010
10/18/11 - 10/31/11	< 0.010
10/31/11 - 11/14/11	< 0.018
11/14/11 - 11/28/11	< 0.006
11/28/11 - 12/13/11	< 0.010
12/13/11 - 12/27/11	< 0.021

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 3, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**BNE Background Location
Concentrations of Gross Beta in Bi-Weekly Air Particulate Samples**

BNE Office (COAP01)

<u>Collection Period</u>	<u>Particulate Gross Beta (pCi/m³)</u>
01/14/11 - 01/31/11	0.023 ± 0.0020
01/31/11 - 02/08/11	0.031 ± 0.0030
02/08/11 - 02/23/11	0.027 ± 0.0020
02/23/11 - 03/09/11	0.011 ± 0.0010
03/09/11 - 03/21/11	0.020 ± 0.0020
03/21/11 - 03/28/11*	0.048 ± 0.0040
03/28/11 - 04/05/11*	0.043 ± 0.0030
04/05/11 - 04/12/11*	0.036 ± 0.0030
04/12/11 - 04/19/11*	0.024 ± 0.0030
04/19/11 - 04/26/11*	0.025 ± 0.0030
04/26/11 - 05/04/11*	0.012 ± 0.0020
05/04/11 - 05/17/11	0.014 ± 0.0010
05/17/11 - 05/31/11	0.019 ± 0.0020
05/31/11 - 06/14/11	0.022 ± 0.0020
06/14/11 - 06/27/11	0.019 ± 0.0020
06/27/11 - 07/13/11	0.026 ± 0.0020
07/13/11 - 07/26/11	0.031 ± 0.0020
07/26/11 - 08/09/11	0.023 ± 0.0020
08/09/11 - 08/22/11	0.021 ± 0.0020
08/22/11 - 09/06/11	0.028 ± 0.0020
09/06/11 - 09/21/11	0.029 ± 0.0020
09/21/11 - 10/03/11	0.017 ± 0.0020
10/03/11 - 10/18/11	0.039 ± 0.0030
10/18/11 - 10/31/11	0.024 ± 0.0020
10/31/11 - 11/15/11	0.033 ± 0.0030
11/15/11 - 11/29/11	0.035 ± 0.0030
11/29/11 - 12/14/11	0.040 ± 0.0030
12/14/11 - 12/28/11	0.042 ± 0.0030

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 4, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**BNE Background Location
Concentrations of Gross Beta in Bi-Weekly Air Particulate Samples**

Brendan T. Byrne State Forest (COAP02)

<u>Collection Period</u>	<u>Particulate Gross Beta (pCi/m³)</u>
01/11/11 - 01/24/11	0.028 ± 0.0020
01/24/11 - 02/08/11	0.025 ± 0.0020
02/08/11 - 02/22/11	0.024 ± 0.0020
02/22/11 - 03/09/11	0.025 ± 0.0020
03/09/11 - 03/21/11	0.022 ± 0.0020
03/21/11 - 03/28/11*	0.046 ± 0.0040
03/28/11 - 04/05/11*	0.037 ± 0.0040
04/05/11 - 04/12/11*	0.041 ± 0.0040
04/12/11 - 04/19/11*	0.025 ± 0.0030
04/19/11 - 04/26/11*	0.026 ± 0.0030
04/26/11 - 05/02/11*	0.016 ± 0.0030
05/02/11 - 05/16/11	0.015 ± 0.0020
05/16/11 - 05/31/11	0.021 ± 0.0020
05/31/11 - 06/14/11	0.025 ± 0.0020
06/14/11 - 06/28/11	0.021 ± 0.0020
06/28/11 - 07/11/11	0.024 ± 0.0020
07/11/11 - 07/25/11	0.025 ± 0.0020
07/25/11 - 08/09/11	0.024 ± 0.0020
08/09/11 - 08/23/11	0.022 ± 0.0020
08/23/11 - 09/06/11	0.031 ± 0.0030
09/06/11 - 09/19/11	0.029 ± 0.0030
09/19/11 - 10/03/11	0.017 ± 0.0020
10/03/11 - 10/18/11	0.037 ± 0.0030
10/18/11 - 10/31/11	0.029 ± 0.0030
10/31/11 - 11/14/11	0.031 ± 0.0030
11/14/11 - 11/28/11	0.039 ± 0.0030
11/28/11 - 12/12/11	0.030 ± 0.0030
12/12/11 - 12/26/11	0.046 ± 0.0040

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 2, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Gross Beta in Bi-Weekly Air Particulate Samples**

Waretown Municipal Building (OCAP01)

<u>Collection Period</u>	<u>Particulate Gross Beta (pCi/m³)</u>
01/11/11 - 01/24/11	0.026 ± 0.0020
01/24/11 - 02/08/11	0.024 ± 0.0020
02/08/11 - 02/22/11	0.023 ± 0.0020
02/22/11 - 03/09/11	0.023 ± 0.0020
03/09/11 - 03/21/11	0.022 ± 0.0020
03/21/11 - 03/28/11*	0.056 ± 0.0040
03/28/11 - 04/05/11*	0.032 ± 0.0030
04/05/11 - 04/12/11*	0.044 ± 0.0040
04/12/11 - 04/19/11*	0.024 ± 0.0030
04/19/11 - 04/26/11*	0.027 ± 0.0030
04/26/11 - 05/02/11*	0.012 ± 0.0020
05/02/11 - 05/16/11	0.014 ± 0.0020
05/16/11 - 05/31/11	0.022 ± 0.0020
05/31/11 - 06/14/11	0.028 ± 0.0020
06/14/11 - 06/28/11	0.020 ± 0.0020
06/28/11 - 07/11/11	0.023 ± 0.0020
07/11/11 - 07/25/11	0.026 ± 0.0020
07/25/11 - 08/09/11	0.026 ± 0.0020
08/09/11 - 08/23/11	0.021 ± 0.0020
08/23/11 - 09/06/11	0.028 ± 0.0030
09/06/11 - 09/19/11	0.028 ± 0.0030
09/19/11 - 10/03/11	0.015 ± 0.0020
10/03/11 - 10/17/11	0.037 ± 0.0030
10/17/11 - 10/31/11	0.028 ± 0.0030
10/31/11 - 11/14/11	0.033 ± 0.0030
11/14/11 - 11/28/11	0.037 ± 0.0030
11/28/11 - 12/12/11	0.032 ± 0.0030
12/12/11 - 12/26/11	0.045 ± 0.0040

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 2, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Gross Beta in Bi-Weekly Air Particulate Samples**

Sands Point Harbor (OCAP02)

<u>Collection Period</u>	<u>Particulate Gross Beta (pCi/m³)</u>
01/11/11 - 01/24/11	0.028 ± 0.0020
01/24/11 - 02/08/11	0.034 ± 0.0030
02/08/11 - 02/22/11	0.022 ± 0.0020
02/22/11 - 03/09/11	0.023 ± 0.0020
03/09/11 - 03/21/11	0.022 ± 0.0020
03/21/11 - 03/28/11*	0.044 ± 0.0040
03/28/11 - 04/05/11*	0.039 ± 0.0030
04/05/11 - 04/12/11*	0.047 ± 0.0040
04/12/11 - 04/19/11*	0.020 ± 0.0030
04/19/11 - 04/26/11*	0.026 ± 0.0030
04/26/11 - 05/02/11*	0.012 ± 0.0020
05/02/11 - 05/16/11	0.017 ± 0.0020
05/16/11 - 05/31/11	0.023 ± 0.0020
05/31/11 - 06/14/11	0.026 ± 0.0020
06/14/11 - 06/28/11	0.020 ± 0.0020
06/28/11 - 07/11/11	0.026 ± 0.0020
07/11/11 - 07/25/11	0.030 ± 0.0020
07/25/11 - 08/09/11	0.027 ± 0.0020
08/09/11 - 08/23/11	0.022 ± 0.0020
08/23/11 - 09/06/11	0.023 ± 0.0020
09/06/11 - 09/19/11	0.029 ± 0.0030
09/19/11 - 10/03/11	0.017 ± 0.0020
10/03/11 - 10/17/11	0.037 ± 0.0030
10/17/11 - 10/31/11	0.030 ± 0.0030
10/31/11 - 11/14/11	0.031 ± 0.0030
11/14/11 - 11/28/11	0.034 ± 0.0030
11/28/11 - 12/12/11	0.030 ± 0.0030
12/12/11 - 12/26/11	0.053 ± 0.0040

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 2, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Gross Beta in Bi-Weekly Air Particulate Samples**

Forked River Marina (OCAP03)

<u>Collection Period</u>	<u>Particulate Gross Beta (pCi/m³)</u>
01/11/11 - 01/24/11	0.026 ± 0.0020
01/24/11 - 02/08/11	0.028 ± 0.0020
02/08/11 - 02/22/11	0.022 ± 0.0020
02/22/11 - 03/09/11	0.021 ± 0.0020
03/09/11 - 03/21/11	0.019 ± 0.0020
03/21/11 - 03/28/11*	0.051 ± 0.0040
03/28/11 - 04/05/11*	0.034 ± 0.0030
04/05/11 - 04/12/11*	0.044 ± 0.0040
04/12/11 - 04/19/11*	0.021 ± 0.0020
04/19/11 - 04/26/11*	0.023 ± 0.0030
04/26/11 - 05/02/11*	0.011 ± 0.0020
05/02/11 - 05/16/11	0.015 ± 0.0010
05/16/11 - 05/31/11	0.021 ± 0.0020
05/31/11 - 06/14/11	0.024 ± 0.0020
06/14/11 - 06/28/11	0.020 ± 0.0020
06/28/11 - 07/11/11	0.026 ± 0.0020
07/11/11 - 07/25/11	0.023 ± 0.0020
07/25/11 - 08/09/11	0.025 ± 0.0020
08/09/11 - 08/23/11	0.023 ± 0.0020
08/23/11 - 09/06/11	0.025 ± 0.0020
09/06/11 - 09/19/11	0.028 ± 0.0020
09/19/11 - 10/03/11	0.017 ± 0.0020
10/03/11 - 10/17/11	0.038 ± 0.0030
10/17/11 - 10/31/11	0.031 ± 0.0020
10/31/11 - 11/14/11	0.031 ± 0.0030
11/14/11 - 11/28/11	0.040 ± 0.0030
11/28/11 - 12/12/11	0.031 ± 0.0030
12/12/11 - 12/26/11	0.047 ± 0.0040

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 2, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Gross Beta in Bi-Weekly Air Particulate Samples**

Lacey Twp. Recreation Building (OCAP04)

<u>Collection Period</u>	<u>Particulate Gross Beta (pCi/m³)</u>
01/11/11 - 01/24/11	0.025 ± 0.0020
01/24/11 - 02/08/11	0.024 ± 0.0020
02/08/11 - 02/22/11	0.025 ± 0.0020
02/22/11 - 03/09/11	0.020 ± 0.0020
03/09/11 - 03/21/11	0.021 ± 0.0020
03/21/11 - 03/29/11*	0.048 ± 0.0040
03/29/11 - 04/05/11*	0.040 ± 0.0030
04/05/11 - 04/12/11*	0.040 ± 0.0030
04/12/11 - 04/19/11*	0.028 ± 0.0030
04/19/11 - 04/26/11*	0.026 ± 0.0030
04/26/11 - 05/02/11*	0.014 ± 0.0020
05/02/11 - 05/16/11	0.015 ± 0.0020
05/16/11 - 05/31/11	0.022 ± 0.0020
05/31/11 - 06/14/11	0.025 ± 0.0020
06/14/11 - 06/28/11	0.021 ± 0.0020
06/28/11 - 07/11/11	0.023 ± 0.0020
07/11/11 - 07/25/11	0.026 ± 0.0020
07/25/11 - 08/09/11	0.025 ± 0.0020
08/09/11 - 08/23/11	0.022 ± 0.0020
08/23/11 - 09/06/11	0.025 ± 0.0020
09/06/11 - 09/20/11	0.029 ± 0.0030
09/20/11 - 10/03/11	0.017 ± 0.0020
10/03/11 - 10/17/11	0.036 ± 0.0030
10/17/11 - 10/31/11	0.027 ± 0.0030
10/31/11 - 11/14/11	0.029 ± 0.0030
11/14/11 - 11/28/11	0.039 ± 0.0030
11/28/11 - 12/12/11	0.031 ± 0.0030
12/12/11 - 12/26/11	0.046 ± 0.0040

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 2, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Gross Beta in Bi-Weekly Air Particulate Samples**

JCP&L Substation (OCAP05)

<u>Collection Period</u>	<u>Particulate Gross Beta (pCi/m³)</u>
01/11/11 - 01/24/11	0.024 ± 0.0030
01/24/11 - 02/08/11	0.028 ± 0.0020
02/08/11 - 02/22/11	0.027 ± 0.0020
02/22/11 - 03/09/11	0.022 ± 0.0020
03/09/11 - 03/21/11	0.021 ± 0.0020
03/21/11 - 03/29/11*	0.057 ± 0.0050
03/29/11 - 04/05/11*	0.044 ± 0.0040
04/05/11 - 04/12/11*	0.043 ± 0.0040
04/12/11 - 04/19/11*	0.026 ± 0.0030
04/19/11 - 04/26/11*	0.025 ± 0.0030
04/26/11 - 05/02/11*	0.011 ± 0.0020
05/02/11 - 05/16/11	0.015 ± 0.0020
05/16/11 - 05/31/11	0.022 ± 0.0020
05/31/11 - 06/14/11	0.021 ± 0.0020
06/14/11 - 06/28/11	0.019 ± 0.0020
06/28/11 - 07/11/11	0.025 ± 0.0020
07/11/11 - 07/25/11	0.028 ± 0.0020
07/25/11 - 08/09/11	0.023 ± 0.0020
08/09/11 - 08/23/11	0.023 ± 0.0020
08/23/11 - 09/06/11	0.028 ± 0.0030
09/06/11 - 09/20/11	0.036 ± 0.0030
09/20/11 - 10/03/11	0.018 ± 0.0020
10/03/11 - 10/17/11	0.035 ± 0.0030
10/17/11 - 10/31/11	0.030 ± 0.0030
10/31/11 - 11/14/11	0.034 ± 0.0030
11/14/11 - 11/28/11	0.034 ± 0.0030
11/28/11 - 12/12/11	0.033 ± 0.0030
12/12/11 - 12/26/11	0.044 ± 0.0030

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 2, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Gross Beta in Weekly* Air Particulate Samples**

Finninger Farm, OC Dredge Site (OCAP06)

<u>Collection Period</u>	<u>Particulate Gross Beta (pCi/m³)</u>
01/05/11 - 01/11/11	0.065 ± 0.0070
01/11/11 - 01/19/11	0.030 ± 0.0040
01/19/11 - 01/25/11	0.023 ± 0.0040
01/25/11 - 02/01/11	0.043 ± 0.0060
02/01/11 - 02/09/11	0.035 ± 0.0050
02/09/11 - 02/16/11	0.044 ± 0.0060
02/16/11 - 02/23/11	0.040 ± 0.0050
02/23/11 - 03/02/11	0.042 ± 0.0060
03/02/11 - 03/09/11	0.033 ± 0.0050
03/09/11 - 03/16/11	0.032 ± 0.0050
03/16/11 - 03/23/11	0.057 ± 0.0070
03/23/11 - 03/30/11	0.059 ± 0.0070
03/30/11 - 04/06/11	0.050 ± 0.0060
04/06/11 - 04/13/11	0.056 ± 0.0070
04/13/11 - 04/20/11	0.041 ± 0.0060
04/20/11 - 04/27/11	0.032 ± 0.0050
04/27/11 - 05/04/11	0.027 ± 0.0050
05/04/11 - 05/11/11	0.035 ± 0.0050
05/11/11 - 05/18/11	0.025 ± 0.0040
05/18/11 - 05/25/11	0.029 ± 0.0050
05/25/11 - 06/01/11	0.041 ± 0.0060
06/01/11 - 06/08/11	0.046 ± 0.0060
06/08/11 - 06/15/11	0.043 ± 0.0040
06/15/11 - 06/22/11	0.041 ± 0.0060
06/22/11 - 06/29/11	0.040 ± 0.0060
06/29/11 - 07/06/11	0.037 ± 0.0060

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* Air Particulate samples are collected by the licensee on a weekly basis

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Gross Beta in Weekly* Air Particulate Samples**

Finninger Farm, OC Dredge Site (OCAP06) - continued

<u>Collection Period</u>	<u>Particulate Gross Beta (pCi/m³)</u>
07/06/11 - 07/13/11	0.053 ± 0.0060
07/13/11 - 07/20/11	0.040 ± 0.0060
07/20/11 - 07/27/11	0.066 ± 0.0070
07/27/11 - 08/03/11	0.034 ± 0.0050
08/03/11 - 08/10/11	0.027 ± 0.0050
08/10/11 - 08/17/11	0.040 ± 0.0060
08/17/11 - 08/24/11	0.042 ± 0.0060
08/24/11 - 08/31/11	0.039 ± 0.0060
08/31/11 - 09/07/11	0.046 ± 0.0070
09/07/11 - 09/14/11	0.043 ± 0.0070
09/14/11 - 09/21/11	0.039 ± 0.0060
09/21/11 - 09/28/11	0.026 ± 0.0050
09/28/11 - 10/05/11	0.029 ± 0.0060
10/05/11 - 10/12/11	0.053 ± 0.0070
10/12/11 - 10/19/11	0.039 ± 0.0060
10/19/11 - 10/26/11	0.040 ± 0.0070
10/26/11 - 11/02/11	0.046 ± 0.0070
11/02/11 - 11/09/11	0.036 ± 0.0060
11/09/11 - 11/16/11	0.047 ± 0.0070
11/16/11 - 11/22/11	0.043 ± 0.0070
11/22/11 - 11/30/11	0.035 ± 0.0060
11/30/11 - 12/07/11	0.021 ± 0.0050
12/07/11 - 12/14/11	0.055 ± 0.0080
12/14/11 - 12/20/11	0.064 ± 0.0090
12/20/11 - 12/28/11	0.035 ± 0.0060

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* Air Particulate samples are collected by the licensee on a weekly basis

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Gross Beta in Weekly Air Particulate Samples**

Access Road to Finninger Farm Property (ENE Sector) (OCAP07)

<u>Collection Period</u>	<u>Particulate Gross Beta (pCi/m³)</u>
01/11/11 - 01/24/11	0.026 ± 0.0020
01/24/11 - 02/08/11	0.028 ± 0.0020
02/08/11 - 02/22/11	0.024 ± 0.0020
02/22/11 - 03/09/11	0.024 ± 0.0020
03/09/11 - 03/21/11	0.019 ± 0.0020
03/21/11 - 03/28/11*	0.055 ± 0.0050
03/28/11 - 04/05/11*	0.047 ± 0.0040
04/05/11 - 04/12/11*	0.042 ± 0.0040
04/12/11 - 04/19/11*	0.020 ± 0.0030
04/19/11 - 04/26/11*	0.026 ± 0.0030
04/26/11 - 05/02/11*	0.016 ± 0.0020
05/02/11 - 05/16/11	0.017 ± 0.0020
05/16/11 - 05/31/11	0.021 ± 0.0020
05/31/11 - 06/14/11	0.026 ± 0.0020
06/14/11 - 06/28/11	0.020 ± 0.0020
06/28/11 - 07/11/11	0.026 ± 0.0020
07/11/11 - 07/25/11	0.024 ± 0.0020
07/25/11 - 08/09/11	0.024 ± 0.0020
08/09/11 - 08/23/11	0.023 ± 0.0020
08/23/11 - 09/06/11	0.029 ± 0.0030
09/06/11 - 09/19/11	0.029 ± 0.0030
09/19/11 - 10/03/11	0.016 ± 0.0020
10/03/11 - 10/17/11	0.032 ± 0.0030
10/17/11 - 10/31/11	0.030 ± 0.0030
10/31/11 - 11/14/11	0.034 ± 0.0030
11/14/11 - 11/28/11	0.037 ± 0.0030
11/28/11 - 12/12/11	0.031 ± 0.0030
12/12/11 - 12/26/11	0.048 ± 0.0040

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 2, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Salem/Hope Creek
Concentrations of Gross Beta in Bi-Weekly Air Particulate Samples**

Fort Elfsborg Road (AIAP01)

<u>Collection Period</u>	<u>Particulate Gross Beta (pCi/m³)</u>
01/14/11 - 01/31/11	0.029 ± 0.0020
01/31/11 - 02/08/11	0.025 ± 0.0030
02/08/11 - 02/23/11	0.027 ± 0.0020
02/23/11 - 03/09/11	0.026 ± 0.0020
03/09/11 - 03/21/11	0.022 ± 0.0020
03/21/11 - 03/28/11*	0.058 ± 0.0050
03/28/11 - 04/05/11*	0.046 ± 0.0040
04/05/11 - 04/12/11*	0.040 ± 0.0040
04/12/11 - 04/19/11*	0.024 ± 0.0030
04/19/11 - 04/26/11*	0.028 ± 0.0030
04/26/11 - 05/03/11*	0.016 ± 0.0020
05/03/11 - 05/17/11	0.017 ± 0.0020
05/17/11 - 05/31/11	0.026 ± 0.0020
05/31/11 - 06/14/11	0.032 ± 0.0020
06/14/11 - 06/28/11	0.021 ± 0.0020
06/28/11 - 07/12/11	0.029 ± 0.0020
07/12/11 - 07/25/11	0.032 ± 0.0020
07/25/11 - 08/09/11	0.027 ± 0.0020
08/09/11 - 08/22/11	0.022 ± 0.0020
08/22/11 - 09/06/11	0.027 ± 0.0020
09/06/11 - 09/20/11	0.029 ± 0.0020
09/20/11 - 10/03/11	0.014 ± 0.0020
10/03/11 - 10/18/11	0.036 ± 0.0030
10/18/11 - 10/31/11	0.030 ± 0.0030
10/31/11 - 11/14/11	0.031 ± 0.0030
11/14/11 - 11/28/11	0.041 ± 0.0040
11/28/11 - 12/13/11	0.032 ± 0.0030
12/13/11 - 12/27/11	0.050 ± 0.0040

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 3, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Salem/Hope Creek
Concentrations of Gross Beta in Bi-Weekly Air Particulate Samples**

Plant Access Road (AIAP02)

<u>Collection Period</u>	<u>Particulate Gross Beta (pCi/m³)</u>
01/14/11 - 01/31/11	0.031 ± 0.0020
01/31/11 - 02/08/11	0.027 ± 0.0030
02/08/11 - 02/23/11	0.023 ± 0.0020
02/23/11 - 03/09/11	0.022 ± 0.0020
03/09/11 - 03/21/11	0.024 ± 0.0020
03/21/11 - 03/28/11*	0.053 ± 0.0040
03/28/11 - 04/05/11*	0.045 ± 0.0040
04/05/11 - 04/12/11*	0.044 ± 0.0040
04/12/11 - 04/19/11*	0.026 ± 0.0030
04/19/11 - 04/26/11*	0.024 ± 0.0030
04/26/11 - 05/03/11*	0.016 ± 0.0020
05/03/11 - 05/17/11	0.018 ± 0.0020
05/17/11 - 05/31/11	0.026 ± 0.0020
05/31/11 - 06/14/11	0.030 ± 0.0020
06/14/11 - 06/28/11	0.022 ± 0.0020
06/28/11 - 07/12/11	0.026 ± 0.0020
07/12/11 - 07/25/11	0.029 ± 0.0020
07/25/11 - 08/09/11	0.028 ± 0.0020
08/09/11 - 08/22/11	0.023 ± 0.0020
08/22/11 - 09/06/11	0.032 ± 0.0020
09/06/11 - 09/20/11	0.031 ± 0.0030
09/20/11 - 10/03/11	0.015 ± 0.0020
10/03/11 - 10/18/11	0.036 ± 0.0030
10/18/11 - 10/31/11	0.033 ± 0.0030
10/31/11 - 11/14/11	0.035 ± 0.0030
11/14/11 - 11/28/11	0.039 ± 0.0030
11/28/11 - 12/13/11	0.035 ± 0.0030
12/13/11 - 12/27/11	0.053 ± 0.0040

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 3, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Salem/Hope Creek
Concentrations of Gross Beta in Bi-Weekly Air Particulate Samples**

Lower Alloways Creek School (AIAP03)

<u>Collection Period</u>	<u>Particulate Gross Beta (pCi/m³)</u>
01/14/11 - 01/31/11	0.030 ± 0.0020
01/31/11 - 02/08/11	0.028 ± 0.0030
02/08/11 - 02/23/11	0.024 ± 0.0020
02/23/11 - 03/09/11	0.023 ± 0.0020
03/09/11 - 03/21/11	0.022 ± 0.0020
03/21/11 - 03/28/11*	0.053 ± 0.0040
03/28/11 - 04/05/11*	0.041 ± 0.0030
04/05/11 - 04/12/11*	0.032 ± 0.0030
04/12/11 - 04/19/11*	0.025 ± 0.0030
04/19/11 - 04/27/11*	0.008 ± 0.0020
04/27/11 - 05/03/11*	0.040 ± 0.0040
05/03/11 - 05/17/11	0.016 ± 0.0020
05/17/11 - 05/31/11	0.025 ± 0.0020
05/31/11 - 06/14/11	0.029 ± 0.0020
06/14/11 - 06/28/11	0.024 ± 0.0020
06/28/11 - 07/12/11	0.025 ± 0.0020
07/12/11 - 07/25/11	0.026 ± 0.0020
07/25/11 - 08/09/11	0.031 ± 0.0020
08/09/11 - 08/22/11	0.024 ± 0.0020
08/22/11 - 09/06/11	0.028 ± 0.0020
09/06/11 - 09/20/11	0.034 ± 0.0030
09/20/11 - 10/03/11	0.017 ± 0.0020
10/03/11 - 10/18/11	0.036 ± 0.0030
10/18/11 - 10/31/11	0.032 ± 0.0030
10/31/11 - 11/14/11	0.035 ± 0.0030
11/14/11 - 11/28/11	0.036 ± 0.0030
11/28/11 - 12/13/11	0.031 ± 0.0030
12/13/11 - 12/27/11	0.051 ± 0.0040

Results in picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

* The sample collection frequency was increased from bi-weekly to weekly from March 21, 2011 through May 3, 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**BNE Background Location
Concentrations of Gamma Emitters and Strontium in
Quarterly Composite Air Samples**

BNE Office (COAP01)

<u>Collection Period</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>Be-7</u>	<u>Sr-89</u>	<u>Sr-90</u>
12/14/10 - 03/28/11	< 0.7	< 0.6	< 0.6	85 ± 22	< 4.0	< 1.1
03/28/11 - 06/27/11	< 0.4	< 0.2	0.6 ± 0.3	109 ± 18	< 2.5	< 0.7
06/27/11 - 09/21/11	< 0.7	< 0.9	< 0.7	99 ± 27	< 5.7	< 1.3
09/21/11 - 12/28/11	< 0.3	< 0.4	< 0.3	93 ± 17	< 3.6	< 1.4

Brendan T. Byrne State Forest (COAP02)

<u>Collection Period</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>Be-7</u>	<u>Sr-89</u>	<u>Sr-90</u>
12/16/10 - 03/28/11	< 0.6	< 0.5	< 0.5	107 ± 21	< 4.4	< 1.6
03/28/11 - 06/28/11	< 0.7	< 1.1	< 0.5	112 ± 27	< 2.9	< 1.0
06/28/11 - 09/19/11	< 0.9	< 1.1	< 0.8	104 ± 32	< 6.3	< 2.3
09/19/11 - 12/26/11	< 0.3	< 0.4	< 0.4	94 ± 15	< 4.7	< 1.7

Results in 10⁻³ picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

Beryllium-7 (Be-7) is a naturally occurring radionuclide found in the environment.

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Gamma Emitters and Strontium in
Quarterly Composite Air Samples**

Waretown Municipal Building (OCAP01)

<u>Collection Period</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>Be-7</u>	<u>Sr-89</u>	<u>Sr-90</u>
12/16/10 - 03/28/11	< 0.5	< 0.5	< 0.4	96 ± 17	< 4.9	< 1.4
03/28/11 - 06/28/11	< 0.3	< 0.2	0.5 ± 0.2	113 ± 20	< 5.1	< 1.0
06/28/11 - 09/19/11	< 1.2	< 1.4	< 1.0	137 ± 41	< 5.3	< 1.1
09/19/11 - 12/26/11	< 0.3	< 0.3	< 0.3	101 ± 14	< 4.2	< 1.5

Sands Point Harbor (OCAP02)

<u>Collection Period</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>Be-7</u>	<u>Sr-89</u>	<u>Sr-90</u>
12/16/10 - 03/28/11	< 0.4	< 0.5	< 0.3	92 ± 19	< 4.6	< 1.1
03/28/11 - 06/28/11	< 0.5	< 0.8	< 0.5	105 ± 23	< 4.6	< 1.1
06/28/11 - 09/19/11	< 1.0	< 0.9	< 0.9	90 ± 34	< 4.5	< 1.4
09/19/11 - 12/26/11	< 0.4	< 0.4	< 0.3	100 ± 15	< 3.7	< 1.3

Forked River Marina (OCAP03)

<u>Collection Period</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>Be-7</u>	<u>Sr-89</u>	<u>Sr-90</u>
12/16/10 - 03/28/11	< 0.4	< 0.4	< 0.4	121 ± 22	< 5.3	< 1.2
03/28/11 - 06/28/11	< 0.6	< 0.8	0.7 ± 0.3	92 ± 21	< 4.0	< 1.0
06/28/11 - 09/19/11	< 0.7	< 1.1	< 0.7	115 ± 37	< 5.3	< 1.4
09/19/11 - 12/26/11	< 0.3	< 0.3	< 0.3	92 ± 13	< 3.8	< 1.1

Lacey Township Recreation Building (OCAP04)

<u>Collection Period</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>Be-7</u>	<u>Sr-89</u>	<u>Sr-90</u>
12/16/10 - 03/29/11	< 0.4	< 0.3	< 0.3	108 ± 19	< 4.0	< 0.8
03/29/11 - 06/28/11	< 0.2	< 0.3	< 0.3	128 ± 18	< 3.5	< 1.4
06/28/11 - 09/20/11	< 0.8	< 0.9	< 1.0	109 ± 34	< 5.5	< 1.9
09/20/11 - 12/26/11	< 0.4	< 0.4	< 0.3	95 ± 15	< 3.7	< 1.1

Results in 10⁻³ picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

Beryllium-7 (Be-7) is a naturally occurring radionuclide found in the environment.

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Gamma Emitters and Strontium in
Quarterly Composite Air Samples**

Jersey Central Power and Light Substation (OCAP05)

<u>Collection Period</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>Be-7</u>	<u>Sr-89</u>	<u>Sr-90</u>
12/16/10 - 03/29/11	< 0.7	< 0.8	< 0.6	130 ± 27	< 4.8	< 1.4
03/29/11 - 06/28/11	< 0.2	< 0.8	< 0.7	99 ± 23	< 3.2	< 1.9
06/28/11 - 09/20/11	< 1.0	< 1.1	< 1.0	140 ± 37	< 4.0	< 1.4
09/20/11 - 12/26/11	< 0.4	< 0.4	< 0.2	87 ± 14	< 3.1	< 1.2

Finninger Farm, OC Dredge Site (OCAP06)

<u>Collection Period</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>Be-7</u>	<u>Sr-89</u>	<u>Sr-90</u>
01/05/11 - 03/30/11	< 0.6	< 1.3	< 1.1	102 ± 34	< 10.8	< 4.0
03/30/11 - 06/29/11	< 0.9	< 1.2	< 1.0	86 ± 29	< 14.7	< 3.3
06/29/11 - 09/28/11	< 2.1	< 1.7	< 1.2	67 ± 57	< 8.4	< 2.9
09/28/11 - 12/28/11	< 0.7	< 0.8	< 0.8	101 ± 22	< 5.3	< 3.1

Access Road, Finninger Farm Property (ENE Sector) (OCAP07)

<u>Collection Period</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>Be-7</u>	<u>Sr-89</u>	<u>Sr-90</u>
12/16/10 - 03/28/11	< 0.5	< 0.5	< 0.4	105 ± 21	< 4.4	< 1.0
03/28/11 - 06/28/11	< 0.5	< 0.9	0.9 ± 0.4	117 ± 23	< 3.0	< 1.1
06/28/11 - 09/19/11	< 0.8	< 0.9	< 0.7	138 ± 37	< 4.5	< 1.4
09/19/11 - 12/26/11	< 0.3	< 0.3	< 0.3	102 ± 14	< 4.2	< 1.2

Results in 10⁻³ picoCuries per cubic meter (pCi/m³) +/- 2 Standard Deviations

Beryllium-7 (Be-7) is a naturally occurring radionuclide found in the environment.

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Salem / Hope Creek
Concentrations of Gamma Emitters and Strontium in
Quarterly Composite Air Samples**

Fort Elfsborg Road (AIAP01)

<u>Collection Period</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>Be-7</u>	<u>Sr-89</u>	<u>Sr-90</u>
12/14/10 - 03/28/11	< 0.3	< 0.7	< 0.5	116 ± 23	< 5.9	< 1.3
03/28/11 - 06/28/11	< 0.5	< 0.7	0.8 ± 0.5	132 ± 24	< 3.5	< 1.0
06/28/11 - 09/20/11	< 1.6	< 1.3	< 1.1	139 ± 46	< 4.8	< 1.6
09/20/11 - 12/27/11	< 0.4	< 0.3	< 0.3	99 ± 15	< 3.1	< 1.9

Plant Access Road (AIAP02)

<u>Collection Period</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>Be-7</u>	<u>Sr-89</u>	<u>Sr-90</u>
12/14/10 - 03/28/11	< 0.4	< 0.6	< 0.4	74 ± 19	< 5.3	< 1.0
03/28/11 - 06/28/11	< 0.4	< 0.5	< 0.5	138 ± 23	< 5.0	< 1.2
06/28/11 - 09/20/11	< 0.7	< 0.9	< 0.8	118 ± 27	< 3.3	< 1.4
09/20/11 - 12/27/11	< 0.3	< 0.2	< 0.2	101 ± 15	< 3.0	< 1.7

Lower Alloways Creek School (AIAP03)

<u>Collection Period</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>Be-7</u>	<u>Sr-89</u>	<u>Sr-90</u>
12/14/10 - 03/28/11	< 0.5	< 0.4	< 0.4	106 ± 19	< 5.7	< 1.0
03/28/11 - 06/28/11	< 0.4	< 0.6	< 0.5	122 ± 22	< 3.9	< 0.9
06/28/11 - 09/20/11	< 0.7	< 0.8	< 0.7	91 ± 30	< 4.6	< 1.0
09/20/11 - 12/27/11	< 0.3	< 0.4	< 0.5	110 ± 16	< 3.8	< 1.6

Results in 10^{-3} picoCuries per cubic meter (pCi/m^3) +/- 2 Standard Deviations

Beryllium-7 (Be-7) is a naturally occurring radionuclide found in the environment.

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Gamma Emitters and Strontium in Fish/Shellfish Samples**

Stouts Creek (OCFS01)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>	<u>Sr-89</u>	<u>Sr-90</u>
04/26/11 - Clams	< 16	< 18	< 19	< 18	1310 ± 280	< 880	< 870
09/26/11 - Clams	< 19	< 19	< 25	< 20	930 ± 274	< 455	< 540

East of Site – Barnegat Bay (OCFS02)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>	<u>Sr-89</u>	<u>Sr-90</u>
04/25/11 - Clams	< 10	< 11	< 11	< 13	1570 ± 237	< 728	< 811
09/26/11 - Clams	< 15	< 22	< 25	< 21	1130 ± 300	< 407	< 547

Great Bay / Little Egg Harbor (OCFS03)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>	<u>Sr-89</u>	<u>Sr-90</u>
04/26/11 - Clams	< 4	< 4	< 4	< 4	1280 ± 149	< 859	< 872
09/27/11 - Clams	< 21	< 34	< 32	< 31	1140 ± 400	< 410	< 395
04/26/11 - Striped Bass	< 16	< 18	< 20	< 17	3130 ± 422	< 612	< 833
09/27/11 - Bluefish	< 41	< 33	< 48	< 40	3880 ± 600	< 641	< 633

Results in picoCuries per kilogram – WET (pCi/kg) +/- 2 Standard Deviations

Potassium-40 (K-40) is a naturally occurring radionuclide found in the environment

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Gamma Emitters and Strontium in Fish/Shellfish Samples**

OCNGS Discharge Canal between Pump Discharges and US Route 9 (OCFS04)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>	<u>Sr-89</u>	<u>Sr-90</u>
04/28/11 – Striped Bass	< 4	< 4	< 4	< 3	3380 ± 316	< 650	< 779
11/07/11 – Bluefish	< 3	< 4	< 4	< 3	4230 ± 437	< 286	< 301

ESE of Site, EAST of U.S. Route 9 Bridge at the OCNGS Discharge Canal (OCFS05)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>	<u>Sr-89</u>	<u>Sr-90</u>
04/27/11 – Striped Bass	< 11	< 10	< 11	< 10	3130 ± 349	< 679	< 802
04/27/11 – Sea Trout	< 12	< 12	< 12	< 11	3150 ± 365	< 951	< 823
09/26/11 – Bluefish	< 29	< 29	< 47	< 35	3570 ± 668	< 383	< 463

Results in picoCuries per kilogram – WET (pCi/kg) +/- 2 Standard Deviations

Potassium-40 (K-40) is a naturally occurring radionuclide found in the environment.

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Salem/Hope Creek
Concentrations of Gamma Emitters and Strontium in Fish/Shellfish Samples**

Onsite Surface Water Inlet Building (AIFS01)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>	<u>Sr-89</u>	<u>Sr-90</u>
05/11/11 – Striped Bass	< 7	< 6	< 6	< 5	3700 ± 386	< 727	< 895
10/26/11 – Fish *	< 4	< 4	< 4	< 3	3470 ± 307	< 411	< 281
07/01/11 – Hardshell Crab	< 9	< 9	< 10	< 7	2210 ± 297	< 953	< 880
08/26/11 – Hardshell Crab	< 4	< 5	< 5	< 4	1280 ± 142	< 605	< 834

Delaware River – West Bank Upstream (AIFS02)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>	<u>Sr-89</u>	<u>Sr-90</u>
10/26/11 – Fish **	< 3	< 3	< 4	< 3	2830 ± 289	< 266	< 267
07/01/11 – Hardshell Crab	< 6	< 7	< 8	< 6	2280 ± 272	< 969	< 882
08/26/11 – Hardshell Crab	< 5	< 5	< 5	< 4	1350 ± 166	< 891	< 720

Results in picocuries per kilogram – WET (pCi/kg) +/- 2 Standard Deviations

Potassium-40 (K-40) is a naturally occurring radionuclide found in the environment.

* Species of fish include Striped Bass and Channel Catfish

** Species of fish include Striped Bass, Channel and White Catfish

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Gamma Emitters in Aquatic Sediment Samples**

Barnegat Bay (OCAQ01)

<u>Collection Date</u>	<u>Be-7</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
04/25/11	< 144	< 14	< 16	< 20	< 17	905 ± 211
09/26/11	< 289	< 26	< 27	< 33	< 26	8160 ± 971

Oyster Creek Discharge Canal (OCAQ02)

<u>Collection Date</u>	<u>Be-7</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
04/25/11	517 ± 165	< 17	< 18	< 26	< 16	3000 ± 427
09/26/11	< 359	< 29	< 24	< 35	< 34	4500 ± 625

Great Bay / Little Egg Harbor (OCAQ03)

<u>Collection Date</u>	<u>Be-7</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
04/26/11	< 188	< 24	< 30	< 35	< 26	14900 ± 1440
09/27/11	< 235	< 27	< 27	< 35	< 23	15700 ± 1520

Stouts Creek (OCAQ04)

<u>Collection Date</u>	<u>Be-7</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
04/26/11	297 ± 208	< 25	< 27	< 34	< 29	4720 ± 604
09/26/11	< 334	< 27	< 27	< 36	< 29	1930 ± 443

Results in picoCuries per kilogram – DRY (pCi/kg) +/- 2 Standard Deviations

Potassium-40 (K-40) and Beryllium-7 (Be-7) are naturally occurring radionuclides found in the environment.

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Salem/Hope Creek
Concentrations of Gamma Emitters in Aquatic Sediment Samples**

Observation Building – Onsite (AIAQ01)

<u>Collection Date</u>	<u>Be-7</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
06/27/11	< 125	< 10	< 8	< 12	< 8	2150 ± 263
11/21/11	136 ± 35	< 3	< 3	< 4	< 3	3880 ± 357

Surface Water Inlet Building (AIAQ02)

<u>Collection Date</u>	<u>Be-7</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
06/23/11	< 153	< 14	< 11	< 17	< 12	3740 ± 436
11/21/11	47 ± 21	< 2	< 3	< 4	< 2	2560 ± 232

Onsite – Cooling Tower Blowdown Discharge Line (AIAQ03)

<u>Collection Date</u>	<u>Be-7</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
06/23/11	< 138	< 14	< 11	< 15	< 8	4520 ± 479
11/21/11	73 ± 32	< 4	< 4	< 7	< 4	3970 ± 345

Onsite – South Storm Drain Discharge Line (AIAQ04)

<u>Collection Date</u>	<u>Be-7</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
06/23/11	< 212	< 19	< 14	< 22	< 13	6630 ± 633
11/21/11	110 ± 46	< 6	< 7	< 10	< 6	4620 ± 402

West Bank of Delaware River – Upstream (AIAQ05)

<u>Collection Date</u>	<u>Be-7</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
06/23/11	< 274	< 29	< 22	< 32	< 20	18300 ± 2020
11/21/11	46 ± 32	< 5	< 5	< 7	< 6	6180 ± 543

Results in picoCuries per kilogram – DRY (pCi/kg) +/- 2 Standard Deviations

Potassium-40 (K-40) and Beryllium-7 (Be-7) are naturally occurring radionuclides found in the environment.

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Gamma Emitters in Vegetable Samples**

Oyster Creek Onsite Garden - ESE (OCVE01)

<u>Sample</u>	<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
Cabbage	07/19/11	< 12	< 16	< 16	< 14	3040 ± 393
Kale	07/19/11	< 12	< 14	< 15	< 12	4690 ± 536
Cabbage	08/16/11	< 8	< 10	< 11	< 11	2580 ± 305
Collards	08/16/11	< 10	< 11	< 11	< 10	4820 ± 475
Kale	08/16/11	< 14	< 15	< 17	< 22	5360 ± 571
Collards	09/13/11	< 11	< 13	< 14	< 12	3020 ± 378
Kale	09/13/11	< 9	< 11	< 12	< 10	4350 ± 501
Collards	10/25/11	< 8	< 9	< 10	< 8	2790 ± 305
Kale	10/25/11	< 12	< 13	< 15	< 12	4380 ± 477

Private Farm – NW (OCVE02)

<u>Sample</u>	<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
Cabbage	07/19/11	< 7	< 9	< 9	< 7	1610 ± 213
Collards	07/19/11	< 5	< 7	< 6	< 5	4010 ± 416
Kale	07/19/11	< 13	< 16	< 17	< 14	4280 ± 507
Cabbage	08/16/11	< 9	< 11	< 12	< 11	2770 ± 317
Collards	08/16/11	< 10	< 12	< 11	< 9	2850 ± 315
Kale	08/16/11	< 9	< 9	< 10	< 9	2030 ± 252
Cabbage	09/13/11	< 11	< 11	< 13	< 10	1960 ± 269
Collards	09/13/11	< 9	< 11	< 11	< 11	3480 ± 377
Kale	09/13/11	< 10	< 11	< 12	< 11	4080 ± 454
Cabbage	10/25/11	< 10	< 11	< 14	< 11	2210 ± 312
Collards	10/25/11	< 6	< 7	< 7	< 7	4150 ± 404
Kale	10/25/11	< 10	< 12	< 13	< 17	3670 ± 401

Results in picoCuries per kilogram – WET (pCi/kg) +/- 2 Standard Deviations

Potassium-40 (K-40) is a naturally occurring radionuclide found in the environment.

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Gamma Emitters in Vegetable Samples**

Oyster Creek Onsite Garden - SE (OCVE03)

<u>Sample</u>	<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
Cabbage	08/16/11	< 8	< 9	< 10	< 8	2410 ± 275
Cabbage	09/13/11	< 7	< 9	< 10	< 9	2420 ± 277

Oyster Creek Onsite Garden - E (OCVE07)

<u>Sample</u>	<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
Cabbage	07/19/11	< 9	< 12	< 11	14 ± 12	3010 ± 367
Collards	07/19/11	< 12	< 14	< 14	37 ± 13	3140 ± 394
Kale	07/19/11	< 10	< 12	< 10	18 ± 8	4140 ± 446
Cabbage	08/16/11	< 8	< 8	< 9	46 ± 10	2250 ± 255
Collards	08/16/11	< 10	< 12	< 11	63 ± 12	2900 ± 346
Kale	08/16/11	< 13	< 14	< 17	< 18	3860 ± 471
Collards	09/13/11	< 8	< 9	< 10	25 ± 9	3160 ± 334
Kale	09/13/11	< 10	< 12	< 14	23 ± 11	3670 ± 441
Collards	10/25/11	< 11	< 12	< 13	< 10	3430 ± 374
Kale	10/25/11	< 10	< 10	< 12	< 11	4280 ± 449

Results in picoCuries per kilogram – WET (pCi/kg) +/- 2 Standard Deviations

Potassium-40 (K-40) is a naturally occurring radionuclide found in the environment.

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Salem/Hope Creek
Concentrations of Gamma Emitters in Vegetable Samples**

Private Farm – NNE (AIVE04)

<u>Sample</u>	<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
Asparagus	05/01/11	< 15	< 15	< 13	< 13	2280 ± 349
Corn	07/05/11	< 4	< 5	< 5	< 4	2200 ± 232
Pepper	07/05/11	< 6	< 7	< 8	< 6	1510 ± 185
Tomato	07/05/11	< 3	< 4	< 4	< 4	1970 ± 197

Private Farm – NNE (AIVE05)

<u>Sample</u>	<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
Asparagus	05/01/11	< 9	< 10	< 11	< 9	1800 ± 256
Tomato	07/11/11	< 5	< 6	< 6	< 5	2680 ± 281
Corn	07/11/11	< 9	< 13	< 11	< 11	2470 ± 310

Private Farm – NE (AIVE08)

<u>Sample</u>	<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
Cabbage	07/05/11	< 7	< 7	< 8	< 7	3390 ± 337
Corn	07/21/11	< 4	< 5	< 5	< 4	2340 ± 261
Tomato	07/21/11	< 5	< 7	< 7	< 6	2520 ± 285

Private Farm – NE (AIVE10)

<u>Sample</u>	<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
Tomato	08/24/11	< 5	< 8	< 7	< 7	2510 ± 275
Peppers	08/24/11	< 10	< 11	< 13	< 10	2060 ± 311

Private Farm – NE (AIVE11)

<u>Sample</u>	<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
Asparagus	05/01/11	< 10	< 10	< 12	< 10	2140 ± 290
Cabbage	06/29/11	< 5	< 6	< 6	< 5	2260 ± 245
Tomato	06/29/11	< 3	< 4	< 4	< 4	1890 ± 187

Owner Controlled Area (Onsite) - N (AIVE12)

<u>Sample</u>	<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
Cabbage	12/15/11	< 9	< 7	< 8	< 7	4770 ± 461

Owner Controlled Area (Onsite) – NW (AIVE13)

<u>Sample</u>	<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
Cabbage	12/15/11	< 9	< 7	< 7	< 6	4020 ± 393

Results in picoCuries per kilogram – WET (pCi/kg) +/- 2 Standard Deviations

Potassium-40 (K-40) is a naturally occurring radionuclide found in the environment.

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Salem/Hope Creek
Concentrations of Gamma Emitters in Vegetable Samples**

Owner Controlled Area (Onsite) - NNW (AIVE14)

<u>Sample</u>	<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
Cabbage	12/15/11	< 9	< 7	< 8	< 7	3830 ± 402

Private Farm – SSW (AIVE15)

<u>Sample</u>	<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
Cabbage	12/15/11	< 9	< 7	< 8	< 6	3070 ± 306

Private Farm – NNE (AIVE18)

<u>Sample</u>	<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
Corn	07/18/11	< 8	< 10	< 9	< 8	2160 ± 279
Tomato	07/18/11	< 6	< 6	< 7	< 6	1170 ± 166
Peppers	07/18/11	< 8	< 8	< 9	< 8	1400 ± 195

Private Farm – WNW (AIVE19)

<u>Sample</u>	<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
Soybean	11/06/11	< 5	< 6	< 7	< 5	12100 ± 1230

Private Farm – N (AIVE20)

<u>Sample</u>	<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
Soybean	11/07/11	< 6	< 7	< 7	< 5	12500 ± 1130

Private Farm – NE (AIVE21)

<u>Sample</u>	<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
Soybean	11/18/11	< 8	< 10	< 10	< 8	14500 ± 1260

Results in picoCuries per kilogram – WET (pCi/kg) +/- 2 Standard Deviations

Potassium-40 (K-40) is a naturally occurring radionuclide found in the environment.

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**BNE Background Location
Concentrations of Gamma Emitters and Strontium in Milk Samples**

State of New Jersey Dairy Farm (COMI01)

<u>Collection Date</u>	<u>Cs-137</u>	<u>I-131</u>	<u>K-40</u>	<u>Sr-89</u>	<u>Sr-90</u>
01/17/11	< 2.56	< 14.0 *	1330 ± 134	< 1.46 *	< 1.56 *
03/23/11	< 2.18	< 0.52	1560 ± 159	< 0.79	< 0.86
03/30/11	< 2.53	0.94 ± 0.39	1380 ± 145	< 0.85	< 0.82
03/30/11**	< 2.30	< 0.75	2000 ± 201	< 0.89	< 0.85
04/06/11	< 5.46	< 0.76	1740 ± 198	< 0.95	< 0.87
04/06/11**	< 3.68	< 0.94	1420 ± 168	< 0.95	< 0.87
04/13/11	< 2.42	< 0.64	1410 ± 143	< 0.97	< 0.93
04/13/11**	< 3.15	< 0.94	1370 ± 142	< 0.57	< 0.81
04/20/11	< 4.53	< 0.91	1450 ± 145	< 0.92	< 0.95
04/20/11**	< 2.42	< 0.79	1620 ± 156	< 0.91	< 0.88
04/27/11	< 1.98	< 0.94	1100 ± 106	< 0.90	< 0.84
04/27/11**	< 3.20	< 0.47	1940 ± 194	< 0.83	< 0.84
06/02/11	< 2.07	< 0.61	1470 ± 153	< 0.85	< 0.78
09/20/11	< 2.56	< 0.67	1500 ± 143	< 0.89	< 0.94
12/19/11	< 3.38	< 0.62	1700 ± 173	< 0.80	< 0.89

Results in picoCuries per Liter (pCi/L) +/- 2 Standard Deviations

Potassium-40 (K-40) is a naturally occurring radionuclide found in the environment.

The sample collection frequency was increased from quarter-annual to weekly from 03/30/11 through 04/27/11 as the result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

* Sample minimum detectable concentration was in excess of the 1.0 pCi/L detection level due to limited sample volume and a delay in sample analysis. There was insufficient chemical recovery to meet the MDC.

** Cow milk samples are pasteurized. All other samples are raw milk. This additional sampling was performed as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan.

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Salem/Hope Creek
Concentrations of Gamma Emitters and Strontium in Milk Samples**

Private Farm – NNE (AIMI01)

<u>Collection Date</u>	<u>Cs-137</u>	<u>I-131</u>	<u>K-40</u>	<u>Sr-89</u>	<u>Sr-90</u>
01/03/11	< 2.15	< 0.66	1530 ± 144	< 0.85	< 0.82
02/07/11	< 2.56	< 0.68	1890 ± 185	< 0.68	< 0.88
03/07/11	< 2.49	< 0.53	1710 ± 175	< 0.89	< 0.77
04/04/11	< 2.27	< 0.74	1300 ± 131	< 0.92	< 0.84
04/18/11**	< 3.30	< 0.63	1420 ± 148	< 0.89	< 0.88
05/02/11	< 2.81	< 0.95	1460 ± 147	< 0.90	< 0.83
06/06/11	< 2.70	< 1.04*	1340 ± 136	< 0.84	< 0.91
07/05/11	< 2.15	< 0.52	1680 ± 164	< 0.92	< 0.90
08/07/11	< 2.97	< 0.88	1420 ± 153	< 0.98	< 0.89
09/06/11	< 2.79	< 0.85	1430 ± 150	< 0.87	< 0.86
10/03/11	< 3.00	< 0.75	1290 ± 133	< 0.89	< 0.89
11/07/11	< 2.39	< 0.46	1890 ± 187	< 0.72	< 0.73
12/05/11	< 4.16	< 0.68	1610 ± 173	< 0.83	< 0.65

Private Farm – NE (AIMI02)

<u>Collection Date</u>	<u>Cs-137</u>	<u>I-131</u>	<u>K-40</u>	<u>Sr-89</u>	<u>Sr-90</u>
01/03/11	< 2.86	< 0.72	1400 ± 139	< 0.91	< 0.90
02/07/11	< 2.52	< 0.55	1510 ± 149	< 0.67	< 0.81
03/07/11	< 1.93	< 0.70	1660 ± 157	< 0.84	< 0.76
04/04/11	< 3.14	< 0.92	1140 ± 123	< 0.96	< 0.86
04/18/11**	< 2.77	< 0.66	1390 ± 137	< 0.89	< 0.91
05/02/11	< 2.16	< 0.71	1830 ± 178	< 0.91	< 0.81
06/06/11	< 2.23	< 0.99	954 ± 97	< 0.95	< 0.91
07/05/11	< 2.52	< 0.97	1640 ± 169	< 0.95	< 0.90
08/07/11	< 2.09	< 0.67	1490 ± 146	< 0.99	< 0.82
09/06/11	< 2.77	< 0.76	1390 ± 138	< 0.89	< 0.90
10/03/11	< 2.53	< 0.62	1250 ± 130	< 0.89	< 0.87
11/07/11	< 3.50	< 0.75	1910 ± 191	< 0.82	< 0.63
12/05/11	< 4.09	< 0.58	1820 ± 200	< 0.79	< 0.58

Results in picoCuries per Liter (pCi/L) +/- 2 Standard Deviations

Potassium-40 (K-40) is a naturally occurring radionuclide found in the environment

* Sample minimum detectable concentration was in excess of the 1.0 pCi/L detection level due to low chemical yield. Low chemical yield is a result of the delay in time between sample collection and analysis along with I-131 decay for the same reason (8.02 days).

** The sample collection frequency was increased from monthly to bi-weekly during April 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan.

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Salem/Hope Creek
Concentrations of Gamma Emitters and Strontium in Milk Samples**

Private Farm – WNW (AIMI03)

<u>Collection Date</u>	<u>Cs-137</u>	<u>I-131</u>	<u>K-40</u>	<u>Sr-89</u>	<u>Sr-90</u>
01/03/11	< 2.07	< 0.56	1550 ± 147	< 0.79	< 0.72
02/07/11	< 2.49	< 0.69	1640 ± 157	< 0.69	< 0.87
03/07/11	< 2.05	< 0.52	1630 ± 160	< 0.86	< 0.78
04/04/11	< 2.13	< 0.95	1300 ± 126	< 0.98	< 0.87
04/18/11**	< 2.19	< 0.80	1320 ± 141	< 0.88	< 0.87
05/02/11	< 2.03	< 0.57	1950 ± 183	< 0.92	< 0.99
06/06/11	< 2.57	< 1.05*	1160 ± 121	< 0.94	< 0.89
07/05/11	< 2.53	< 0.60	1890 ± 196	< 0.90	< 0.98
08/07/11	< 2.64	< 0.96	1370 ± 140	< 0.98	< 0.85
09/06/11	< 2.81	< 0.83	1410 ± 139	< 0.90	< 0.83
10/03/11	< 2.58	< 0.82	1320 ± 141	< 0.81	< 0.90
11/07/11	< 3.33	< 0.50	2030 ± 191	< 0.79	< 0.64
12/05/11	< 3.30	< 0.97	2040 ± 209	< 0.77	< 0.54

Results in picoCuries per Liter (pCi/L) +/- 2 Standard Deviations

Potassium-40 (K-40) is a naturally occurring radionuclide found in the environment

* Sample minimum detectable concentration was in excess of the 1.0 pCi/L detection level due to low chemical yield. Low chemical yield is a result of the delay in time between sample collection and analysis along with I-131 decay due to its short half-life (8.02 days).

** The sample collection frequency was increased from monthly to bi-weekly during April 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan.

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Gamma Emitters and Tritium (H-3) in Surface Water**

Barnegat Bay (OCSW01)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>H-3</u>	<u>I-131</u>
04/25/11	< 2.17	< 2.18	< 2.36	< 2.04	< 467	< 0.94
09/26/11	< 1.96	< 2.14	< 2.37	< 2.21	< 527	< 0.95

Great Bay / Little Egg Harbor (OCSW02)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>H-3</u>	<u>I-131</u>
01/06/11 - 01/25/11	< 1.96	< 2.13	< 2.39	< 2.18	< 542	< 0.75
02/04/11 - 02/24/11	< 1.84	< 1.87	< 2.11	< 1.78	< 452	< 0.50
03/02/11 - 03/31/11	< 1.93	< 2.46	< 2.69	< 2.37	< 480	< 0.72
04/07/11 - 04/26/11	< 1.77	< 1.73	< 1.90	< 1.80	< 473	< 0.90
05/05/11 - 05/26/11	< 2.09	< 2.45	< 2.42	< 2.35	< 144	< 0.91
06/02/11 - 06/30/11	< 2.20	< 2.22	< 2.27	< 1.96	< 197	< 2.40*
07/06/11 - 07/28/11	< 2.58	< 2.49	< 3.11	< 2.36	< 217	< 0.75
08/04/11 - 08/25/11	< 2.65	< 2.65	< 2.76	< 2.17	< 143	< 2.57*
09/01/11 - 09/27/11	< 2.41	< 2.52	< 2.66	< 2.28	< 546	< 0.92
10/06/11 - 10/25/11	< 1.97	< 1.81	< 2.13	< 1.85	< 399	No Data**
11/02/11 - 11/22/11	< 4.31	< 5.40	< 6.56	< 5.16	< 252	< 0.84
12/01/11 - 12/28/11	< 2.38	< 2.32	< 2.84	< 2.48	< 189	< 0.87

Stouts Creek (OCSW03)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>H-3</u>	<u>I-131</u>
04/26/11	< 1.98	< 2.13	< 2.38	< 2.02	< 472	< 0.92
09/26/11	< 1.99	< 1.95	< 2.26	< 2.13	< 521	< 0.79

Results in picoCuries per Liter (pCi/L) +/- 2 Standard Deviations

* Sample minimum detectable concentration was in excess of the 1.0 pCi/L detection level due to low chemical yield. Low chemical yield is a result of the delay in time between sample collection and analysis along with iodine-131 decay due to its short half-life (8.02 days).

** Radiochemical Analysis for Iodine-131 was not performed on the sample since the time between sample collection and analysis was well beyond several half-lives. The half-life of iodine-131 is 8.02 days.

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Gamma Emitters and Tritium (H-3) in Surface Water**

Oyster Creek Discharge Canal (OCSW04)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>H-3</u>	<u>I-131</u>
01/06/11 – 01/25/11	< 2.49	< 2.48	< 2.84	< 3.80	< 537	< 0.91
02/04/11 – 02/23/11	< 2.00	< 2.30	< 2.40	< 2.07	< 457	< 0.55
03/02/11 – 03/31/11	< 1.85	< 2.51	< 2.58	< 2.42	< 476	< 0.54
04/06/11 – 04/25/11	< 2.29	< 2.62	< 2.72	< 2.56	< 474	< 0.90
05/05/11 – 05/25/11	< 2.10	< 2.23	< 2.58	< 2.35	< 144	< 0.96
06/02/11 – 06/30/11	< 2.24	< 1.95	< 2.24	< 1.77	< 206	< 2.30*
07/06/11 – 07/28/11	< 1.51	< 1.89	< 1.67	< 1.57	< 215	< 0.99
08/04/11 – 08/25/11	< 2.47	< 2.40	< 2.70	< 2.18	< 143	< 2.62 *
09/01/11 – 09/26/11	< 2.36	< 2.27	< 2.51	< 2.24	< 531	< 0.92
10/06/11 – 10/25/11	< 1.88	< 2.01	< 2.25	< 1.90	< 398	No Data**
11/02/11 – 11/22/11	< 4.02	< 4.27	< 5.08	< 4.37	< 251	< 0.85
11/30/11 – 12/28/11	< 2.32	< 2.39	< 2.57	< 2.02	< 177	< 0.91

Results in picoCuries per Liter (pCi/L) +/- 2 Standard Deviations

* Sample minimum detectable concentration was in excess of the 1.0 pCi/L detection level due to low chemical yield. Low chemical yield is a result of the delay in time between sample collection and analysis along with iodine-131 decay due to its short half-life (8.02 days).

** Radiochemical Analysis for Iodine-131 was not performed on the sample since the time between sample collection and analysis was well beyond several half-lives. The half-life of iodine-131 is 8.02 days.

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Salem/Hope Creek
Concentrations of Gamma Emitters and Tritium (H-3) in Surface Water**

Surface Water Inlet Building Discharge (AISW01)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>H-3</u>	<u>I-131</u>
01/03/11	< 1.69	< 1.95	< 2.24	< 1.90	< 535	< 0.65
02/04/11	< 1.75	< 2.05	< 2.17	< 1.87	< 520	< 0.68
03/08/11	< 1.95	< 1.87	< 2.49	< 1.93	< 431	< 0.59
04/07/11	< 1.72	< 1.81	< 2.18	< 2.03	< 227	< 0.75
05/06/11	< 1.87	< 1.88	< 1.91	< 1.71	< 448	< 0.78
06/06/11	< 1.82	< 2.10	< 2.16	< 1.67	< 147	< 0.75
07/05/11	< 2.50	< 2.59	< 2.69	< 2.59	< 162	< 0.96
08/01/11	< 1.94	< 2.58	< 2.33	< 2.15	< 211	< 0.86
08/22/11	< 2.18	< 2.40	< 2.52	< 2.06	< 270	< 0.92
09/06/11	< 2.12	< 2.53	< 2.39	< 2.56	< 242	< 0.83
10/05/11	< 1.84	< 2.17	< 2.28	< 1.99	< 530	< 0.91
11/09/11	< 2.58	< 2.43	< 2.76	< 2.46	< 327	< 0.58
12/06/11	< 1.89	< 2.15	< 2.38	< 1.84	< 263	< 0.89

West Bank – Delaware River (AISW02)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>H-3</u>	<u>I-131</u>
01/03/11	< 2.17	< 2.31	< 2.56	< 2.37	< 540	< 0.77
02/04/11	< 2.40	< 2.57	< 2.84	< 2.42	< 515	< 0.87
03/08/11	< 1.56	< 1.74	< 1.79	< 1.60	< 432	< 1.09*
04/07/11	< 1.96	< 1.98	< 2.16	< 1.94	< 213	< 0.91
05/06/11	< 1.70	< 1.72	< 1.87	< 1.60	< 455	< 0.68
06/06/11	< 2.40	< 2.85	< 2.59	< 3.70	< 148	< 0.86
07/05/11	< 1.90	< 2.04	< 2.14	< 1.85	< 163	< 0.94
08/01/11	< 2.04	< 2.11	< 2.48	< 1.98	< 218	< 0.87
08/22/11	< 2.00	< 2.32	< 2.28	< 2.06	< 258	< 0.96
09/06/11	< 2.97	< 2.79	< 3.27	< 2.67	< 230	< 0.88
10/05/11	< 2.20	< 2.12	< 2.73	< 2.16	< 531	< 0.99
11/09/11	< 2.08	< 2.34	< 2.78	< 2.17	< 318	< 0.73
12/06/11	< 2.16	< 1.87	< 2.60	< 2.11	< 261	< 0.83

Results in picoCuries per Liter (pCi/L) +/- 2 Standard Deviations

* Sample minimum detectable concentration was in excess of the 1.0 pCi/L detection level due to low chemical yield as a result of insufficient sample. Low chemical yield is a result of the delay in time between sample collection and analysis along with iodine-131 decay due to its short half-life (8.02 days).

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Concentrations of Gamma Emitters and Tritium (H-3) in Well Water**

Oyster Creek Administration Building Onsite (OCWW01)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>H-3</u>	<u>I-131</u>
01/24/11	< 1.79	< 2.41	< 2.13	< 1.83	< 254	< 0.58
03/28/11	< 1.74	< 1.75	< 2.40	< 2.13	< 554	< 0.80
04/05/11*	< 3.41	< 4.53	< 4.04	< 4.35	< 473	< 0.93
04/12/11*	< 1.77	< 2.14	< 2.01	< 1.60	< 228	< 0.48
04/19/11*	< 2.65	< 2.54	< 3.19	< 2.88	< 530	< 0.88
04/26/11*	< 1.69	< 1.72	< 1.89	< 1.65	< 474	< 0.83
09/06/11	< 2.13	< 2.20	< 2.55	< 2.29	< 145	< 0.98
11/28/11	< 1.71	< 2.04	< 2.33	< 1.99	< 140	< 0.46

Forked River Marina (OCWW02)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>H-3</u>	<u>I-131</u>
01/24/11	< 1.66	< 2.22	< 2.20	< 1.97	< 254	< 0.68
03/28/11	< 1.96	< 1.86	< 2.35	< 2.08	< 562	< 0.83
04/05/11*	< 3.04	< 3.25	< 4.15	< 5.18	< 468	< 0.62
04/12/11*	< 1.71	< 1.78	< 1.99	< 1.78	< 226	< 0.45
04/19/11*	< 2.26	< 2.41	< 2.64	< 2.39	< 528	< 0.86
04/26/11*	< 2.36	< 2.37	< 2.63	< 2.55	< 473	< 0.88
09/06/11	< 2.12	< 2.10	< 2.59	< 2.36	< 144	< 0.93
11/28/11	< 1.54	< 1.90	< 2.07	< 1.87	< 143	< 0.44

Results in picoCuries per Liter (pCi/L) +/- 2 Standard Deviations

* The sample collection frequency was increased from quarterly to weekly during April 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Salem/Hope Creek
Concentrations of Gamma Emitters and Tritium (H-3) in Well Water**

Elsinboro School (AIWW01)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>H-3</u>	<u>I-131</u>
02/08/11	< 2.43	< 2.57	< 3.11	< 2.55	< 472	< 0.63
03/30/11	< 2.80	< 2.76	< 3.07	< 2.65	< 561	< 0.65
04/05/11*	< 3.00	< 3.19	< 3.16	< 3.06	< 546	< 0.59
04/12/11*	< 2.11	< 2.67	< 2.69	< 3.66	< 224	< 0.61
04/19/11*	< 2.06	< 2.31	< 2.53	< 2.39	< 536	< 0.83
04/26/11*	< 1.97	< 2.12	< 2.42	< 2.06	< 465	< 0.87
09/06/11	< 1.92	< 1.75	< 2.12	< 1.97	155 ± 121	< 0.92
11/28/11	< 2.28	< 2.35	< 2.65	< 2.20	< 144	< 0.41

Lower Alloways Creek Police Station (AIWW02)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>H-3</u>	<u>I-131</u>
02/08/11	< 2.18	< 2.38	< 2.69	< 2.36	< 465	< 0.79
03/30/11	< 3.55	< 3.53	< 3.79	< 3.35	< 547	< 0.88
04/05/11*	< 3.63	< 3.07	< 3.94	< 3.19	< 477	< 0.78
04/12/11*	< 1.98	< 2.00	< 2.10	< 1.93	< 227	< 0.81
04/19/11*	< 1.78	< 2.13	< 2.55	< 2.01	< 525	< 0.91
04/26/11*	< 2.11	< 2.25	< 2.37	< 2.05	< 466	< 0.85
09/06/11	< 2.62	< 2.55	< 3.10	< 2.77	< 143	< 0.38
11/28/11	< 2.41	< 2.60	< 3.01	< 2.66	< 142	< 0.35

Salem Processing Center (AIWW03)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>H-3</u>	<u>I-131</u>
02/08/11	< 2.17	< 2.67	< 2.56	< 2.35	< 466	< 0.61
03/30/11	< 4.33	< 4.30	< 5.16	< 4.63	< 543	< 0.67
04/05/11*	< 2.17	< 2.53	< 2.82	< 2.41	< 474	< 0.95
04/12/11*	< 1.90	< 2.12	< 2.40	< 1.98	< 221	< 0.72
04/19/11*	< 2.29	< 2.39	< 2.49	< 2.42	< 521	< 0.82
04/27/11*	< 2.11	< 2.21	< 2.52	< 2.17	< 462	< 0.87
09/06/11	< 2.10	< 2.18	< 2.44	< 2.06	< 139	< 0.86
11/28/11	< 1.48	< 1.69	< 1.89	< 1.48	< 142	< 0.33

Results in picoCuries per Liter (pCi/L) +/- 2 Standard Deviations

* The sample collection frequency was increased from quarterly to weekly during April 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Salem/Hope Creek
Concentrations of Gamma Emitters and Tritium (H-3) in Well Water**

Lower Alloways Creek School (AIWW04)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>H-3</u>	<u>I-131</u>
02/08/11	< 2.01	< 2.43	< 2.42	< 2.11	< 453	< 0.95
03/30/11	< 3.17	< 3.21	< 3.95	< 3.39	< 548	< 0.88
04/05/11*	< 2.06	< 2.46	< 2.28	< 2.06	< 475	< 0.93
04/12/11*	< 1.58	< 2.18	< 2.21	< 1.78	< 226	< 0.50
04/19/11*	< 2.42	< 2.57	< 2.96	< 2.48	< 531	< 0.89
04/27/11*	< 1.97	< 2.06	< 2.21	< 1.95	< 463	< 0.85
09/06/11	< 1.67	< 1.83	< 2.08	< 1.72	< 142	< 0.97
11/28/11	< 1.98	< 2.00	< 2.43	< 1.94	< 141	< 0.42

Results in picoCuries per Liter (pCi/L) +/- 2 Standard Deviations

* The sample collection frequency was increased from quarterly to weekly during April 2011 as a result of the March 11, 2011 accident at the Fukushima Daiichi nuclear plant in Japan

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**BNE Background Location
Thermoluminescent Dosimetry Data
Quarterly Results for 2011**

<u>Station</u>	<u>Location</u>	<u>1st Quarter</u>		<u>2nd Quarter</u>		<u>3rd Quarter</u>		<u>4th Quarter</u>	
		<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>
CO01	BNE Office, Arctic Parkway, Ewing, NJ	14.3	2.9	13.9	4.2	13.5	2.0	11.6	2.3
CO02	Brendan T. Byrne State Forest, New Lisbon, NJ	10.5	1.2	10.2	7.1	9.8	1.0	8.1	1.4

Results are reported in units of milliroentgens (mR)

CV is the coefficient of variation; the ratio of the standard deviation to the mean, and is normally reported as a percentage

All exposures were normalized to 90 days (a standard quarter)

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Thermoluminescent Dosimetry Data
Quarterly Results for 2011**

<u>Station</u>	<u>Location</u>	<u>1st Quarter</u>		<u>2nd Quarter</u>		<u>3rd Quarter</u>		<u>4th Quarter</u>	
		<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>
1	Ocean County Vocational School	9.3	2.4	8.6	4.0	8.5	2.8	6.9	2.1
2	Ocean Twp. Municipal Building	10.3	1.8	9.9	5.0	9.7	3.6	7.8	3.1
3	Sewage Pumping Station, Forked River	11.4	1.4	10.1	2.6	10.6	4.3	8.3	1.1
4	Twin River Station, Forked River	9.8	1.8	8.9	3.3	9.1	3.3	7.2	3.0
5	Sewage Pumping Station, Ocean Twp.	10.7	1.8	10.0	4.7	9.4	3.9	7.9	2.5
6	Oyster Creek, Gate #2, Forked River	11.6	1.2	10.0	2.6	10.4	3.4	8.2	2.3
7	Finninger Farm, Forked River	9.6	2.4	8.5	1.6	8.8	3.6	7.1	2.1
8	Ocean Co. Memorial Cemetery, Waretown	9.9	1.7	8.8	2.3	9.1	3.2	6.8	3.6
9	Oyster Creek Building 17, Forked River	11.0	1.1	10.2	2.6	10.4	1.6	8.3	2.0
10	Sheffield & Derby Rd, Forked River	10.6	7.8	9.4	0.5	9.5	2.9	7.4	1.6
11	Lakeside Drive, Forked River	10.3	2.6	9.2	3.2	9.8	3.7	7.5	1.5
12	Forked River Game Farm, Forked River	10.8	1.6	9.3	1.5	10.2	2.9	7.9	2.1

Results are reported in units of milliroentgens (mR)

CV is the coefficient of variation; the ratio of the standard deviation to the mean, and is normally reported as a percentage.

All exposures were normalized to 90 days (a standard quarter)

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Oyster Creek
Thermoluminescent Dosimetry Data
Quarterly Results for 2011**

<u>Station</u>	<u>Location</u>	<u>1st Quarter</u>		<u>2nd Quarter</u>		<u>3rd Quarter</u>		<u>4th Quarter</u>	
		<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>
13	Restrooms, Lakeside Dr., Forked River	11.0	5.3	9.2	3.6	10.1	6.9	7.5	1.3
14	Sands Pt. Park, Dock Ave., Waretown	11.1	0.8	10.9	5.2	10.4	3.3	8.8	4.0
15	Recreation Center, Waretown	9.8	3.6	9.1	3.8	9.0	1.6	7.3	1.2
16	North Access Rd., Forked River	11.2	1.2	10.1	1.2	10.7	1.3	9.2	6.3
20	Third Avenue, Barnegat Light	9.5	3.3	8.2	3.2	8.3	2.4	7.1	3.8
21	Rose Hill Road & Barnegat Blvd	10.7	2.7	9.4	3.5	9.7	2.9	7.9	5.9
22	Bay Way & Clairmore Avenue	10.1	2.0	9.4	1.4	9.7	5.2	7.9	3.3
23	Island Beach State Park, Parking Lot A5	9.6	2.7	8.7	2.6	8.5	9.8	7.0	1.7

Results are reported in units of milliroentgens (mR).

CV is the coefficient of variation; the ratio of the standard deviation to the mean, and is normally reported as a percentage.

All exposures were normalized to 90 days (a standard quarter).

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

**Salem/Hope Creek
Thermoluminescent Dosimetry Data
Quarterly Results for 2011**

<u>Station</u>	<u>Location</u>	<u>1st Quarter</u>		<u>2nd Quarter</u>		<u>3rd Quarter</u>		<u>4th Quarter</u>	
		<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>
1	Access Road – Security Checkpoint	11.7	3.0	11.0	3.1	10.8	1.5	9.3	2.4
2	Poplar Road, Lower Alloways	12.4	2.7	11.3	1.9	11.5	3.3	9.5	3.0
3	Money and Eagle Island Road	13.3	4.3	12.5	2.9	12.8	2.7	10.7	3.1
4	Ft. Elfsborg / Hancocks – East	14.3	1.8	13.8	1.4	13.6	2.2	11.3	4.9
5	Ft. Elfsborg / Hancocks – West	17.0	2.2	16.9	2.1	16.4	1.7	14.5	4.2
6	Stathems Neck Road	11.9	0.6	10.9	0.4	11.4	1.5	9.6	1.8
7	Stow Neck Road Lower Alloways	10.6	3.0	9.8	3.4	9.8	1.3	8.4	6.6
8	Alloways Creek Neck Road - Middle	10.6	1.3	9.4	0.6	9.6	1.2	7.6	3.8
9	Alloways Creek Neck Road - North	13.7	2.8	12.5	4.2	12.8	2.5	10.6	1.7
10	Abbotts Farm Road	10.7	3.8	9.6	2.1	9.3	1.9	7.7	7.6
11	PSEG Education Center/EOF	11.5	2.0	10.8	3.7	10.6	1.7	8.8	3.2

Results are reported in units of milliroentgens (mR)

CV is the coefficient of variation; the ratio of the standard deviation to the mean, and is normally reported as a percentage.

All exposures were normalized to 90 days (a standard quarter).

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

Comparison of NJDEP and Mirion (Global) Technologies Thermoluminescent Dosimetry Data for Oyster Creek

Quarterly Results for Co-located Dosimeters for 2011

<u>Station</u>	<u>Location</u>	<u>1st Quarter</u>				<u>2nd Quarter</u>				<u>3rd Quarter</u>				<u>4th Quarter</u>			
		<u>NJDEP</u>		<u>Global</u>		<u>NJDEP</u>		<u>Global</u>		<u>NJDEP</u>		<u>Global</u>		<u>NJDEP</u>		<u>Global</u>	
		<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>
5	Sewage Pump. Station, Ocean Township	10.7	1.8	9.3	25.5	10.0	4.7	9.5	4.8	9.4	3.9	12.1	2.8	7.9	2.5	10.5	6.6
7	Finninger Farm,OCNGS Forked River	9.6	2.4	7.7	13.2	8.5	1.6	8.0	6.3	8.8	3.6	10.1	3.2	7.1	2.1	8.7	4.9
13	Restrooms, Lakeside Dr. Forked River	11.0	5.3	12.2	18.8	9.2	3.6	9.3	4.6	10.1	6.9	10.6	9.1	7.5	1.3	9.7	7.8
21	Rose Hill and Barnegat Rd Barnegat Twp.	10.7	2.7	7.7	10.0	9.4	3.5	9.2	6.7	9.7	2.9	11.6	5.7	7.9	5.9	9.7	4.5

Results are reported in units of milliroentgens (mR)

CV is the coefficient of variation; the ratio of the standard deviation to the mean, and is normally reported as a percentage

All exposures were normalized to 90 days (a standard quarter)

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

Comparison of NJDEP and Mirion (Global) Technologies Thermoluminescent Dosimetry Data for Salem/Hope Creek

Quarterly Results for Co-located Dosimeters for 2011

<u>Station</u>	<u>Location</u>	<u>1st Quarter</u>		<u>2nd Quarter</u>		<u>3rd Quarter</u>		<u>4th Quarter</u>									
		<u>NJDEP</u>		<u>Global</u>		<u>NJDEP</u>		<u>Global</u>									
		<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>								
1	Access Road – Security Checkpoint	11.7	3.0	9.5	5.4	11.0	3.1	10.2	6.2	10.8	1.5	12.4	5.0	9.3	2.4	12.3	4.9
2	Poplar Road, Lower Alloways	12.4	2.7	13.1	8.8	11.3	1.9	10.5	4.4	11.5	3.3	13.1	4.8	9.5	3.0	11.5	2.6
3	Money and Eagle Island Roads	13.3	4.3	10.0	8.1	12.5	2.9	12.2	5.3	12.8	2.7	14.3	5.3	10.7	3.1	13.3	4.6
5	Ft. Elfsborg/ Hancocks - West	17.0	2.2	15.0	11.9	16.9	2.1	15.4	3.2	16.4	1.7	18.6	3.8	14.5	4.2	17.3	3.8

Results are reported in units of milliroentgens (mR)

CV is the coefficient of variation; the ratio of the standard deviation to the mean, and is normally reported as a percentage

All exposures were normalized to 90 days (a standard quarter)

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

Comparison of NJDEP and Mirion (Global) Technologies Thermoluminescent Dosimetry Data for Salem/Hope Creek

Quarterly Results for Co-located Dosimeters for 2011

<u>Station</u>	<u>Location</u>	<u>1st Quarter</u>				<u>2nd Quarter</u>				<u>3rd Quarter</u>				<u>4th Quarter</u>			
		<u>NJDEP</u>		<u>Global</u>		<u>NJDEP</u>		<u>Global</u>		<u>NJDEP</u>		<u>Global</u>		<u>NJDEP</u>		<u>Global</u>	
		<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>
7	Stow Neck Road-Lower Alloways	10.6	3.0	8.0	11.2	9.8	3.4	9.0	0.0	9.8	1.3	12.1	5.1	8.4	6.6	10.7	4.2
9	Alloways Creek Neck Road - North	13.7	2.8	10.7	8.5	12.5	4.2	12.3	10.5	12.8	2.5	13.8	5.1	10.6	1.7	13.0	3.0
11	PSEG Ed. Center/EOF Salem City	11.5	2.0	7.2	8.4	10.8	3.7	11.2	3.1	10.6	1.7	13.6	6.3	8.8	3.2	10.3	3.5

Results are reported in units of milliroentgens (mR)

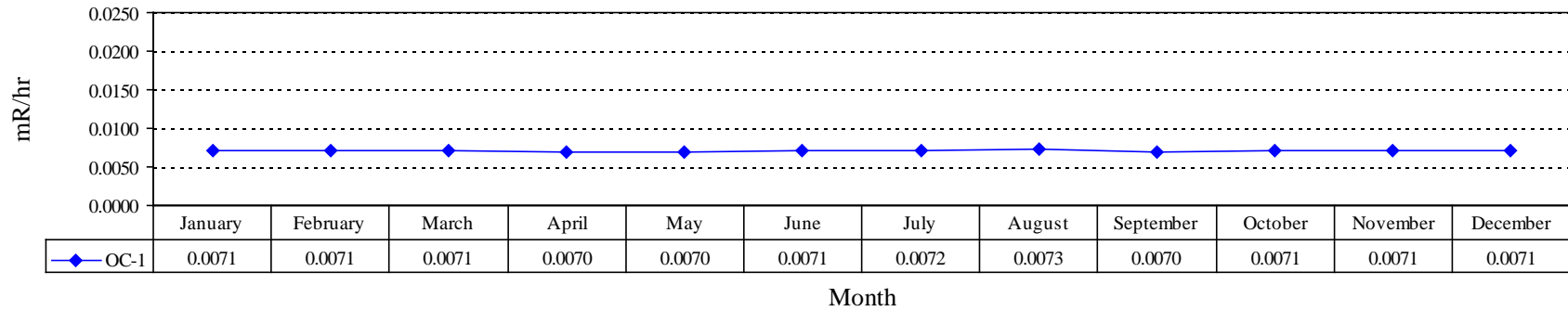
CV is the coefficient of variation; the ratio of the standard deviation to the mean, and is normally reported as a percentage

All exposures were normalized to 90 days (a standard quarter)

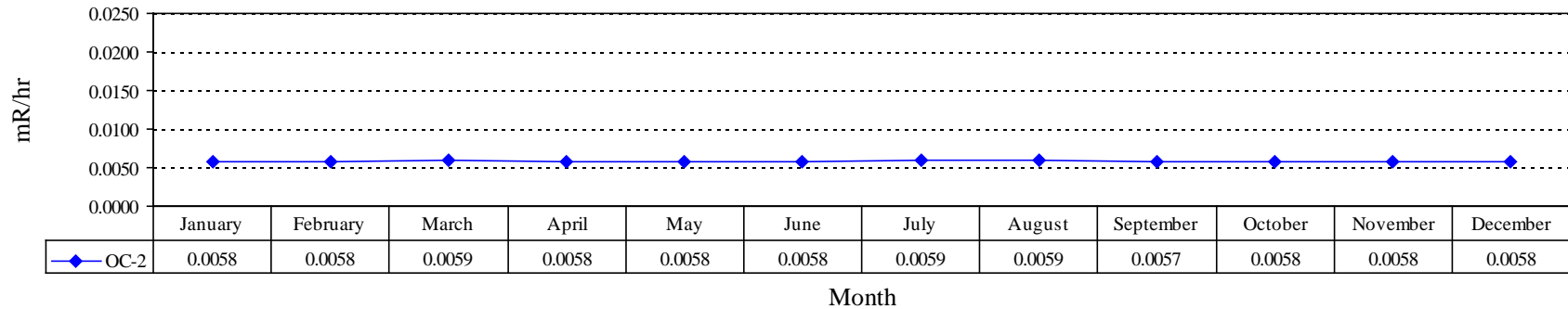
**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

Oyster Creek – Continuous Radiological Environmental Surveillance Telemetry (CREST) Data

**OC 1
2011 Ambient Radiation Levels**



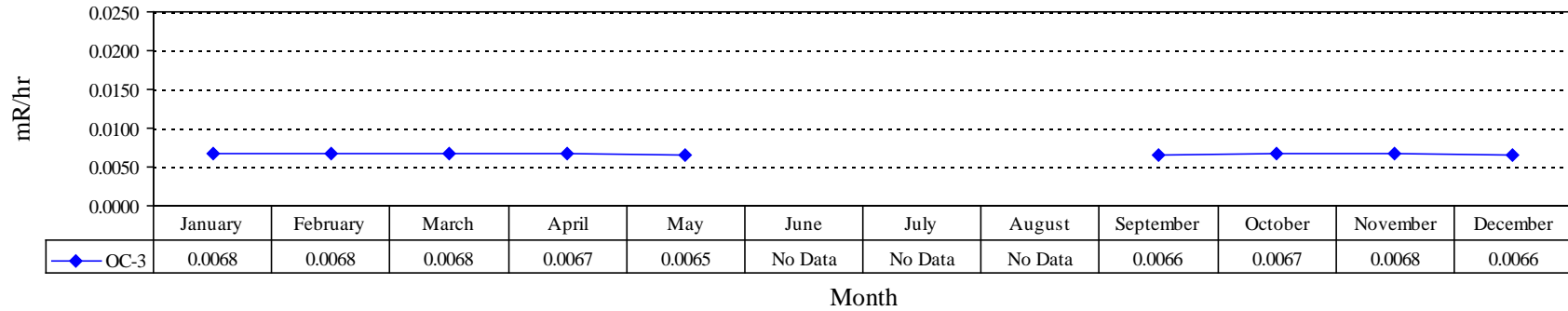
**OC 2
2011 Ambient Radiation Levels**



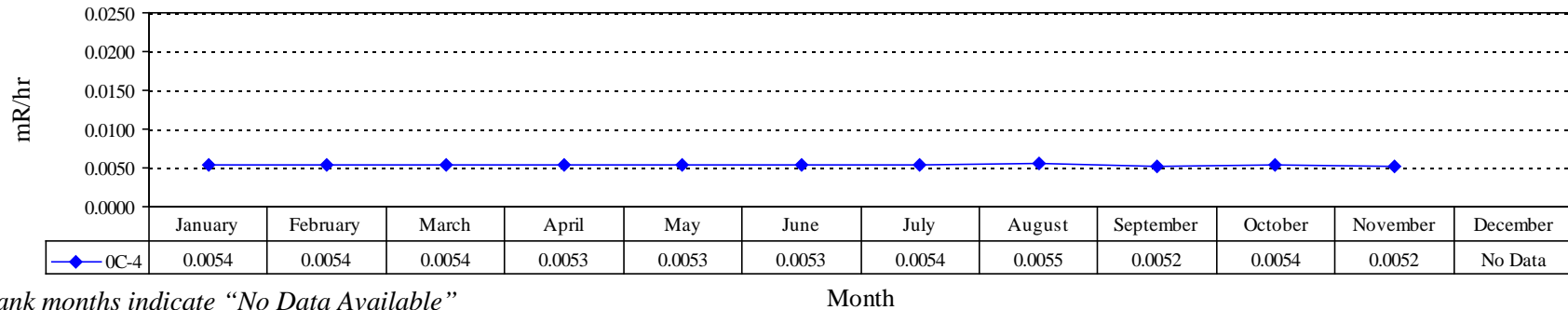
**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

Oyster Creek – Continuous Radiological Environmental Surveillance Telemetry (CREST) Data

**OC 3
2011 Ambient Radiation Levels**



**OC 4
2011 Ambient Radiation Levels**

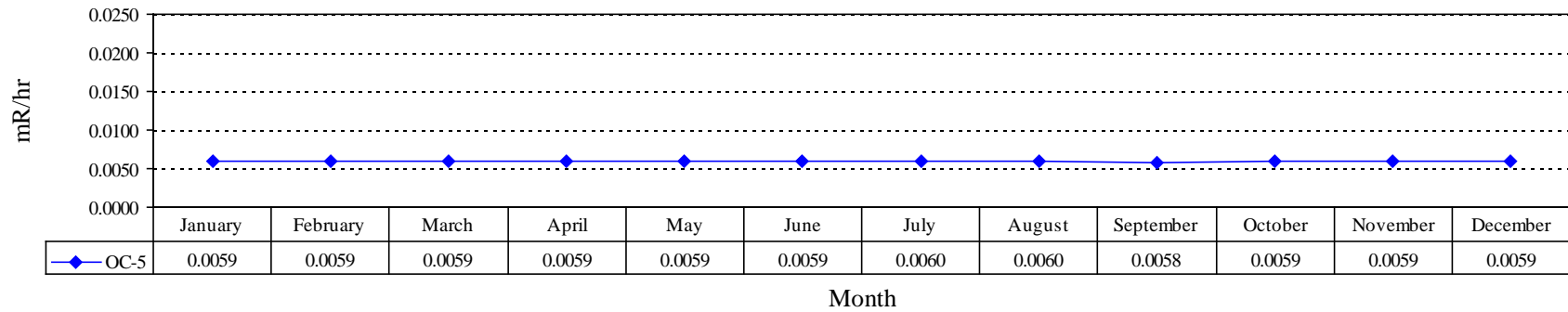


Blank months indicate "No Data Available"

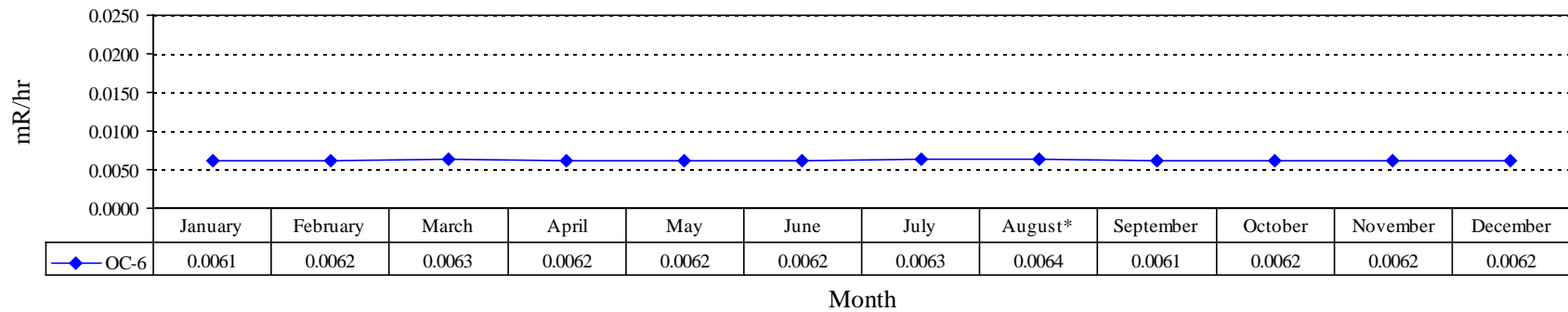
**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

Oyster Creek – Continuous Radiological Environmental Surveillance Telemetry (CREST) Data

**OC 5
2011 Ambient Radiation Levels**



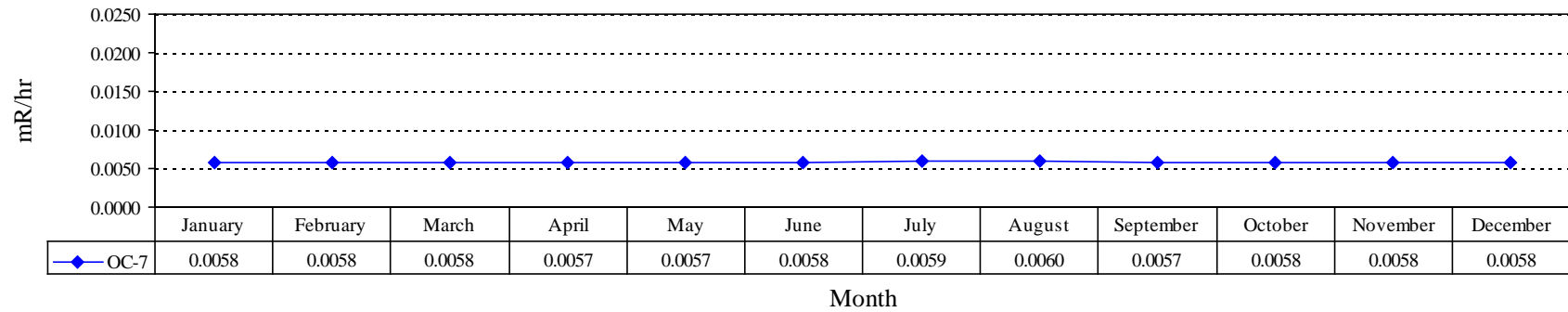
**OC 6
2011 Ambient Radiation Levels**



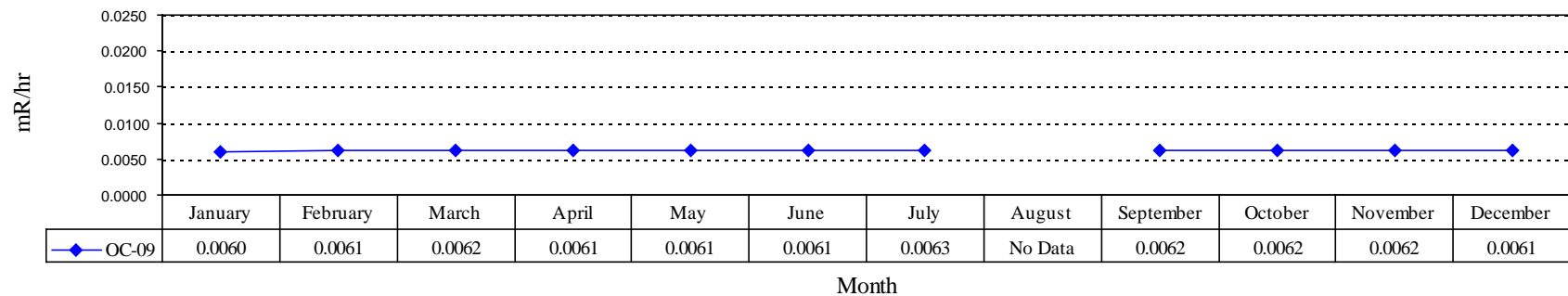
**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

Oyster Creek – Continuous Radiological Environmental Surveillance Telemetry (CREST) Data

**OC 7
2011 Ambient Radiation Levels**



**OC 9
2011 Ambient Radiation Levels**

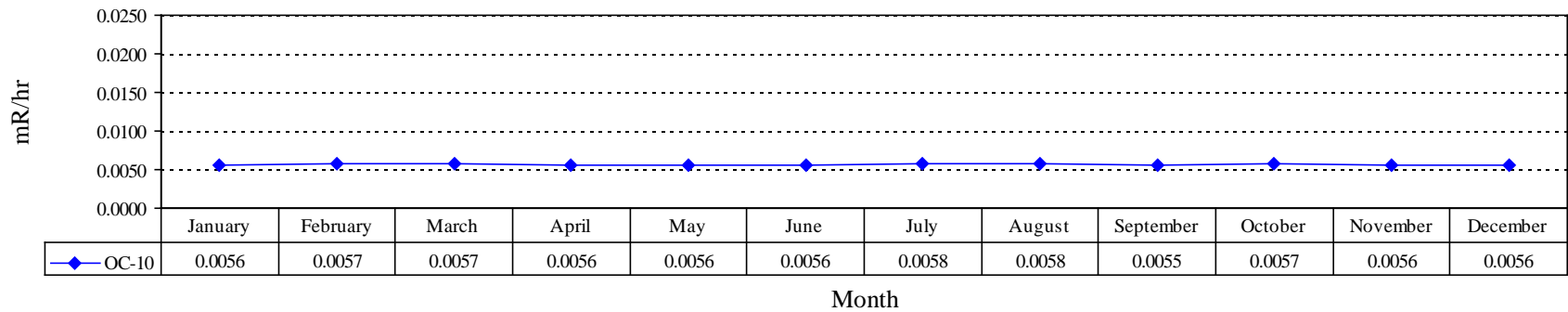


Blank months indicate “No Data Available”. OC-8 was not operational in 2011; therefore no data graph is available

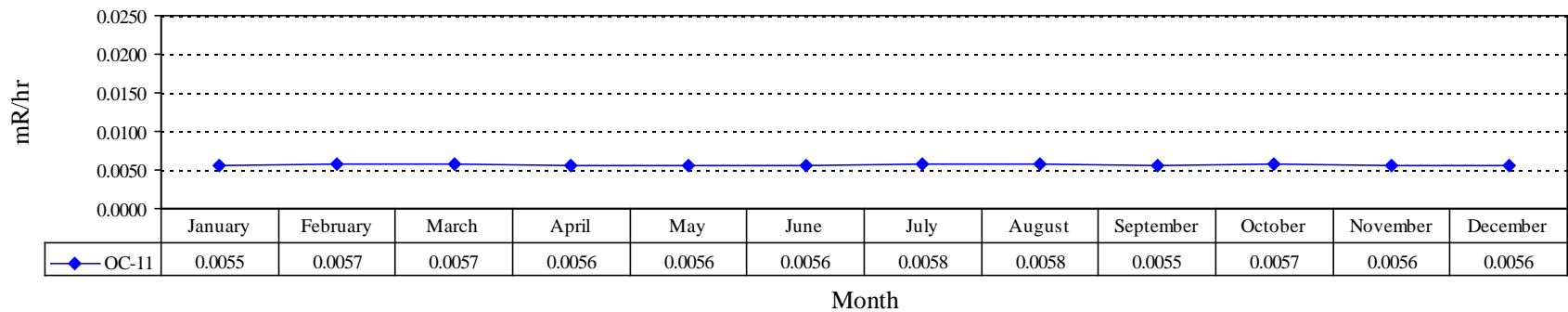
**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

Oyster Creek – Continuous Radiological Environmental Surveillance Telemetry (CREST) Data

**OC 10
2011 Ambient Radiation Levels**



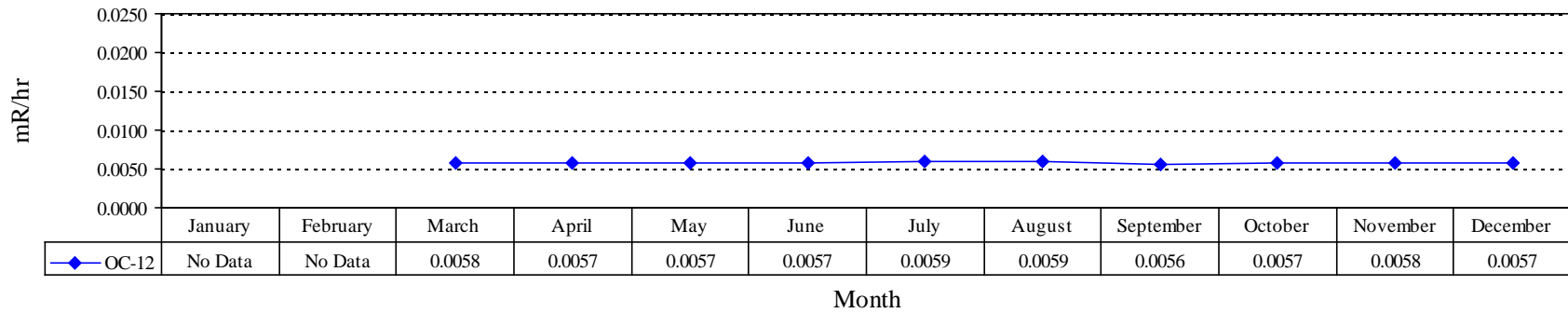
**OC 11
2011 Ambient Radiation Levels**



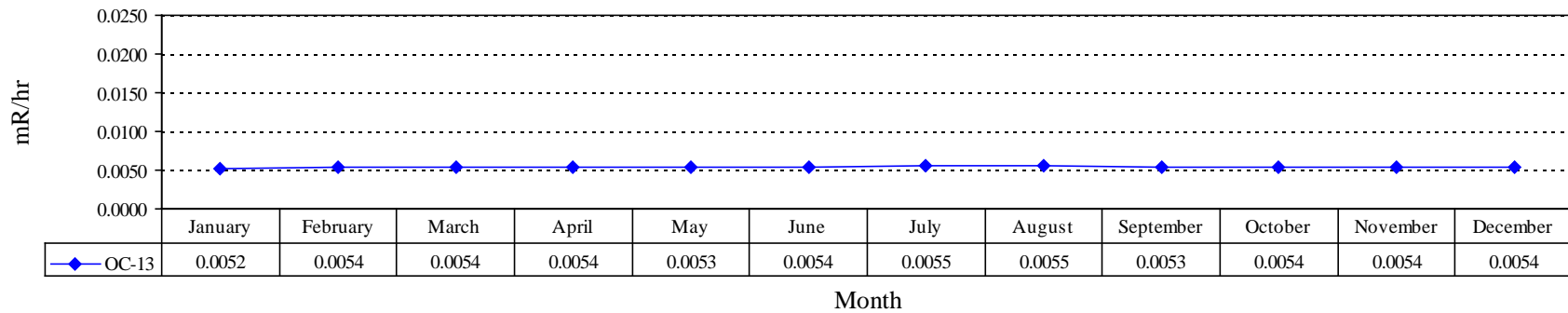
**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

Oyster Creek – Continuous Radiological Environmental Surveillance Telemetry (CREST) Data

**OC 12
2011 Ambient Radiation Levels**



**OC 13
2011 Ambient Radiation Levels**

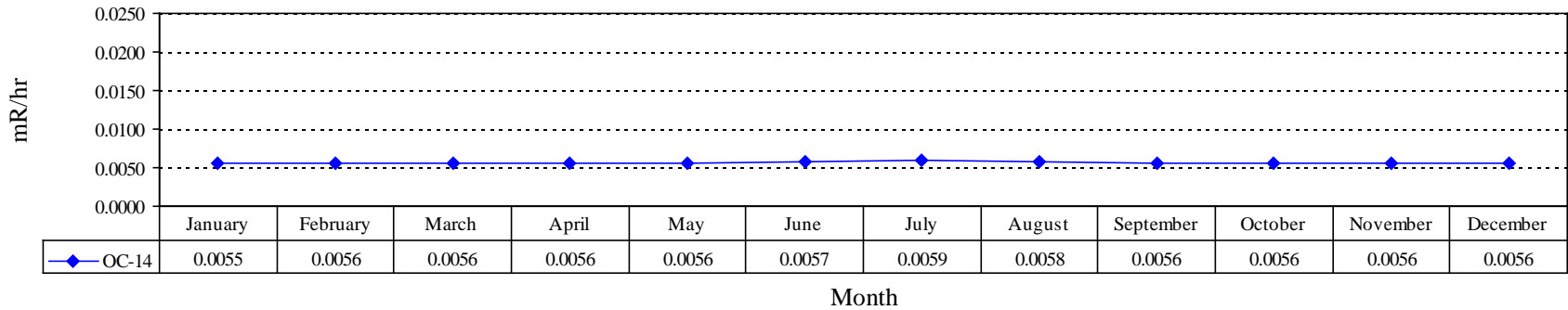


Blank months indicate "No Data Available"

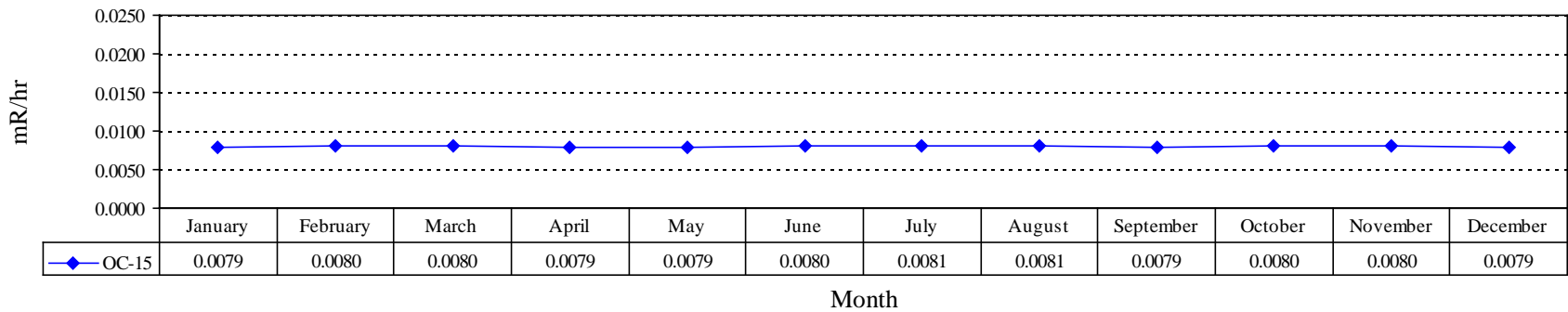
**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

Oyster Creek – Continuous Radiological Environmental Surveillance Telemetry (CREST) Data

**OC 14
2011 Ambient Radiation Levels**



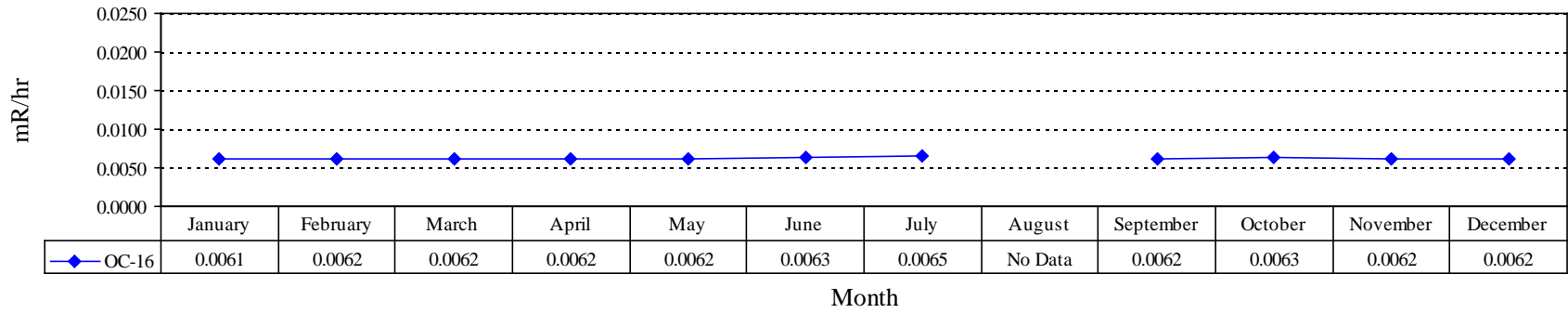
**OC 15
2011 Ambient Radiation Levels**



**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

Oyster Creek – Continuous Radiological Environmental Surveillance Telemetry (CREST) Data

**OC 16
2011 Ambient Radiation Levels**

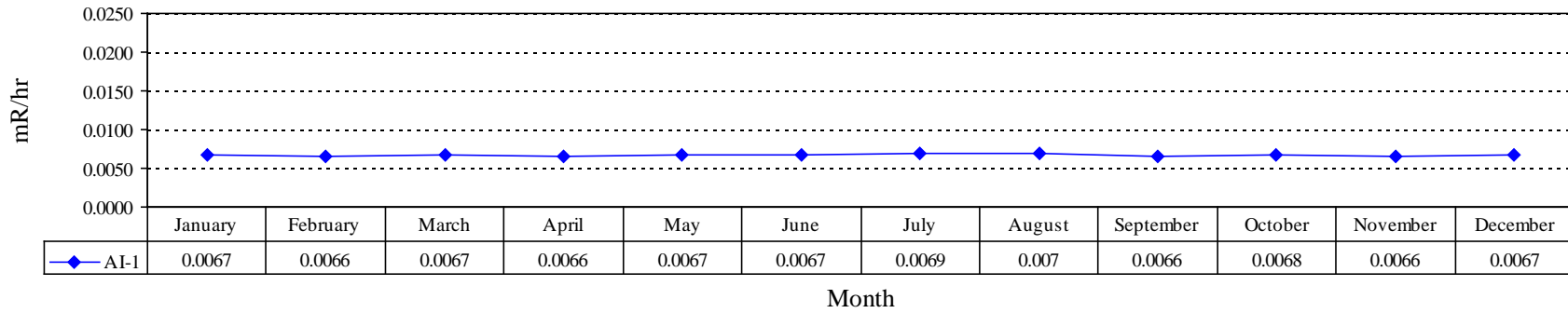


Blank months indicate 'No Data Available'

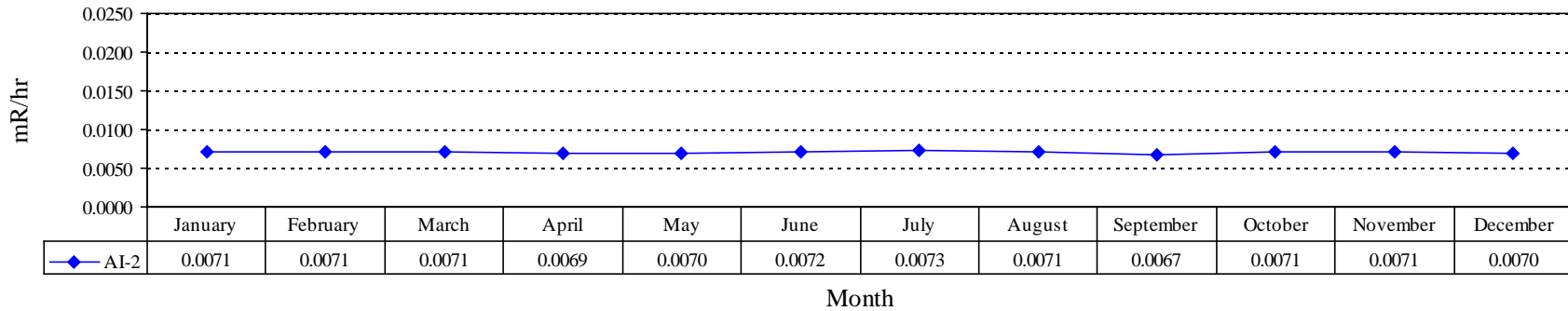
**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

Salem/Hope Creek – Continuous Radiological Environmental Surveillance Telemetry (CREST) Data

**AI 1
2011 Ambient Radiation Levels**



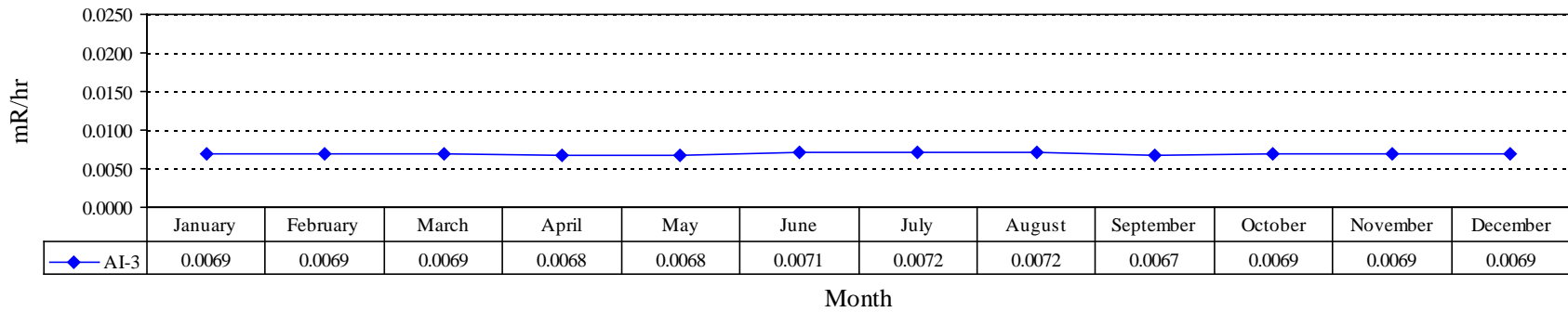
**AI 2
2011 Ambient Radiation Levels**



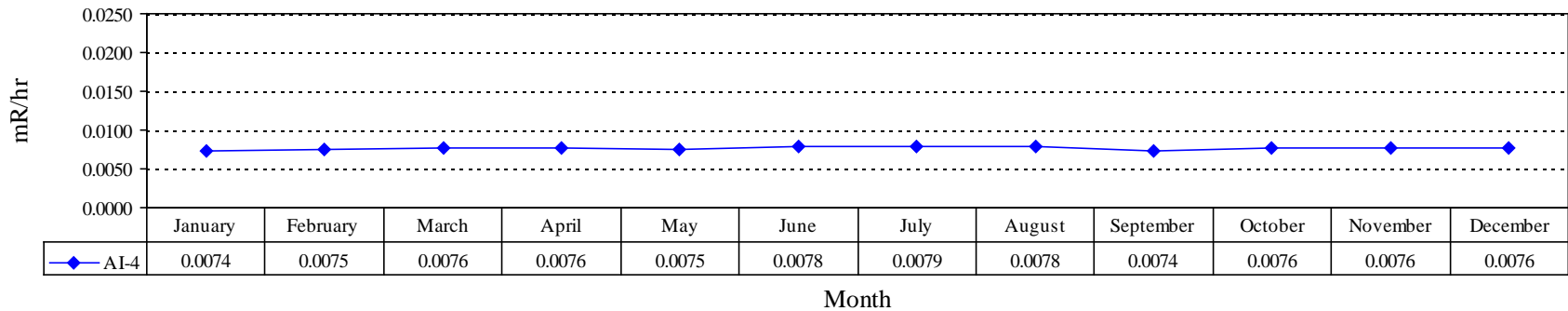
**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

Salem/Hope Creek – Continuous Radiological Environmental Surveillance Telemetry (CREST) Data

**AI 3
2011 Ambient Radiation Levels**



**AI 4
2011 Ambient Radiation Levels**

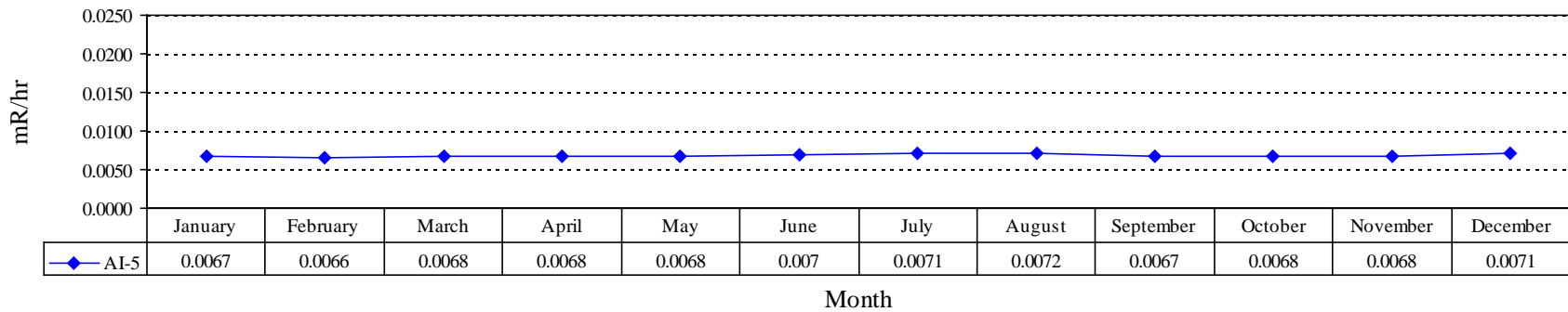


**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

Salem/Hope Creek – Continuous Radiological Environmental Surveillance Telemetry (CREST) Data

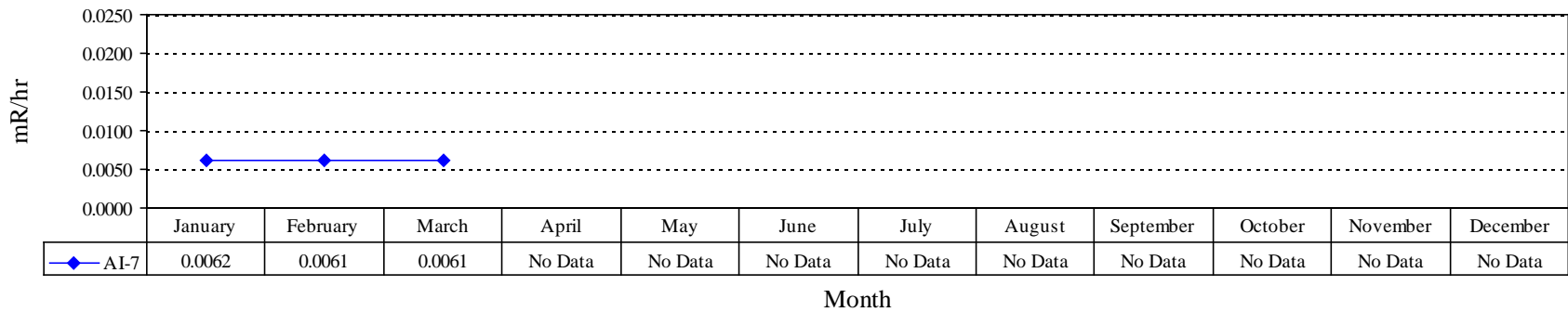
AI 5

2011 Ambient Radiation Levels



AI 7

2011 Ambient Radiation Levels

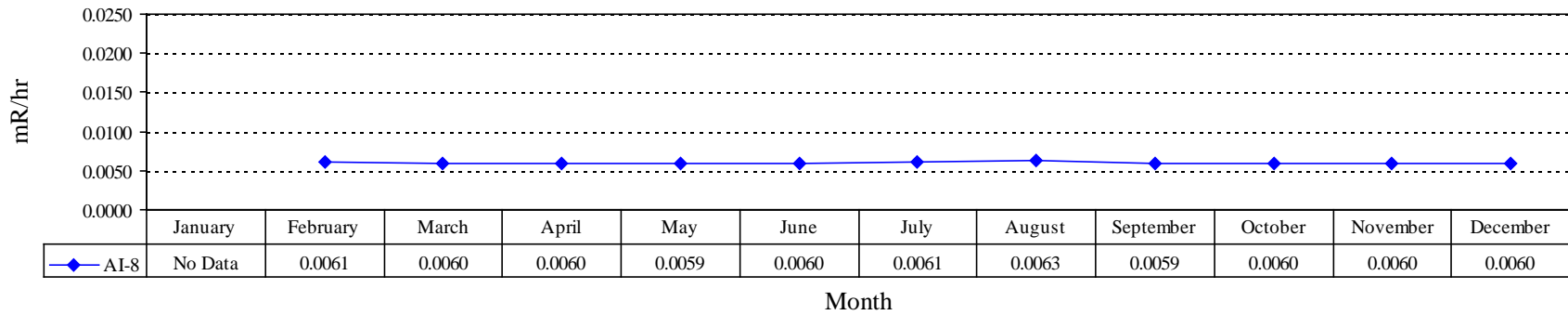


AI-6 was not operational in 2011; therefore no data graph is available; Blank months indicate 'No Data Available'

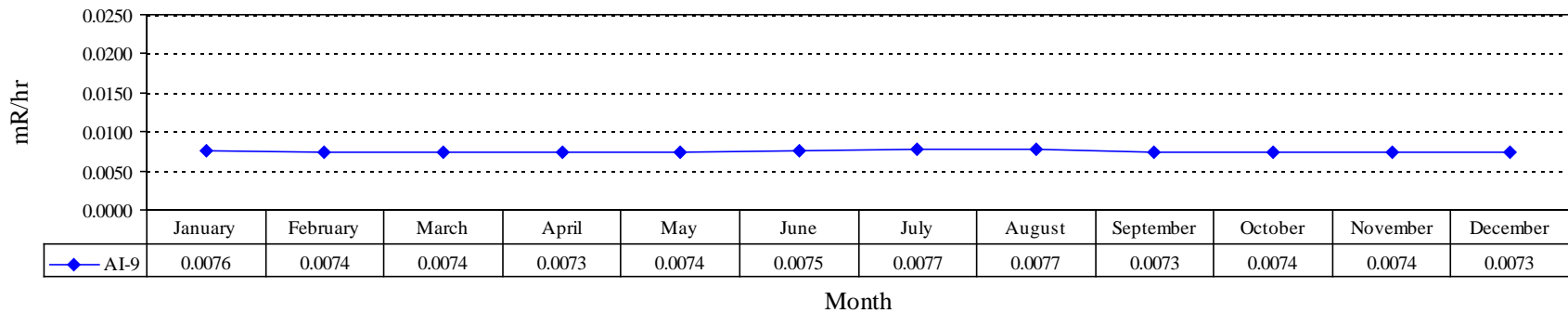
**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

Salem/Hope Creek – Continuous Radiological Environmental Surveillance Telemetry (CREST) Data

**AI 8
2011 Ambient Radiation Levels**



**AI 9
2011 Ambient Radiation Levels**

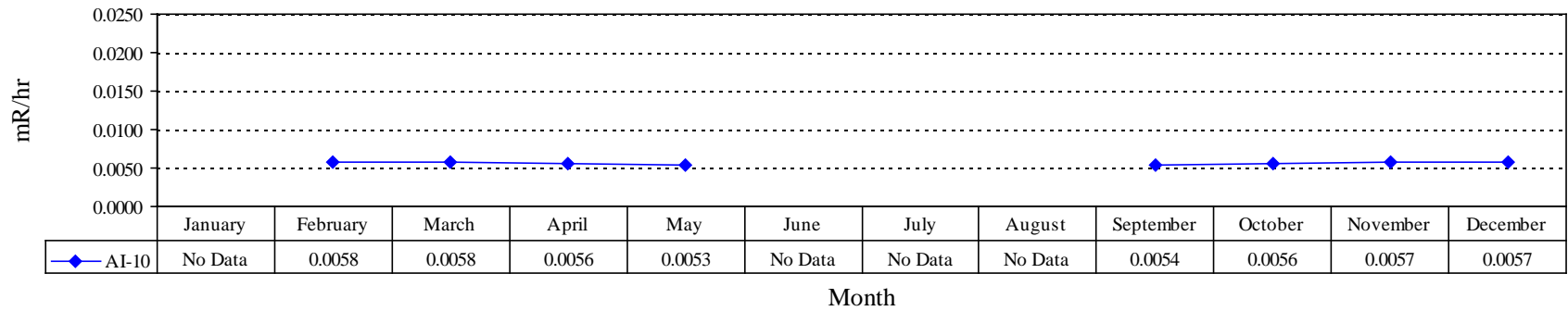


Blank months indicate 'No Data Available'

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2011 Radiological Environmental Monitoring Program**

Salem/Hope Creek – Continuous Radiological Environmental Surveillance Telemetry (CREST) Data

**AI 10
2011 Ambient Radiation Levels**



Blank months indicate 'No Data Available'