

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2010 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/m<sup>3</sup>)</u>
12/28/09 - 01/11/10	< 0.009
01/11/10 - 01/27/10	< 0.010
01/27/10 - 02/08/10	< 0.024
02/08/10 - 02/24/10	< 0.014
02/24/10 - 03/08/10	< 0.009
03/08/10 - 03/23/10	No Data*
03/23/10 - 04/08/10	< 0.048
04/08/10 - 04/22/10	< 0.003
04/22/10 - 07/14/10	No Data**
07/14/10 - 07/27/10	< 0.013
07/27/10 - 08/10/10	< 0.017
08/10/10 - 09/07/10	No Data***
09/07/10 - 09/21/10	< 0.007
09/21/10 - 10/05/10	< 0.007
10/05/10 - 10/21/10	< 0.006
10/21/10 - 11/03/10	< 0.007
11/03/10 - 11/16/10	< 0.009
11/16/10 - 11/30/10	< 0.015
11/30/10 - 12/14/10	No Data***
12/14/10 - 01/14/10	< 0.014

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* 'No Data' indicates that the air iodine result from 03/08/10 through 03/23/10 was not available. The air cartridge was inadvertently discarded by janitorial staff.

\*\* Sample results from 04/22/10 through 07/14/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

\*\*\*Air iodine sample results from 08/10/10 through 09/07/10 and 11/30/10 through 12/14/10 are not available. During these weeks the DEP contracted with two different labs under consecutive short term contracts. Sample shipments and analyses were halted pending approval of each contract. Iodine-131 analysis results were no longer obtainable due to radioactive decay. The half-life of Iodine-131 is 8.02 days.

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**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/m<sup>3</sup>)</u>
12/29/09 - 01/11/10	< 0.010
01/11/10 - 01/26/10	< 0.008
01/26/10 - 02/08/10	< 0.021
02/08/10 - 02/24/10	< 0.011
02/24/10 - 03/08/10	< 0.014
03/08/10 - 03/23/10	< 0.020
03/23/10 - 04/08/10	< 0.029
04/08/10 - 04/20/10	< 0.015
04/20/10 - 07/16/10	No Data*
07/16/10 - 07/27/10	< 0.024
07/27/10 - 08/11/10	< 0.029
08/11/10 - 09/07/10	No Data**
09/07/10 - 09/21/10	< 0.037
09/21/10 - 10/05/10	< 0.009
10/05/10 - 10/18/10	< 0.009
10/18/10 - 11/01/10	< 0.007
11/01/10 - 11/16/10	< 0.016
11/16/10 - 11/30/10*	< 0.016
11/30/10 - 12/16/10	No Data**
12/16/10 - 01/11/11	< 0.017

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* Sample results from 04/22/10 through 07/14/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

\*\*Air iodine sample results from 08/11/10 through 09/07/10 and 11/30/10 through 12/16/10 are not available. During these weeks the DEP contracted with two different labs under consecutive short term contracts. Sample shipments and analyses were halted pending approval of each contract. Iodine-131 analysis results were no longer obtainable due to radioactive decay. The half-life of Iodine-131 is 8.02 days.

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

**Waretown Municipal Building (OCAI01)**

<u>Collection Period</u>	<u>I-131 (pCi/m<sup>3</sup>)</u>
12/29/09 - 01/11/10	< 0.011
01/11/10 - 01/26/10	< 0.012
01/26/10 - 02/08/10	< 0.021
02/08/10 - 02/24/10	< 0.012
02/24/10 - 03/08/10	< 0.014
03/08/10 - 03/23/10	< 0.020
03/23/10 - 04/07/10	< 0.030
04/07/10 - 04/20/10	< 0.014
04/20/10 - 07/16/10	No Data*
07/16/10 - 07/27/10	< 0.027
07/27/10 - 08/11/10	< 0.018
08/11/10 - 09/07/10	No Data**
09/07/10 - 09/21/10	< 0.006
09/21/10 - 10/05/10	< 0.007
10/05/10 - 10/18/10	< 0.011
10/18/10 - 11/01/10	< 0.008
11/01/10 - 11/16/10	< 0.013
11/16/10 - 11/30/10	< 0.017
11/30/10 - 12/16/10	No Data**
12/16/10 - 01/11/11	< 0.017

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* Sample results from 04/20/10 through 07/16/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

\*\*Air iodine sample results from 08/11/10 through 09/07/10 and 11/30/10 through 12/16/10 are not available. During these weeks the DEP contracted with two different labs under consecutive short term contracts. Sample shipments and analyses were halted pending approval of each contract. Iodine-131 analysis results were no longer obtainable due to radioactive decay. The half-life of Iodine-131 is 8.02 days.

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

**Sands Point Harbor (OCAI02)**

<u>Collection Period</u>	<u>I-131 (pCi/m<sup>3</sup>)</u>
12/29/09 - 01/11/10	< 0.012
01/11/10 - 01/26/10	< 0.007
01/26/10 - 02/08/10	< 0.028
02/08/10 - 02/24/10	< 0.009
02/24/10 - 03/08/10	< 0.012
03/08/10 - 03/23/10	< 0.062
03/23/10 - 04/07/10	< 0.024
04/07/10 - 04/20/10	< 0.009
04/20/10 - 07/16/10	No Data*
07/16/10 - 07/27/10	< 0.020
07/27/10 - 08/11/10	< 0.030
08/11/10 - 09/07/10	No Data**
09/07/10 - 09/21/10	< 0.009
09/21/10 - 10/05/10	< 0.008
10/05/10 - 10/18/10	< 0.009
10/18/10 - 11/01/10	< 0.010
11/01/10 - 11/16/10	< 0.011
11/16/10 - 11/30/10	< 0.010
11/30/10 - 12/16/10	No Data**
12/16/10 - 01/11/11	< 0.011

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* Sample results from 04/20/10 through 07/16/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

\*\*Air iodine sample results from 08/11/10 through 09/07/10 and 11/30/10 through 12/16/10 are not available. During these weeks the DEP contracted with two different labs under consecutive short term contracts. Sample shipments and analyses were halted pending approval of each contract. Iodine-131 analysis results were no longer obtainable due to radioactive decay. The half-life of Iodine-131 is 8.02 days.

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

**Forked River Marina (OCAI03)**

<u>Collection Period</u>	<u>I-131 (pCi/m<sup>3</sup>)</u>
12/29/09 - 01/11/10	< 0.010
01/11/10 - 01/26/10	< 0.007
01/26/10 - 02/08/10	< 0.025
02/08/10 - 02/24/10	< 0.010
02/24/10 - 03/08/10	< 0.015
03/08/10 - 03/23/10	< 0.019
03/23/10 - 04/07/10	< 0.031
04/07/10 - 04/20/10	< 0.010
04/20/10 - 07/16/10	No Data*
07/16/10 - 07/27/10	< 0.021
07/27/10 - 08/11/10	< 0.015
08/11/10 - 09/07/10	No Data**
09/07/10 - 09/21/10	< 0.007
09/21/10 - 10/05/10	< 0.009
10/05/10 - 10/18/10	< 0.012
10/18/10 - 11/01/10	< 0.005
11/01/10 - 11/16/10	< 0.017
11/16/10 - 11/30/10	< 0.010
11/30/10 - 12/16/10	No Data**
12/16/10 - 01/11/11	< 0.018

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* Sample results from 04/20/10 through 07/16/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

\*\*Air iodine sample results from 08/11/10 through 09/07/10 and 11/30/10 through 12/16/10 are not available. During these weeks the DEP contracted with two different labs under consecutive short term contracts. Sample shipments and analyses were halted pending approval of each contract. Iodine-131 analysis results were no longer obtainable due to radioactive decay. The half-life of Iodine-131 is 8.02 days.

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

**Lacey Township Recreation Building (OCAI04)**

<u>Collection Period</u>	<u>I-131 (pCi/m<sup>3</sup>)</u>
12/29/09 - 01/11/10	< 0.013
01/11/10 - 01/26/10	< 0.011
01/26/10 - 02/08/10	< 0.025
02/08/10 - 02/24/10	< 0.010
02/24/10 - 03/08/10	< 0.010
03/08/10 - 03/23/10	< 0.022
03/23/10 - 04/07/10	< 0.025
04/07/10 - 04/20/10	< 0.010
04/20/10 - 07/16/10	No Data*
07/16/10 - 07/27/10	< 0.023
07/27/10 - 08/11/10	< 0.029
08/11/10 - 09/07/10	No Data**
09/07/10 - 09/21/10	< 0.007
09/21/10 - 10/05/10	< 0.010
10/05/10 - 10/18/10	< 0.006
10/18/10 - 11/01/10	< 0.006
11/01/10 - 11/16/10	< 0.015
11/16/10 - 11/30/10	< 0.014
11/30/10 - 12/16/10	No Data**
12/16/10 - 01/11/11	< 0.011

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* Sample results from 04/20/10 through 07/16/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

\*\*Air iodine sample results from 08/11/10 through 09/07/10 and 11/30/10 through 12/16/10 are not available. During these weeks the DEP contracted with two different labs under consecutive short term contracts. Sample shipments and analyses were halted pending approval of each contract. Iodine-131 analysis results were no longer obtainable due to radioactive decay. The half-life of Iodine-131 is 8.02 days.

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

**JCP&L Substation (OCAI05)**

<u>Collection Period</u>	<u>I-131 (pCi/m<sup>3</sup>)</u>
12/29/09 - 01/11/10	< 0.011
01/11/10 - 01/26/10	< 0.009
01/26/10 - 02/08/10	< 0.021
02/08/10 - 02/24/10	< 0.067
02/24/10 - 03/08/10	No Data*
03/08/10 - 03/23/10	No Data*
03/23/10 - 04/07/10	< 0.036
04/07/10 - 04/20/10	< 0.009
04/20/10 - 07/16/10	No Data**
07/16/10 - 07/27/10	< 0.028
07/27/10 - 08/11/10	< 0.027
08/11/10 - 09/07/10	No Data***
09/07/10 - 09/21/10	< 0.012
09/21/10 - 10/05/10	< 0.007
10/05/10 - 10/18/10	< 0.009
10/18/10 - 11/01/10	< 0.009
11/01/10 - 11/16/10	< 0.020
11/16/10 - 11/30/10	< 0.014
11/30/10 - 12/16/10	No Data***
12/16/10 - 01/11/11	< 0.025

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* 'No Data' indicates that there were no air iodine sample results due to electrical issues with the power source from Route 9 to the air sampler.

\*\* Sample results from 04/20/10 through 07/16/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

\*\*\* Air iodine sample results from 08/11/10 through 09/07/10 and 11/30/10 through 12/16/10 are not available. During these weeks the DEP contracted with two different labs under consecutive short term contracts. Sample shipments and analyses were halted pending approval of each contract. Iodine-131 analysis results were no longer obtainable due to radioactive decay. The half-life of Iodine-131 is 8.02 days.

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**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/m<sup>3</sup>)</u>
12/29/09	-	01/06/10	< 0.016
01/06/10	-	01/13/10	< 0.026
01/13/10	-	01/20/10	< 0.027
01/20/10	-	01/27/10	< 0.018
01/27/10	-	02/03/10	< 0.022
02/03/10	-	02/09/10	< 0.034
02/09/10	-	02/17/10	< 0.031
02/17/10	-	02/24/10	< 0.023
02/24/10	-	03/02/10	< 0.028
03/02/10	-	03/10/10	< 0.019
03/10/10	-	03/17/10	< 0.022
03/17/10	-	03/24/10	< 0.017
03/24/10	-	03/31/10	< 0.026
03/31/10	-	04/07/10	< 0.024
04/07/10	-	04/15/10	< 0.020
04/15/10	-	04/21/10	< 0.027
04/21/10	-	04/28/10	< 0.015
04/28/10	-	05/05/10	< 0.037
05/05/10	-	05/12/10	< 0.017
05/12/10	-	06/30/10	No Data**
06/30/10	-	07/07/10	< 0.058
07/07/10	-	07/14/10	< 0.048
07/14/10	-	07/21/10	< 0.057
07/21/10	-	07/28/10	< 0.029
07/28/10	-	08/04/10	< 0.037
08/04/10	-	08/11/10	< 0.033
08/11/10	-	08/18/10	< 0.023

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

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

\*\* Sample results from 05/12/10 through 06/30/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.



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

**Finninger Farm, OC Dredge Site (OCAP06)  
(continued)**

<u>Collection Period</u>		<u>I-131</u> <u>(pCi/m<sup>3</sup>)</u>
08/18/10	- 09/08/10	No Data**
09/08/10	- 09/15/10	< 0.018
09/15/10	- 09/22/10	< 0.020
09/22/10	- 09/29/10	< 0.023
09/29/10	- 10/06/10	< 0.014
10/06/10	- 10/13/10	< 0.017
10/13/10	- 10/20/10	< 0.015
10/20/10	- 10/27/10	< 0.017
10/27/10	- 11/03/10	< 0.022
11/03/10	- 11/10/10	< 0.016
11/10/10	- 11/17/10	< 0.013
11/17/10	- 11/23/10	< 0.042
11/23/10	- 11/30/10	< 0.045
11/30/10	- 12/08/10	< 0.019
12/08/10	- 12/15/10	< 0.026
12/15/10	- 12/21/10	< 0.021
12/21/10	- 01/05/11***	< 0.015

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

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

\*\* Air iodine sample results from 08/18/10 through 09/08/10 are not available. During these weeks the DEP contracted with two different labs under consecutive short term contracts. Sample shipments and analyses were halted pending approval of each contract. Iodine-131 analysis results were no longer obtainable due to radioactive decay. The half-life of Iodine-131 is 8.02 days.

\*\*\* Air sampler was inaccessible due to the snowfall event on 12/26/10. The cartridge was analyzed as a bi-weekly sample.

**New Jersey Department of Environmental Protection  
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**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/m<sup>3</sup>)</u>
12/29/09 - 01/11/10	< 0.013
01/11/10 - 01/26/10	< 0.009
01/26/10 - 02/08/10	< 0.030
02/08/10 - 02/24/10	< 0.016
02/24/10 - 03/08/10	< 0.016
03/08/10 - 03/23/10	< 0.022
03/23/10 - 04/07/10	< 0.028
04/07/10 - 04/20/10	< 0.011
04/20/10 - 07/16/10	No Data*
07/16/10 - 07/27/10	< 0.020
07/27/10 - 08/11/10	< 0.029
08/11/10 - 09/07/10	No Data**
09/07/10 - 09/21/10	< 0.008
09/21/10 - 10/05/10	< 0.008
10/05/10 - 10/18/10	< 0.015
10/18/10 - 11/01/10	< 0.008
11/01/10 - 11/16/10	< 0.014
11/16/10 - 11/30/10	< 0.014
11/30/10 - 12/16/10	No Data**
12/16/10 - 01/11/11	< 0.015

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* Sample results from 04/20/10 through 07/16/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

\*\* Air iodine sample results from 08/11/10 through 09/07/10 and 11/30/10 through 12/16/10 are not available. During these weeks the DEP contracted with two different labs under consecutive short term contracts. Sample shipments and analyses were halted pending approval of each contract. Iodine-131 analysis results were no longer obtainable due to radioactive decay. The half-life of Iodine-131 is 8.02 days.

**New Jersey Department of Environmental Protection  
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**Salem/Hope Creek  
Concentrations of Iodine-131 in Bi-Weekly Air Iodine Samples**

**Fort Elfsborg Road (AIAI01)**

<u>Collection Period</u>		<u>I-131</u> <u>(pCi/m<sup>3</sup>)</u>
12/28/09	- 01/11/10	< 0.008
01/11/10	- 01/27/10	< 0.008
01/27/10	- 02/08/10	< 0.019
02/08/10	- 02/22/10	< 0.013
02/22/10	- 03/08/10	< 0.016
03/08/10	- 03/23/10	No Data*
03/23/10	- 04/08/10	< 0.029
04/08/10	- 04/21/10	< 0.009
04/21/10	- 07/14/10	No Data**
07/14/10	- 07/27/10	< 0.018
07/27/10	- 08/10/10	< 0.037
08/10/10	- 09/07/10	No Data***
09/07/10	- 09/21/10	< 0.010
09/21/10	- 10/05/10	< 0.007
10/05/10	- 10/21/10	< 0.008
10/21/10	- 11/01/10	< 0.011
11/01/10	- 11/16/10	< 0.014
11/16/10	- 11/30/10	< 0.012
11/30/10	- 12/14/10	No Data***
12/14/10	- 01/14/11	< 0.011

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* 'No Data' indicates that the Air Iodine result from 03/08/10 through 03/23/10 was not available. The air cartridge was inadvertently discarded by janitorial staff.

\*\* Sample results from 04/21/10 through 07/14/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

\*\*\* Air iodine sample results from 08/10/10 through 09/07/10 and 11/30/10 through 12/14/10 are not available. During these weeks the DEP contracted with two different labs under consecutive short term contracts. Sample shipments and analyses were halted pending approval of each contract. Iodine-131 analysis results were no longer obtainable due to radioactive decay. The half-life of Iodine-131 is 8.02 days.

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**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/m<sup>3</sup>)</u>
12/28/09 - 01/11/10	< 0.009
01/11/10 - 01/27/10	< 0.009
01/27/10 - 02/08/10	< 0.021
02/08/10 - 02/22/10	< 0.011
02/22/10 - 03/08/10	< 0.009
03/08/10 - 03/23/10	No Data*
03/23/10 - 04/08/10	< 0.024
04/08/10 - 04/21/10	< 0.009
04/21/10 - 07/14/10	No Data**
07/14/10 - 07/27/10	< 0.019
07/27/10 - 08/10/10	< 0.032
08/10/10 - 09/07/10	No Data***
09/07/10 - 09/21/10	< 0.008
09/21/10 - 10/05/10	< 0.006
10/05/10 - 10/21/10	< 0.006
10/21/10 - 11/01/10	< 0.009
11/01/10 - 11/16/10	< 0.012
11/16/10 - 11/30/10	< 0.014
11/30/10 - 12/14/10	No Data***
12/14/10 - 01/14/11	< 0.010

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* 'No Data' indicates that the Air Iodine result from 03/08/10 through 03/23/10 was not available. The air cartridge was inadvertently discarded by janitorial staff.

\*\* Sample results from 04/21/10 through 07/14/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

\*\*\* Air iodine sample results from 08/10/10 through 09/07/10 and 11/30/10 through 12/14/10 are not available. During these weeks the DEP contracted with two different labs under consecutive short term contracts. Sample shipments and analyses were halted pending approval of each contract. Iodine-131 analysis results were no longer obtainable due to radioactive decay. The half-life of Iodine-131 is 8.02 days.

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**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/m<sup>3</sup>)</u>
12/28/09 - 01/11/10	< 0.010
01/11/10 - 01/27/10	< 0.009
01/27/10 - 02/08/10	< 0.021
02/08/10 - 02/22/10	< 0.011
02/22/10 - 03/08/10	< 0.013
03/08/10 - 03/23/10	No Data*
03/23/10 - 04/08/10	< 0.022
04/08/10 - 04/21/10	< 0.009
04/21/10 - 07/14/10	No Data**
07/14/10 - 07/27/10	< 0.017
07/27/10 - 08/10/10	< 0.016
08/10/10 - 09/07/10	No Data***
09/07/10 - 09/21/10	< 0.010
09/21/10 - 10/05/10	< 0.008
10/05/10 - 10/21/10	< 0.005
10/21/10 - 11/01/10	< 0.009
11/01/10 - 11/16/10	< 0.015
11/16/10 - 11/30/10	< 0.021
11/30/10 - 12/14/10	No Data***
12/14/10 - 01/14/11	< 0.009

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* 'No Data' indicates that the Air Iodine result from 03/03/10 through 03/23/10 was not available. The air cartridge was inadvertently discarded by janitorial staff.

\*\* Sample results from 04/21/10 through 07/14/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

\*\*\* Air iodine sample results from 08/10/10 through 09/07/10 and 11/30/10 through 12/14/10 are not available. During these weeks the DEP contracted with two different labs under consecutive short term contracts. Sample shipments and analyses were halted pending approval of each contract. Iodine-131 analysis results were no longer obtainable due to radioactive decay. The half-life of Iodine-131 is 8.02 days.

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**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/m<sup>3</sup>)</u>
12/28/09 - 01/11/10	0.015 ± 0.0010
01/11/10 - 01/27/10	0.024 ± 0.0020
01/27/10 - 02/08/10	0.021 ± 0.0010
02/08/10 - 02/24/10	0.020 ± 0.0010
02/24/10 - 03/08/10	0.011 ± 0.0010
03/08/10 - 03/23/10	No Data*
03/23/10 - 04/08/10	0.060 ± 0.0040
04/08/10 - 04/22/10	0.009 ± 0.0010
04/22/10 - 06/15/10	No Data**
06/15/10 - 06/29/10	0.017 ± 0.0010
06/29/10 - 07/14/10	0.031 ± 0.0010
07/14/10 - 07/27/10	0.017 ± 0.0010
07/27/10 - 08/10/10	0.018 ± 0.0010
08/10/10 - 08/24/10	0.006 ± 0.0010
08/24/10 - 09/07/10	0.024 ± 0.0020
09/07/10 - 09/21/10	0.028 ± 0.0020
09/21/10 - 10/05/10	0.017 ± 0.0020
10/05/10 - 10/21/10	0.025 ± 0.0020
10/21/10 - 11/03/10	0.021 ± 0.0020
11/03/10 - 11/16/10	0.030 ± 0.0020
11/16/10 - 11/30/10	0.018 ± 0.0020
11/30/10 - 12/14/10	0.074 ± 0.0040
12/14/10 - 01/14/11	0.011 ± 0.0010

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* 'No Data' indicates the Air Particulate gross beta result for the period of 03/08/10 through 03/23/10 was not available. The air cartridge was inadvertently discarded by janitorial staff.

\*\* Sample results from 04/22/10 through 06/15/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

**New Jersey Department of Environmental Protection  
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**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/m<sup>3</sup>)</u>
12/29/09 - 01/11/10	0.016 ± 0.0010
01/11/10 - 01/26/10	0.023 ± 0.0010
01/26/10 - 02/08/10	0.023 ± 0.0010
02/08/10 - 02/24/10	0.015 ± 0.0010
02/24/10 - 03/08/10	0.012 ± 0.0010
03/08/10 - 03/23/10	0.021 ± 0.0010
03/23/10 - 04/08/10	0.018 ± 0.0010
04/08/10 - 04/20/10	0.017 ± 0.0010
04/20/10 - 06/16/10	No Data*
06/16/10 - 06/30/10	0.017 ± 0.0010
06/30/10 - 07/16/10	0.018 ± 0.0010
07/16/10 - 07/27/10	0.024 ± 0.0010
07/27/10 - 08/11/10	0.018 ± 0.0010
08/11/10 - 08/24/10	0.009 ± 0.0010
08/24/10 - 09/07/10	0.007 ± 0.0010
09/07/10 - 09/21/10	No Data**
09/21/10 - 10/05/10	0.022 ± 0.0020
10/05/10 - 10/18/10	0.030 ± 0.0020
10/18/10 - 11/01/10	0.023 ± 0.0020
11/01/10 - 11/16/10	0.019 ± 0.0020
11/16/10 - 11/30/10	0.036 ± 0.0030
11/30/10 - 12/16/10	0.047 ± 0.0030
12/16/10 - 01/11/11	0.012 ± 0.0010

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* Sample results from 04/20/10 through 06/16/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

\*\* 'No Data' indicates no sample result was available due to maintenance issues with equipment (the air sampler required replacement).

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**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/m<sup>3</sup>)</u>
12/29/09 - 01/11/10	0.017 ± 0.0010
01/11/10 - 01/26/10	0.022 ± 0.0010
01/26/10 - 02/08/10	0.021 ± 0.0010
02/08/10 - 02/24/10	0.011 ± 0.0010
02/24/10 - 03/08/10	0.012 ± 0.0010
03/08/10 - 03/23/10	0.021 ± 0.0010
03/23/10 - 04/07/10	0.013 ± 0.0010
04/07/10 - 04/20/10	0.015 ± 0.0010
04/20/10 - 06/14/10	No Data*
06/14/10 - 06/30/10	0.016 ± 0.0010
06/30/10 - 07/16/10	0.016 ± 0.0010
07/16/10 - 07/27/10	0.022 ± 0.0010
07/27/10 - 08/11/10	0.018 ± 0.0010
08/11/10 - 08/24/10	0.016 ± 0.0010
08/24/10 - 09/07/10	0.018 ± 0.0020
09/07/10 - 09/21/10	0.029 ± 0.0020
09/21/10 - 10/05/10	0.020 ± 0.0020
10/05/10 - 10/18/10	0.025 ± 0.0020
10/18/10 - 11/01/10	0.025 ± 0.0020
11/01/10 - 11/16/10	0.020 ± 0.0020
11/16/10 - 11/30/10	0.035 ± 0.0030
11/30/10 - 12/16/10	0.041 ± 0.0030
12/16/10 - 01/11/11	0.013 ± 0.0010

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* Sample results from 04/20/10 through 06/14/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.



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**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/m<sup>3</sup>)</u>
12/29/09 - 01/11/10	0.015 ± 0.0010
01/11/10 - 01/26/10	0.020 ± 0.0010
01/26/10 - 02/08/10	0.021 ± 0.0010
02/08/10 - 02/24/10	0.011 ± 0.0010
02/24/10 - 03/08/10	0.015 ± 0.0010
03/08/10 - 03/23/10	0.033 ± 0.0020
03/23/10 - 04/07/10	0.013 ± 0.0010
04/07/10 - 04/20/10	0.016 ± 0.0010
04/20/10 - 06/14/10	No Data*
06/14/10 - 06/30/10	0.016 ± 0.0006
06/30/10 - 07/16/10	0.017 ± 0.0006
07/16/10 - 07/27/10	0.023 ± 0.0009
07/27/10 - 08/11/10	0.017 ± 0.0007
08/11/10 - 08/24/10	0.016 ± 0.0010
08/24/10 - 09/07/10	0.021 ± 0.0020
09/07/10 - 09/21/10	0.029 ± 0.0020
09/21/10 - 10/05/10	0.017 ± 0.0020
10/05/10 - 10/18/10	0.026 ± 0.0020
10/18/10 - 11/01/10	0.022 ± 0.0020
11/01/10 - 11/16/10	0.016 ± 0.0020
11/16/10 - 11/30/10	0.038 ± 0.0030
11/30/10 - 12/16/10	0.047 ± 0.0030
12/16/10 - 01/11/11	0.011 ± 0.0010

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* Sample results from 04/20/10 through 06/14/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

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**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/m<sup>3</sup>)</u>
12/29/09 - 01/11/10	0.016 ± 0.0010
01/11/10 - 01/26/10	0.021 ± 0.0010
01/26/10 - 02/08/10	0.021 ± 0.0010
02/08/10 - 02/24/10	0.010 ± 0.0010
02/24/10 - 03/08/10	0.013 ± 0.0010
03/08/10 - 03/23/10	0.020 ± 0.0010
03/23/10 - 04/07/10	0.013 ± 0.0010
04/07/10 - 04/20/10	0.016 ± 0.0010
04/20/10 - 06/14/10	No Data*
06/14/10 - 06/30/10	0.017 ± 0.0007
06/30/10 - 07/16/10	0.017 ± 0.0007
07/16/10 - 07/27/10	0.023 ± 0.0010
07/27/10 - 08/11/10	0.018 ± 0.0007
08/11/10 - 08/24/10	0.017 ± 0.0010
08/24/10 - 09/07/10	0.021 ± 0.0020
09/07/10 - 09/21/10	0.030 ± 0.0020
09/21/10 - 10/05/10	0.021 ± 0.0020
10/05/10 - 10/18/10	0.025 ± 0.0020
10/18/10 - 11/01/10	0.022 ± 0.0020
11/01/10 - 11/16/10	0.019 ± 0.0020
11/16/10 - 11/30/10	0.036 ± 0.0030
11/30/10 - 12/16/10	0.048 ± 0.0030
12/16/10 - 01/11/11	0.013 ± 0.0010

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* Sample results from 04/20/10 through 06/14/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

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**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/m<sup>3</sup>)</u>
12/29/09 - 01/11/10	0.014 ± 0.0010
01/11/10 - 01/26/10	0.028 ± 0.0010
01/26/10 - 02/08/10	0.020 ± 0.0010
02/08/10 - 02/24/10	0.012 ± 0.0010
02/24/10 - 03/08/10	0.006 ± 0.0010
03/08/10 - 03/23/10	0.021 ± 0.0010
03/23/10 - 04/07/10	0.013 ± 0.0010
04/07/10 - 04/20/10	0.014 ± 0.0010
04/20/10 - 06/14/10	No Data*
06/14/10 - 06/30/10	0.017 ± 0.0006
06/30/10 - 07/16/10	0.017 ± 0.0006
07/16/10 - 07/27/10	0.022 ± 0.0009
07/27/10 - 08/11/10	0.017 ± 0.0007
08/11/10 - 08/24/10	0.019 ± 0.0011
08/24/10 - 09/07/10	0.016 ± 0.0010
09/07/10 - 09/21/10	0.032 ± 0.0020
09/21/10 - 10/05/10	0.021 ± 0.0020
10/05/10 - 10/18/10	0.025 ± 0.0020
10/18/10 - 11/01/10	0.022 ± 0.0020
11/01/10 - 11/16/10	0.019 ± 0.0020
11/16/10 - 11/30/10	0.043 ± 0.0030
11/30/10 - 12/16/10	0.043 ± 0.0020
12/16/10 - 01/11/11	0.011 ± 0.0010

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* Sample results from 04/20/10 through 06/14/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

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**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/m<sup>3</sup>)</u>
12/29/09 - 01/11/10	0.016 ± 0.0010
01/11/10 - 01/26/10	0.022 ± 0.0010
01/26/10 - 02/08/10	0.018 ± 0.0010
02/08/10 - 02/24/10	0.024 ± 0.0040
02/24/10 - 03/08/10	No Data*
03/08/10 - 03/23/10	No Data*
03/23/10 - 04/07/10	0.014 ± 0.0010
04/07/10 - 04/20/10	0.014 ± 0.0010
04/20/10 - 06/14/10	No Data**
06/14/10 - 06/30/10	0.016 ± 0.0007
06/30/10 - 07/16/10	0.016 ± 0.0007
07/16/10 - 07/27/10	0.021 ± 0.0009
07/27/10 - 08/11/10	0.020 ± 0.0009
08/11/10 - 08/24/10	0.017 ± 0.0012
08/24/10 - 09/07/10	0.021 ± 0.0020
09/07/10 - 09/21/10	0.029 ± 0.0020
09/21/10 - 10/05/10	0.021 ± 0.0020
10/05/10 - 10/18/10	0.022 ± 0.0020
10/18/10 - 11/01/10	0.021 ± 0.0020
11/01/10 - 11/16/10	0.018 ± 0.0020
11/16/10 - 11/30/10	0.031 ± 0.0020
11/30/10 - 12/16/10	0.044 ± 0.0030
12/16/10 - 01/11/11	0.015 ± 0.0020

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* 'No Data' indicates no sample results due to electrical issues with the power source from Route 9 to the air sampler.

\*\* Sample results from 04/20/10 through 06/14/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

**New Jersey Department of Environmental Protection  
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**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/m<sup>3</sup>)</u>
12/29/09 - 01/06/10	0.023 ± 0.0030
01/06/10 - 01/13/10	0.025 ± 0.0030
01/13/10 - 01/20/10	0.037 ± 0.0040
01/20/10 - 01/27/10	0.026 ± 0.0040
01/27/10 - 02/03/10	0.023 ± 0.0020
02/03/10 - 02/09/10	0.024 ± 0.0030
02/09/10 - 02/17/10	0.018 ± 0.0020
02/17/10 - 02/24/10	0.013 ± 0.0020
02/24/10 - 03/02/10	0.013 ± 0.0020
03/02/10 - 03/10/10	0.033 ± 0.0030
03/10/10 - 03/17/10	0.022 ± 0.0020
03/17/10 - 03/24/10	0.030 ± 0.0030
03/24/10 - 03/31/10	0.024 ± 0.0030
03/31/10 - 04/07/10	0.019 ± 0.0020
04/07/10 - 04/15/10	0.024 ± 0.0020
04/15/10 - 04/21/10	0.018 ± 0.0020
04/21/10 - 04/28/10	0.028 ± 0.0030
04/28/10 - 05/05/10	0.025 ± 0.0030
05/05/10 - 05/12/10	0.028 ± 0.0030
05/12/10 - 06/30/10	No Data**
06/30/10 - 07/07/10	0.033 ± 0.0019
07/07/10 - 07/14/10	0.028 ± 0.0019
07/14/10 - 07/21/10	0.030 ± 0.0028
07/21/10 - 07/28/10	0.029 ± 0.0027
07/28/10 - 08/04/10	0.024 ± 0.0017
08/04/10 - 08/11/10	0.037 ± 0.0021
08/11/10 - 08/18/10	0.025 ± 0.0018

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

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

\*\* Sample results from 05/12/10 through 06/30/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
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**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/m<sup>3</sup>)</u>
08/18/10 - 08/25/10	0.032 ± 0.0029
08/25/10 - 09/01/10	0.059 ± 0.0060
09/01/10 - 09/08/10	0.062 ± 0.0060
09/08/10 - 09/15/10	0.033 ± 0.0050
09/15/10 - 09/22/10	0.040 ± 0.0050
09/22/10 - 09/29/10	0.051 ± 0.0060
09/29/10 - 10/06/10	0.022 ± 0.0040
10/06/10 - 10/13/10	0.063 ± 0.0070
10/13/10 - 10/20/10	0.039 ± 0.0050
10/20/10 - 10/27/10	0.036 ± 0.0050
10/27/10 - 11/03/10	0.028 ± 0.0040
11/03/10 - 11/10/10	0.028 ± 0.0050
11/10/10 - 11/17/10	0.047 ± 0.0060
11/17/10 - 11/23/10	0.063 ± 0.0070
11/23/10 - 11/30/10	0.046 ± 0.0060
11/30/10 - 12/08/10	0.033 ± 0.0050
12/08/10 - 12/15/10	0.036 ± 0.0050
12/15/10 - 12/21/10	0.050 ± 0.0060
12/21/10 - 01/05/11**	0.035 ± 0.0030

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

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

\*\* Air sampler was inaccessible due to the snowfall event on 12/26/10. The filter was analyzed as a bi-weekly sample.

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
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**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/m<sup>3</sup>)</u>
12/29/09 - 01/11/10	0.017 ± 0.0010
01/11/10 - 01/26/10	0.023 ± 0.0010
01/26/10 - 02/08/10	0.023 ± 0.0010
02/08/10 - 02/24/10	0.011 ± 0.0010
02/24/10 - 03/08/10	0.014 ± 0.0010
03/08/10 - 03/23/10	0.022 ± 0.0010
03/23/10 - 04/07/10	0.014 ± 0.0010
04/07/10 - 04/20/10	0.015 ± 0.0010
04/20/10 - 06/14/10	No Data*
06/14/10 - 06/30/10	0.017 ± 0.0006
06/30/10 - 07/16/10	0.017 ± 0.0006
07/16/10 - 07/27/10	0.024 ± 0.0010
07/27/10 - 08/11/10	0.018 ± 0.0007
08/11/10 - 08/24/10	0.017 ± 0.0011
08/24/10 - 09/07/10	0.019 ± 0.0020
09/07/10 - 09/21/10	0.027 ± 0.0020
09/21/10 - 10/05/10	0.021 ± 0.0020
10/05/10 - 10/18/10	0.026 ± 0.0020
10/18/10 - 11/01/10	0.023 ± 0.0020
11/01/10 - 11/16/10	0.019 ± 0.0020
11/16/10 - 11/30/10	0.033 ± 0.0020
11/30/10 - 12/16/10	0.043 ± 0.0030
12/16/10 - 01/11/11	0.012 ± 0.0010

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* Sample results from 04/20/10 through 06/14/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2010 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/m<sup>3</sup>)</u>
12/28/09 - 01/11/10	0.017 ± 0.0010
01/11/10 - 01/27/10	0.026 ± 0.0010
01/27/10 - 02/08/10	0.027 ± 0.0020
02/08/10 - 02/22/10	0.016 ± 0.0010
02/22/10 - 03/08/10	0.013 ± 0.0010
03/08/10 - 03/23/10	No Data*
03/23/10 - 04/08/10	0.016 ± 0.0010
04/08/10 - 04/21/10	0.014 ± 0.0010
04/21/10 - 06/15/10	No Data **
06/15/10 - 06/29/10	0.018 ± 0.0010
06/29/10 - 07/14/10	0.018 ± 0.0010
07/14/10 - 07/27/10	0.023 ± 0.0010
07/27/10 - 08/10/10	0.019 ± 0.0010
08/10/10 - 08/24/10	0.022 ± 0.0010
08/24/10 - 09/07/10	0.024 ± 0.0020
09/07/10 - 09/21/10	0.036 ± 0.0020
09/21/10 - 10/05/10	0.024 ± 0.0020
10/05/10 - 10/21/10	0.027 ± 0.0020
10/21/10 - 11/01/10	0.023 ± 0.0020
11/01/10 - 11/16/10	0.018 ± 0.0020
11/16/10 - 11/30/10	0.041 ± 0.0030
11/30/10 - 12/14/10	0.078 ± 0.0040
12/14/10 - 01/14/11	0.008 ± 0.0010

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* 'No Data' indicates that the Air Particulate gross beta result from 03/08/10 through 03/23/10 was not available. The air cartridge was inadvertently discarded by janitorial staff.

\*\* Sample results from 04/21/10 through 06/15/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.



**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
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**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/m<sup>3</sup>)</u>
12/28/09 - 01/11/10	0.015 ± 0.0010
01/11/10 - 01/27/10	0.025 ± 0.0010
01/27/10 - 02/08/10	0.024 ± 0.0010
02/08/10 - 02/22/10	0.016 ± 0.0010
02/22/10 - 03/08/10	0.013 ± 0.0010
03/08/10 - 03/23/10	No Data*
03/23/10 - 04/08/10	0.014 ± 0.0010
04/08/10 - 04/21/10	0.014 ± 0.0010
04/21/10 - 06/15/10	No Data**
06/15/10 - 06/29/10	0.018 ± 0.0007
06/29/10 - 07/14/10	0.018 ± 0.0007
07/14/10 - 07/27/10	0.021 ± 0.0008
07/27/10 - 08/10/10	0.019 ± 0.0007
08/10/10 - 08/24/10	0.021 ± 0.0010
08/24/10 - 09/07/10	0.021 ± 0.0020
09/07/10 - 09/21/10	0.034 ± 0.0020
09/21/10 - 10/05/10	0.022 ± 0.0020
10/05/10 - 10/21/10	0.029 ± 0.0020
10/21/10 - 11/01/10	0.023 ± 0.0020
11/01/10 - 11/16/10	0.020 ± 0.0020
11/16/10 - 11/30/10	0.040 ± 0.0030
11/30/10 - 12/14/10	0.073 ± 0.0040
12/14/10 - 01/14/11	0.008 ± 0.0010

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* 'No Data' indicates that the Air particulate gross beta result from 03/08/10 through 03/23/10 was not available. The air cartridge was inadvertently discarded by janitorial staff.

\*\* Sample results from 04/21/10 through 06/15/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

**New Jersey Department of Environmental Protection  
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**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/m<sup>3</sup>)</u>
12/28/09 - 01/11/10	0.015 ± 0.0010
01/11/10 - 01/27/10	0.026 ± 0.0010
01/27/10 - 02/08/10	0.021 ± 0.0010
02/08/10 - 02/22/10	0.017 ± 0.0010
02/22/10 - 03/08/10	0.012 ± 0.0010
03/08/10 - 03/23/10	No Data*
03/23/10 - 04/08/10	0.016 ± 0.0010
04/08/10 - 04/21/10	0.015 ± 0.0010
04/21/10 - 06/15/10	No Data**
06/15/10 - 06/29/10	0.017 ± 0.0006
06/29/10 - 07/14/10	0.016 ± 0.0006
07/14/10 - 07/27/10	0.021 ± 0.0007
07/27/10 - 08/10/10	0.017 ± 0.0007
08/10/10 - 08/24/10	0.020 ± 0.0010
08/24/10 - 09/07/10	0.023 ± 0.0020
09/07/10 - 09/21/10	0.031 ± 0.0020
09/21/10 - 10/05/10	0.023 ± 0.0020
10/05/10 - 10/21/10	0.028 ± 0.0020
10/21/10 - 11/01/10	0.018 ± 0.0020
11/01/10 - 11/16/10	0.020 ± 0.0020
11/16/10 - 11/30/10	0.040 ± 0.0030
11/30/10 - 12/14/10	0.073 ± 0.0040
12/14/10 - 01/14/11	0.009 ± 0.0010

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

\* 'No Data' indicates that the Air particulate gross beta result from 03/08/10 through 03/23/10 was not available. The air cartridge was inadvertently discarded by janitorial staff.

\*\* Sample results from 04/21/10 through 06/15/10 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

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**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>
06/15/10	- 09/21/10	< 1.0	< 0.8	< 0.8	86 ± 25	< 1.2	< 0.1
09/21/10	- 12/14/10	< 1.0	< 1.0	< 1.0	150 ± 24	< 5.0	< 1.0

**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>
06/16/10	- 09/21/10	< 0.7	< 0.7	< 0.6	40 ± 18	< 0.8	< 0.1
09/21/10	- 12/16/10	< 1.0	< 1.0	< 1.0	111 ± 22	< 5.0	< 2.0

Results in 10<sup>-3</sup> picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

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

**Note:** Air Particulate quarterly composite analysis results were not available from December 30, 2009 through June 14, 2010 due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost. Samples were lost due to the unexpected interruption in contract laboratory services during the calendar year.

**New Jersey Department of Environmental Protection  
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**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>
06/14/10 - 09/21/10	< 1.1	< 1.1	< 1.1	71 ± 28	< 0.6	< 0.1
09/21/10 - 12/16/10	< 1.0	< 1.0	< 1.0	142 ± 23	< 5.0	< 3.0

**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>
06/14/10 - 09/21/10	< 0.4	< 0.5	< 0.5	41 ± 13	< 0.6	< 0.1
09/21/10 - 12/16/10	< 1.0	< 1.0	< 1.0	105 ± 20	< 5.0	< 1.0

**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>
06/14/10 - 09/21/10	< 0.7	< 0.5	< 0.5	52 ± 16	< 0.6	< 0.1
09/21/10 - 12/16/10	< 1.0	< 1.0	< 1.0	127 ± 22	< 6.0	< 2.0

**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>
06/14/10 - 09/21/10	< 0.6	< 0.4	< 0.3	41 ± 12	< 0.6	< 0.1
09/21/10 - 12/16/10	< 1.0	< 1.0	< 1.0	150 ± 24	< 4.0	< 2.0

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

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

**Note:** Air Particulate quarterly composite analysis results were not available from December 30, 2009 through June 13, 2010 due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost. Samples were lost due to the unexpected interruption in contract laboratory services during the calendar year

**New Jersey Department of Environmental Protection  
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**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>
06/14/10 - 09/21/10	< 0.8	< 0.5	< 0.7	55 ± 18	< 0.7	< 0.1
09/21/10 - 12/16/10	< 1.0	< 1.0	< 1.0	98 ± 21	< 5.0	< 2.0

**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>
06/23/10 - 09/29/10	< 38.9	< 27.7*	< 34.0*	< 1011.0	< 15.1	< 2.2
09/29/10 - 01/05/11	< 1.0	< 1.0	< 1.0	81 ± 20	< 4.0	< 2.0

**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>
06/14/10 - 09/21/10	< 0.7	< 0.4	< 0.5	31 ± 14	< 0.6	< 0.1
09/21/10 - 12/16/10	< 1.0	< 1.0	< 1.0	131 ± 23	< 5.0	< 2.0

Results in 10<sup>-3</sup> picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

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

**Note:** Air Particulate quarterly composite analysis results were not available from December 30, 2009 through June 13, 2010 due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

\* Contract MDC's for Cs-134 and Cs-137 were not achieved by the laboratory due to insufficient sample volume.

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**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>
06/15/10 - 09/21/10	< 1.3	< 1.2	< 1.2	78 ± 31	< 0.7	< 0.1
09/21/10 - 12/14/10	< 1.0	< 1.0	< 1.0	167 ± 27	< 5.0	< 1.0

**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>
06/15/10 - 09/21/10	< 0.5	< 0.4	< 0.5	51 ± 15	< 0.5	< 0.1
09/21/10 - 12/14/10	< 1.0	< 1.0	< 1.0	133 ± 23	< 5.0	< 1.0

**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>
06/15/10 - 09/21/10	< 0.5	< 0.4	< 0.4	54 ± 15	< 0.6	< 0.1
09/21/10 - 12/14/10	< 1.0	< 1.0	< 1.0	170 ± 25	< 4.0	< 1.0

Results in 10<sup>-3</sup> picoCuries per cubic meter (pCi/m<sup>3</sup>) +/- 2 Standard Deviations

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

**Note:** Air Particulate quarterly composite analysis results were not available from December 30, 2009 through June 13, 2010 due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

**New Jersey Department of Environmental Protection  
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**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>
04/13/10 - Clams	< 3	< 3	< 2	< 3	1302 ± 117	< 314	< 179
10/11/10 - Clams	< 11	< 16	< 21	< 13	1200 ± 281	< 671	< 610

**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>
04/13/10 - Clams	< 3	< 4	< 3	< 4	1344 ± 131	< 328	< 190
10/11/10 - Clams	< 13	< 17	< 15	< 13	1110 ± 273	< 817	< 945

**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>
04/13/10 - Clams	< 2	< 2	< 2	< 2	1062 ± 84	< 344	< 199
10/12/10 - Clams	< 14	< 10	< 13	< 14	1280 ± 256	< 818	< 615

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  
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**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>
04/14/10 – Bluefish	< 5	< 5	< 5	< 5	4741 ± 320	< 337	< 198
04/14/10 – Striped Bass	< 3	< 3	< 2	< 3	4107 ± 251	< 418	< 245
04/14/10 – Sea Trout	< 8	< 9	< 8	< 9	6159 ± 477	< 391	< 229
04/16/10 – Black Drum	< 7	< 7	< 6	< 7	5128 ± 365	< 328	< 193
10/12/10 – Bluefish	< 17	< 16	< 16	< 18	3780 ± 565	< 802	< 603
10/12/10 – Striped Bass	< 20	< 15	< 17	< 17	3860 ± 542	< 627	< 561

**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>
04/15/10 - Striped Bass	< 4	< 5	< 4	< 4	5720 ± 352	< 444	< 257

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  
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**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>
07/15/10 - Crabs	< 14	< 16	< 12	< 11	2480 ± 325	< 281	< 135
07/21/10 – Fish **	< 15	< 15	< 10	< 13	2571 ± 345	< 236	< 117
10/18/10 – Fish ***	< 13	< 10	< 13	< 10	3450 ± 424	< 898	< 887

**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>
07/15/10 - Crabs	< 16	< 22	< 12	< 12	2462 ± 370	< 277	< 131
06/22/10 – Fish ****	< 16	< 16	< 10	< 12	2030 ± 303	< 383	< 125
10/19/10 – Fish *****	< 12	< 8	< 10	< 10	3370 ± 393	< 972	< 869

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

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

- \*\* Fish consist of various species including Striped Bass, Summer Flounder, Catfish and White Perch
- \*\*\* Fish consist of various species including Striped Bass and Bluefish
- \*\*\*\* Fish consist of various species including Bluefish and Catfish
- \*\*\*\*\* Fish consist of various species including Striped Bass, Channel Catfish, Bluefish, Brown Bullhead Catfish

**New Jersey Department of Environmental Protection  
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**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>
04/13/10	< 67	< 6	< 5	< 6	< 6	520 ± 114
10/11/10	< 253	< 24	< 16	< 22	< 16	4990 ± 609

**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>
04/13/10	< 101	< 10	< 8	< 8	< 9	4778 ± 459
10/11/10	< 258	< 23	< 14	< 21	< 17	568 ± 222

**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>
04/13/10	< 150	< 16	< 13	< 12	< 14	13530 ± 1285
10/12/10	< 320	< 30	< 22	< 25	< 17	15600 ± 1590

**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>
04/13/10	< 85	< 8	< 7	< 7	< 7	939 ± 167
10/11/10	< 291	< 27	< 19	< 25	< 20	4400 ± 539

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

**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>
11/22/10	< 167	< 17	< 18	< 26	< 17	5160 ± 627

**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>
11/22/10	< 154	< 17	< 16	< 20	< 16	3920 ± 456

**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>
11/22/10	< 253	< 27	< 26	< 41	< 25	7000 ± 771

**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>
11/22/10	< 248	< 26	< 29	< 38	< 27	18600 ± 1920

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.

**Note:** Results from samples collected in the spring are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

**New Jersey Department of Environmental Protection  
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**Oyster Creek  
Concentrations of Gamma Emitters in Vegetable Samples**

**Oyster Creek Onsite Garden (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	07/27/10	< 17	< 23	< 16	< 17	5711 ± 602
Cabbage	08/23/10	< 44	< 43	< 35	< 40	2250 ± 554
Collards	08/23/10	< 18	< 26	< 15	< 21	4768 ± 560
Kale	08/23/10	< 21	< 22	< 16	< 19	3880 ± 538
Cabbage	09/15/10	< 10	< 13	< 13	< 13	3610 ± 440
Collards	09/15/10	< 12	< 15	< 15	< 13	4630 ± 508
Kale	09/15/10	< 12	< 14	< 15	< 12	7320 ± 718
Cabbage	10/25/10	< 8	< 9	< 10	< 8	5430 ± 530
Collards	10/25/10	< 11	< 12	< 13	< 11	3900 ± 459
Kale	10/25/10	< 12	< 12	< 13	< 11	5640 ± 590

**Private Farm – NW Sector (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	07/27/10	< 13	< 18	< 11	< 13	2886 ± 368
Cabbage	08/23/10	< 19	< 24	< 16	< 21	3373 ± 494
Kale	08/23/10	< 21	< 23	< 17	< 17	2763 ± 454
Collards	08/23/10	< 35	< 39	< 30	< 32	4265 ± 2036
Cabbage	09/15/10	< 8	< 8	< 11	< 9	2570 ± 304
Collards	09/15/10	< 5	< 6	< 6	< 5	4640 ± 435
Kale	09/15/10	< 6	< 7	< 7	< 9	3950 ± 387
Cabbage	10/25/10	< 10	< 12	< 14	< 11	2560 ± 307
Collards	10/25/10	< 9	< 10	< 11	< 8	4140 ± 423
Kale	10/25/10	< 11	< 11	< 13	< 11	4980 ± 563

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  
2010 Radiological Environmental Monitoring Program**

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

**Oyster Creek Onsite Garden (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>
Kale	07/27/10	< 23	< 26	< 18	< 22	3593 ± 508
Cabbage	08/23/10	< 25	< 29	< 21	< 26	3467 ± 561
Collards	08/23/10	< 26	< 41	< 24	< 23	3994 ± 626
Kale	08/23/10	< 24	< 36	< 21	< 28	2923 ± 512
Cabbage	09/15/10	< 12	< 14	< 13	< 14	2910 ± 379
Kale	09/15/10	< 12	< 14	< 15	< 13	4090 ± 476
Kale	10/25/10	< 11	< 13	< 14	< 11	4120 ± 455

**Oyster Creek Onsite Garden (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	07/27/10	< 22	< 34	< 21	< 23	6115 ± 747
Cabbage	08/23/10	< 24	< 24	< 19	< 22	3214 ± 501
Collards	08/23/10	< 26	< 31	< 25	< 34	1565 ± 809
Kale	08/23/10	< 26	< 32	< 26	< 30	1845 ± 489
Cabbage	09/15/10	< 10	< 13	< 14	< 12	3660 ± 403
Collards	09/15/10	< 8	< 11	< 11	< 9	7650 ± 746
Kale	09/15/10	< 11	< 12	< 14	< 11	6500 ± 624
Cabbage	10/25/10	< 8	< 9	< 9	< 7	2940 ± 343
Collards	10/25/10	< 7	< 8	< 9	< 8	5440 ± 522
Kale	10/25/10	< 11	< 11	< 13	< 11	4190 ± 443

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

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

\* This is a new sampling site located on Finninger Farm, approximately ¼ mile to the ENE of the plant. Therefore, there is no historical BNE data available for this site.

**New Jersey Department of Environmental Protection  
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**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>
Pepper	07/26/10	< 15	< 14	< 11	< 12	1500 ± 252

**Private Farm – NNE (AIVE07)**

<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	07/22/10	< 16	< 11	< 15	< 14	1362 ± 277

**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>
Peppers	08/09/10	< 10	< 11	< 9	< 12	1425 ± 231
Corn	08/09/10	< 16	< 20	< 13	< 15	1265 ± 293

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

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

**Note:** Results from samples collected in April through October are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost.

**New Jersey Department of Environmental Protection  
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**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>
02/03/10	< 1.48	< 0.67	1723 ± 151	< 0.60	< 0.56
10/04/10	< 3.29	< 0.83	1220 ± 130	< 0.65	< 0.72

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

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

**Note:** Results from samples collected during the 2<sup>nd</sup> quarter of 2010 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost. Results from samples collected during the 4<sup>th</sup> quarter of 2010 are not available. During these weeks the DEP contracted with two different labs under consecutive short term contracts. Sample shipments and analyses were halted pending approval of each contract.

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

**Private Farm – ENE (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>
01/18/10	< 1.86	< 0.23	1477 ± 130	< 0.87	< 0.60
02/09/10	< 1.45	< 0.44	1610 ± 141	< 0.41	< 0.36
03/15/10	< 1.48	< 0.33	1467 ± 129	< 0.64	0.80 ± 0.38
04/05/10	< 1.47	< 0.21	1444 ± 127	< 0.64	< 0.54
07/19/10	< 3.85	< 0.62	926 ± 125	< 0.68	< 0.37
08/02/10	< 6.36	< 0.46	1113 ± 158	< 0.63	< 0.32
10/17/10	< 3.24	< 0.44	1440 ± 146	< 0.71	< 0.79
11/08/10	< 2.27	< 0.78	1180 ± 124	< 0.84	< 0.93
12/06/10	< 2.33	< 0.64	1500 ± 147	< 0.78	< 0.88

**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>
01/18/10	< 1.40	< 0.22	1513 ± 133	< 1.14 *	< 0.79
02/09/10	< 1.78	< 0.50	1415 ± 128	< 0.33	< 0.29
03/15/10	< 1.47	< 0.33	1533 ± 136	< 0.61	< 0.43
04/05/10	< 1.79	< 0.26	1375 ± 124	< 0.66	< 0.56
07/19/10	< 3.96	< 0.54	910 ± 117	< 0.72	< 0.36
08/02/10	< 5.48	< 0.43	1203 ± 165	< 0.73	< 0.38
10/17/10	< 2.22	< 0.48	1430 ± 142	< 0.86	< 0.79
11/08/10	< 2.42	< 0.62	1090 ± 113	< 0.83	< 0.66
12/06/10	< 3.13	< 0.69	1650 ± 167	< 0.84	< 0.88

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

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

\* Sample result 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 Sr-89 decay for the same reason (51 days). There was insufficient chemical recovery to meet the MDC.

**Note:** Results from samples collected in May and June of 2010 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost. Results from samples collected in September of 2010 are not available. During these weeks the DEP contracted with two different labs under consecutive short term contracts. Sample shipments and analyses were halted pending approval of each contract.



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**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>
01/18/10	< 1.43	< 0.24	1579 ± 138	< 1.05 *	< 0.72
02/09/10	< 1.43	< 0.51	1506 ± 133	< 0.51	< 0.45
03/15/10	< 1.94	< 0.36	1576 ± 140	< 0.68	< 0.48
04/05/10	< 1.82	< 0.30	1572 ± 139	< 0.69	< 0.59
07/19/10	< 4.14	< 0.42	1143 ± 144	< 0.60	< 0.31
08/02/10	< 5.69	< 0.39	931 ± 136	< 0.61	< 0.34
10/17/10	< 2.55	< 0.47	1650 ± 158	< 0.95	< 0.82
11/08/10	< 2.87	< 0.89	1400 ± 141	< 0.88	< 0.65
12/06/10	< 2.74	< 0.78	1340 ± 147	< 0.85	< 0.92

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

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

\* Sample result 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 Sr-89 decay due to its short half-life (8.02 days) during the laboratory preparation and analysis.

**Note:** Results from samples collected in May and June of 2010 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost. Results from samples collected in September of 2010 are not available. During these weeks the DEP contracted with two different labs under consecutive short term contracts. Sample shipments and analyses were halted pending approval of each contract.

**New Jersey Department of Environmental Protection  
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**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>
04/13/10	< 1.56	< 1.51	< 1.42	< 1.42	< 280	< 0.29
10/11/10	< 2.21	< 2.38	< 2.57	< 2.15	< 492	< 0.72

**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>
01/28/10	< 1.25	< 1.25	< 1.13	< 1.24	< 280	< 0.84
02/23/10	< 1.65	< 1.49	< 1.47	< 1.62	< 278	< 0.68
04/01/10	< 1.76	< 1.72	< 1.51	< 1.61	< 280	< 0.58
04/28/10	< 1.64	< 1.46	< 1.44	< 1.55	< 275	< 0.68
07/01/10	< 3.79	< 3.30	< 2.70	< 2.78	< 207	< 0.45
07/29/10	< 6.07	< 5.07	< 4.68	< 5.53	< 459	< 0.72
08/26/10	< 0.60	< 6.61	< 4.04	< 6.13	< 497	No Data*
09/29/10	< 1.72	< 1.74	< 2.20	< 2.06	< 461	< 0.58
10/28/10	< 2.34	< 2.60	< 2.61	< 2.61	< 617	< 0.67
11/23/10	< 1.65	< 1.90	< 2.39	< 1.92	< 496	< 0.52

**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>
04/13/10	< 1.19	< 1.22	< 1.17	< 1.25	< 275	< 0.28
10/11/10	< 2.02	< 2.17	< 2.47	< 2.21	< 481	< 0.58

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

\* 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.

**Note:** Results from samples collected in May and June of 2010 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost. Tritium (H-3) analyses in 2010 were performed by three labs under separate contracts requiring different minimum detectable concentrations (MDC). The required MDC for H-3 from January through July 2010 was 300 pCi/L. The required MDC the end of July through December 2010 was 1000 pCi/L. No surface water sample was collected in December 2010. Sample shipments and analyses were halted pending approval of a new short term lab contract.

**New Jersey Department of Environmental Protection  
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**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>
01/28/10	< 1.29	< 1.22	< 1.11	< 1.25	< 274	< 0.85
02/23/10	< 1.17	< 1.13	< 1.09	< 1.25	< 278	< 0.79
04/01/10	< 1.33	< 1.25	< 1.24	< 1.35	< 275	< 0.56
04/28/10	< 1.23	< 1.25	< 1.15	< 1.22	< 279	< 0.53
06/30/10	< 6.01	< 5.81	< 5.00	< 4.97	< 208	< 0.41
07/29/10	< 6.58	< 6.03	< 5.47	< 5.39	< 461	< 0.61
08/26/10	< 11.69	< 4.43	< 4.33	< 3.80	< 501	No Data*
09/29/10	< 2.13	< 2.58	< 2.63	< 2.37	< 461	< 0.51
10/28/10	< 2.01	< 2.19	< 2.76	< 2.38	< 480	< 0.65
11/03/10	< 1.82	< 2.23	< 2.48	< 2.17	< 500	< 0.54

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

\* 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.

**Note:** Results from samples collected in May of 2010 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost. Tritium (H-3) analyses in 2010 were performed by three labs under separate contracts requiring different minimum detectable concentrations (MDC). The required MDC for H-3 from January through July 2010 was 300 pCi/L. The required MDC the end of July through December 2010 was 1000 pCi/L. No surface water sample was collected in December 2010. Sample shipments and analyses were halted pending approval of a new short term lab contract.

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**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>
01/14/10	< 1.19	< 1.23	< 1.08	< 1.21	< 270	< 0.34
02/04/10	< 1.23	< 1.18	< 1.08	< 1.16	< 278	< 0.71
03/02/10	< 1.22	< 1.10	< 1.12	< 1.18	< 289	< 1.89 *
04/06/10	< 1.22	< 1.15	< 1.08	< 1.17	< 277	< 0.48
07/06/10	< 4.60	< 4.31	< 3.83	< 4.12	< 207	< 0.76
08/02/10	< 5.96	< 6.13	< 5.52	< 6.45	< 479	< 0.51
10/06/10	< 2.10	< 2.55	< 2.69	< 3.35	< 487	< 0.78
11/01/10	< 1.86	< 1.61	< 2.04	< 1.75	< 528	< 1.82 *
12/09/10	< 2.14	< 2.25	< 2.42	< 2.43	< 494	< 0.74

**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>
01/14/10	< 1.53	< 1.58	< 1.52	< 1.66	< 270	< 0.42
02/04/10	< 1.20	< 1.19	< 1.11	< 1.26	< 278	< 0.67
03/02/10	< 1.63	< 1.54	< 1.57	< 1.63	< 289	< 1.61 *
04/06/10	< 1.62	< 1.42	< 1.49	< 1.53	< 278	< 0.53
07/06/10	< 8.08	< 6.77	< 5.89	< 6.84	< 208	< 0.67
08/02/10	< 5.45	< 4.13	< 3.60	< 4.23	< 477	< 0.43
10/06/10	< 1.99	< 2.02	< 2.51	< 1.82	< 488	< 0.80
11/01/10	< 1.66	< 1.62	< 1.86	< 1.82	< 245	< 1.82 *
12/09/10	< 2.32	< 2.36	< 2.24	< 2.14	< 493	< 0.72

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

\* Sample result 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).

**Note:** Results from samples collected in May and June of 2010 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost. Results from samples collected in September and December of 2010 are not available. During these weeks the DEP contracted with two different labs under consecutive short term contracts. Sample shipments and analyses were halted pending approval of each contract. Tritium (H-3) analyses in 2010 were performed by three labs under separate contracts requiring different minimum detectable concentrations (MDC). The required MDC for H-3 from January through July 2010 was 300 pCi/L. The required MDC the end of July through December 2010 was 1000 pCi/L.

**New Jersey Department of Environmental Protection  
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**Oyster Creek  
Concentrations of Gamma Emitters and Tritium (H-3) in Potable 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>
02/02/10	< 1.15	< 1.18	< 1.07	< 1.18	< 277	< 0.53
08/24/10	< 11.59	< 4.08	< 3.97	< 3.55	< 533	No Data *
11/17/10	< 1.82	< 2.04	< 2.35	< 1.99	< 465	< 0.35

**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>
02/02/10	< 1.49	< 1.50	< 1.35	< 1.56	< 277	< 0.66
08/24/10	< 12.27	< 3.86	< 3.60	< 3.68	< 536	No Data *
11/17/10	< 2.20	< 2.38	< 2.89	< 2.47	< 461	< 0.37

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

\* 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.

**Note:** Results from samples collected during the 2<sup>nd</sup> quarter of 2010 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost. Tritium (H-3) analyses in 2010 were performed by three labs under separate contracts requiring different minimum detectable concentrations (MDC). The required MDC for H-3 from January through July 2010 was 300 pCi/L. The required MDC the end of July through December 2010 was 1000 pCi/L.

**New Jersey Department of Environmental Protection  
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**Salem/Hope Creek  
Concentrations of Gamma Emitters and Tritium (H-3) in Potable 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>
02/04/10	< 1.24	< 1.18	< 1.14	< 1.29	< 281	< 0.56
08/24/10	< 12.15	< 4.54	< 3.67	< 3.85	< 536	No Data*
11/17/10	< 2.19	< 2.50	< 2.87	< 2.44	< 468	< 0.44

**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>
02/04/10	< 1.67	< 1.70	< 1.78	< 1.72	< 273	< 0.44
08/24/10	< 10.98	< 3.67	< 3.77	< 3.85	< 535	No Data*
11/17/10	< 2.21	< 2.35	< 2.60	< 2.55	< 466	< 0.48

**Salem Administration Building (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>
02/04/10	< 1.13	< 1.23	< 1.08	< 1.29	< 277	< 0.44
08/24/10	< 16.74**	< 6.55	< 5.58	< 5.65	< 532	No Data*
11/17/10	< 2.06	< 2.20	< 2.69	< 2.19	< 464	< 0.38

**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>
02/04/10	< 1.63	< 1.60	< 1.70	< 1.72	< 275	< 0.58
08/24/10	< 12.05	< 3.74	< 3.74	< 3.76	< 532	No Data*
11/17/10	< 2.07	< 2.41	< 2.85	< 2.55	< 459	< 0.46

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

\* 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.

\*\* Sample result was in excess of the 15.0 pCi/L detection level due to radioactive decay of Co-58 over a 3 month period. The delay in the analysis was due to interruptions in contract laboratory services. During these weeks the DEP contracted with two different labs under consecutive short term contracts. Sample shipments and analyses were halted pending approval of each contract.

**Note:** Results from samples collected during the 2<sup>nd</sup> quarter of 2010 are not available due to the shutdown of the BNE's Radiological Contract Lab without notification. These samples were not able to be recovered and the data was lost. Tritium (H-3) analyses in 2010 were performed by three labs under separate contracts requiring different minimum detectable concentrations (MDC). The required MDC for H-3 from January through July 2010 was 300 pCi/L. The required MDC the end of July through December 2010 was 1000 pCi/L.

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**BNE Background Location  
Thermoluminescent Dosimetry Data  
Quarterly Results for 2010**

<u>Station</u>	<u>Location</u>	<u>1<sup>st</sup> Quarter</u>		<u>2<sup>nd</sup> Quarter</u>		<u>3<sup>rd</sup> Quarter</u>		<u>4<sup>th</sup> 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	11.9	1.8	14.1	0.3	14.4	0.6	13.2	32.8
CO02	Brendan T. Byrne State Forest, New Lisbon, NJ	9.3	2.3	11.1	1.5	10.7	3.7	11.5	2.6

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 91 days (a standard quarter)

**New Jersey Department of Environmental Protection  
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**Oyster Creek  
Thermoluminescent Dosimetry Data  
Quarterly Results for 2010**

<u>Station</u>	<u>Location</u>	<u>1<sup>st</sup> Quarter</u>		<u>2<sup>nd</sup> Quarter</u>		<u>3<sup>rd</sup> Quarter</u>		<u>4<sup>th</sup> 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	8.1	5.7	9.5	3.4	9.5	4.8	10.1	3.9
2	Ocean Twp. Municipal Building	9.6	2.2	10.0	5.5	10.0	2.9	11.0	2.6
3	Sewage Pumping Station, Forked River	10.2	4.5	10.8	0.9	11.0	3.1	11.8	2.1
4	Twin River Station, Forked River	8.7	1.9	9.5	3.8	9.5	1.3	10.6	3.4
5	Sewage Pumping Station, Ocean Twp.	9.4	3.7	10.2	3.0	10.2	3.1	11.5	3.3
6	Oyster Creek, Gate #2, Forked River	9.7	2.8	10.8	4.4	10.7	2.2	11.9	5.0
7	Finninger Farm, Forked River	8.3	1.6	9.1	4.1	8.9	1.5	10.1	2.9
8	Ocean Co. Memorial Cemetery, Waretown	9.1	1.3	9.2	2.0	9.2	3.5	10.1	4.1
9	Oyster Creek Building 17, Forked River	9.5	1.3	10.7	3.2	10.6	5.0	11.7	2.4
10	Sheffield & Derby Rd, Forked River	8.8	2.5	10.0	4.8	10.0	1.9	10.9	3.1
11	Lakeside Drive, Forked River	9.0	5.3	10.2	3.6	10.1	3.3	11.1	1.6
12	Forked River Game Farm, Forked River	9.7	2.6	10.1	1.6	10.2	2.6	11.4	2.0

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 91 days (a standard quarter)



**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2010 Radiological Environmental Monitoring Program**

**Oyster Creek  
Thermoluminescent Dosimetry Data  
Quarterly Results for 2010**

<u>Station</u>	<u>Location</u>	<u>1<sup>st</sup> Quarter</u>		<u>2<sup>nd</sup> Quarter</u>		<u>3<sup>rd</sup> Quarter</u>		<u>4<sup>th</sup> 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	8.8	2.3	9.8	3.2	9.7	1.1	10.9	2.5
14	Sands Pt. Park, Dock Ave., Waretown	9.7	3.7	11.3	2.9	10.9	2.2	12.0	3.4
15	Recreation Center, Waretown	8.6	2.0	9.6	2.9	9.4	2.3	10.8	1.5
16	North Access Rd., Forked River	9.6	6.4	10.9	5.1	11.1	2.9	11.4	2.9
20	Third Avenue, Barnegat Light	8.1	2.4	8.6	9.9	9.0	1.3	10.0	1.4
21	Rose Hill Road & Barnegat Blvd	9.1	2.0	10.0	4.3	10.2	3.9	11.1	3.0
22	Bay Way & Claimore Avenue	9.1	0.8	*	*	10.2	0.6	11.2	2.6
23	Island Beach State Park, Parking Lot A5	8.0	3.5	8.7	1.8	9.0	2.4	10.2	3.6

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 91 days (a standard quarter).

\* TLD badges missing from site

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2010 Radiological Environmental Monitoring Program**

**Salem/Hope Creek  
Thermoluminescent Dosimetry Data  
Quarterly Results for 2010**

<u>Station</u>	<u>Location</u>	<u>1<sup>st</sup> Quarter</u>		<u>2<sup>nd</sup> Quarter</u>		<u>3<sup>rd</sup> Quarter</u>		<u>4<sup>th</sup> 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	9.9	3.1	11.6	2.9	11.9	2.5	13.2	4.2
2	Poplar Road, Lower Alloways	10.2	1.8	12.4	2.5	12.4	2.5	13.8	2.0
3	Money and Eagle Island Road	10.9	3.0	13.2	2.8	13.3	2.9	14.6	1.9
4	Ft. Elfsborg / Hancocks – East	11.4	1.4	14.1	5.1	13.9	1.8	15.6	3.8
5	Ft. Elfsborg / Hancocks – West	14.6	3.3	18.4	3.8	18.1	1.8	20.0	1.9
6	Stathems Neck Road	10.2	2.5	11.8	1.1	11.9	1.4	13.3	1.5
7	Stow Neck Road Lower Alloways	9.0	2.1	10.5	6.0	10.4	2.6	11.8	4.4
8	Alloways Creek Neck Road - Middle	9.1	4.1	10.3	3.1	10.4	2.7	11.3	0.6
9	Alloways Creek Neck Road - North	12.9	21.5	14.4	10.4	13.7	1.8	15.2	5.0
10	Abbotts Farm Road	8.8	5.6	10.8	1.6	10.2	3.5	12.0	11.6
11	PSEG Education Center/EOF	10.2	2.9	11.8	2.2	12.1	2.8	13.2	2.9

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 91 days (a standard quarter).

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2010 Radiological Environmental Monitoring Program**

**Comparison of NJDEP and Global Dosimetry Solutions Thermoluminescent Dosimetry Data for Oyster Creek**

**Quarterly Results for Co-located Dosimeters for 2010**

<u>Station</u>	<u>Location</u>	<u>1<sup>st</sup> Quarter</u>				<u>2<sup>nd</sup> Quarter</u>				<u>3<sup>rd</sup> Quarter</u>				<u>4<sup>th</sup> 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	9.4	3.7	7.9	4.1	10.2	3.0	6.5	3.5	10.2	3.1	10.1	6.5	11.5	3.3	7.7	7.9
7	Finninger Farm,OCNGS Forked River	8.3	1.6	6.4	0.0	9.1	4.1	5.5	7.0	8.9	1.5	8.2	3.9	10.1	2.9	6.2	7.1
13	Restrooms, Lakeside Dr. Forked River	8.8	2.3	7.4	4.9	9.8	3.2	6.7	0.0	9.7	1.1	9.1	6.9	10.9	2.5	7.2	3.2
21	Rose Hill and Barnegat Rd Barnegat Twp.	9.1	2.0	7.4	4.9	10.0	4.3	6.5	3.5	10.2	3.9	9.2	3.6	11.1	3.0	7.4	0.0

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 91 days (a standard quarter)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2010 Radiological Environmental Monitoring Program**

**Comparison of NJDEP and Global Dosimetry Solutions Thermoluminescent Dosimetry Data for Salem/Hope Creek**

**Quarterly Results for Co-located Dosimeters for 2010**

<u>Station</u>	<u>Location</u>	<u>1<sup>st</sup> Quarter</u>		<u>2<sup>nd</sup> Quarter</u>		<u>3<sup>rd</sup> Quarter</u>		<u>4<sup>th</sup> Quarter</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>				
1	Access Road – Security Checkpoint	9.9	3.1	9.6	5.0	11.6	2.9	8.1	4.1	11.9	2.5	10.2	5.3	13.2	4.2	8.9	5.8
2	Poplar Road, Lower Alloways	10.2	1.8	9.4	0.0	12.4	2.5	8.0	3.9	12.4	2.5	11.2	5.0	13.8	2.0	10.2	2.6
3	Money and Eagle Island Roads	10.9	3.0	9.8	3.4	13.2	2.8	9.9	2.7	13.3	2.9	11.7	4.5	14.6	1.9	10.2	6.2
5	Ft. Elfsborg/ Hancocks - West	14.6	3.3	13.8	2.7	18.4	3.8	14.0	2.7	18.1	1.8	16.6	3.8	20.0	1.9	17.6	20.4

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 91 days (a standard quarter)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2010 Radiological Environmental Monitoring Program**

**Comparison of NJDEP and Global Dosimetry Solutions Thermoluminescent Dosimetry Data for Salem/Hope Creek**

**Quarterly Results for Co-located Dosimeters for 2010**

<u>Station</u>	<u>Location</u>	<u>1<sup>st</sup> Quarter</u>				<u>2<sup>nd</sup> Quarter</u>				<u>3<sup>rd</sup> Quarter</u>				<u>4<sup>th</sup> 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	9.0	2.1	8.8	3.6	10.5	6.0	7.2	4.4	10.4	2.6	9.6	9.3	11.8	4.4	7.9	6.2
9	Alloways Creek Neck Road - North	12.9	21.5	10.4	4.0	14.4	10.4	9.9	8.6	13.7	1.8	12.2	8.7	15.2	5.0	10.6	6.1
11	PSEG Ed. Center/EOF Salem City	10.2	2.9	9.3	5.1	11.8	2.2	8.4	3.8	12.1	2.8	10.9	5.6	13.2	2.9	9.2	5.1

Results are reported in units of milliroentgens (mR)

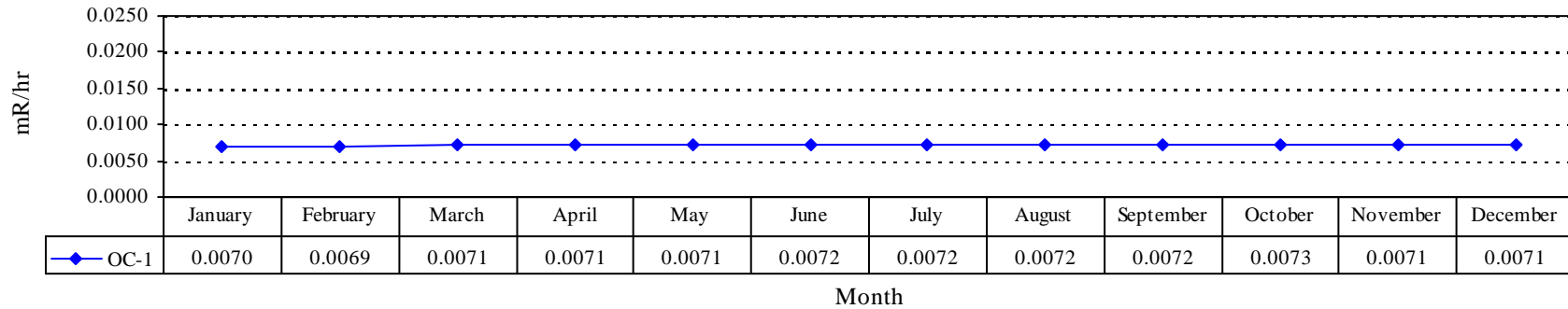
CV is the coefficient of variation; the ratio of the standard deviation to the mean, and is normally reported as a percentage

All exposures were normalized to 91 days (a standard quarter)

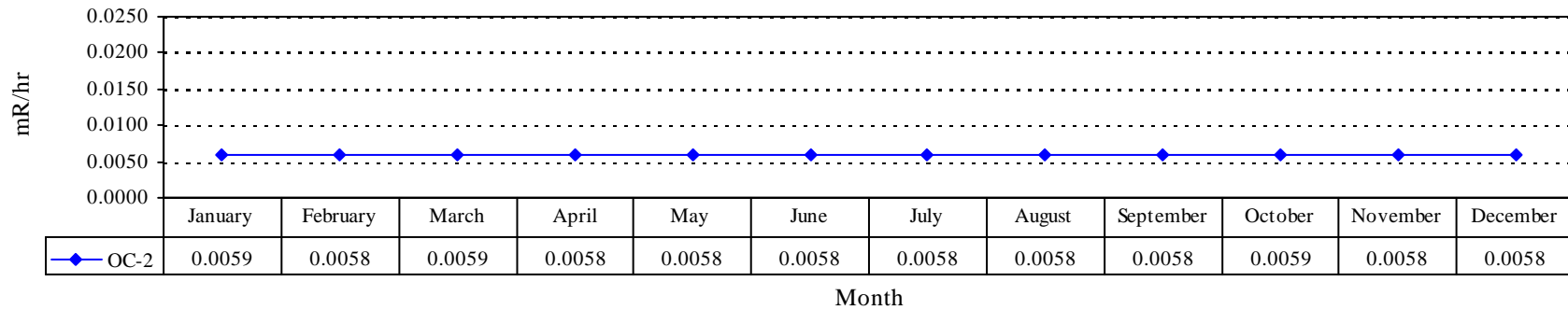
**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2010 Radiological Environmental Monitoring Program**

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

**OC 1  
2010 Ambient Radiation Levels**



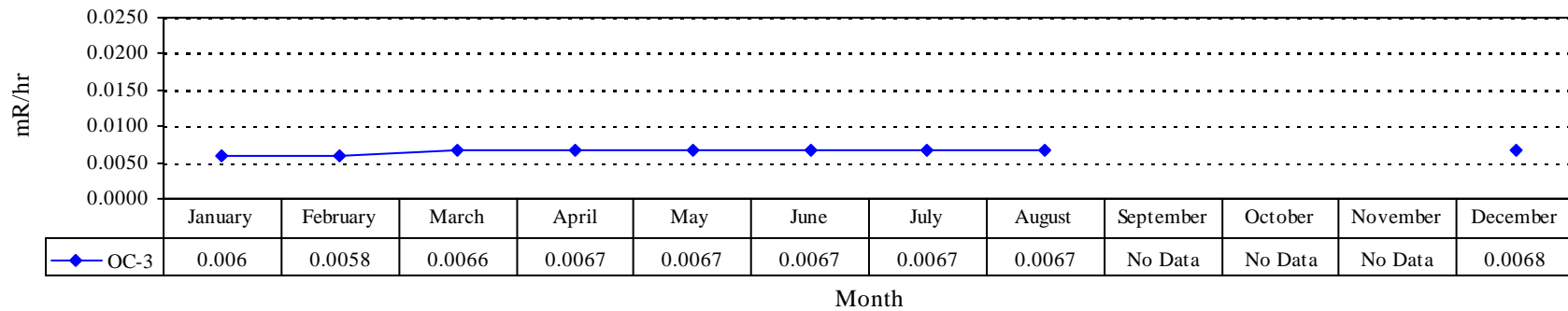
**OC 2  
2010 Ambient Radiation Levels**



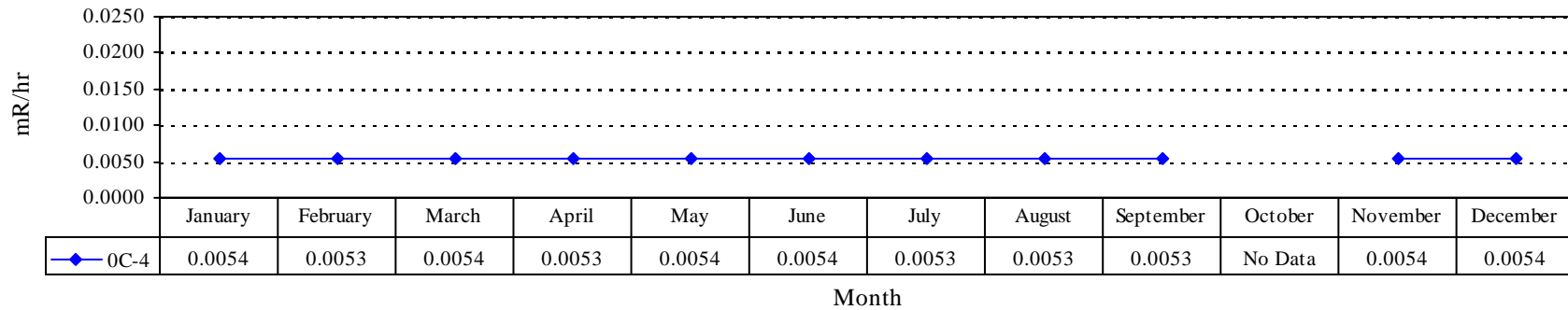
**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2010 Radiological Environmental Monitoring Program**

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

**OC 3  
2010 Ambient Radiation Levels**



**OC 4  
2010 Ambient Radiation Levels**

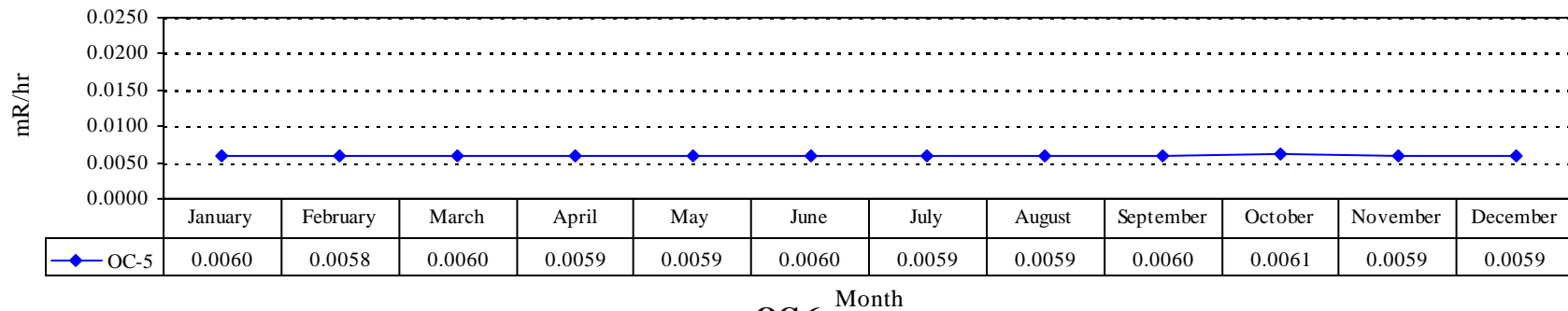


*Blank months indicate "No Data Available"*

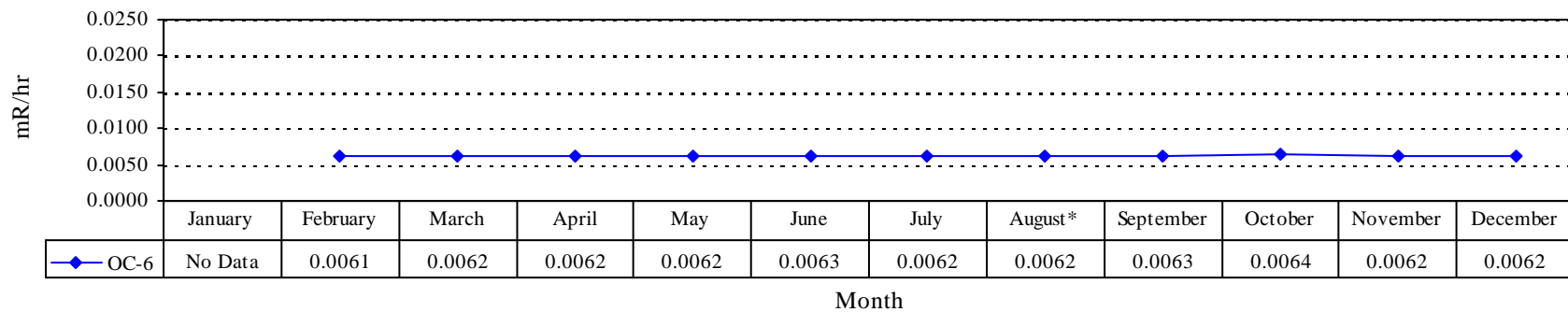
**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2010 Radiological Environmental Monitoring Program**

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

**OC 5  
2010 Ambient Radiation Levels**



**OC 6  
2010 Ambient Radiation Levels**



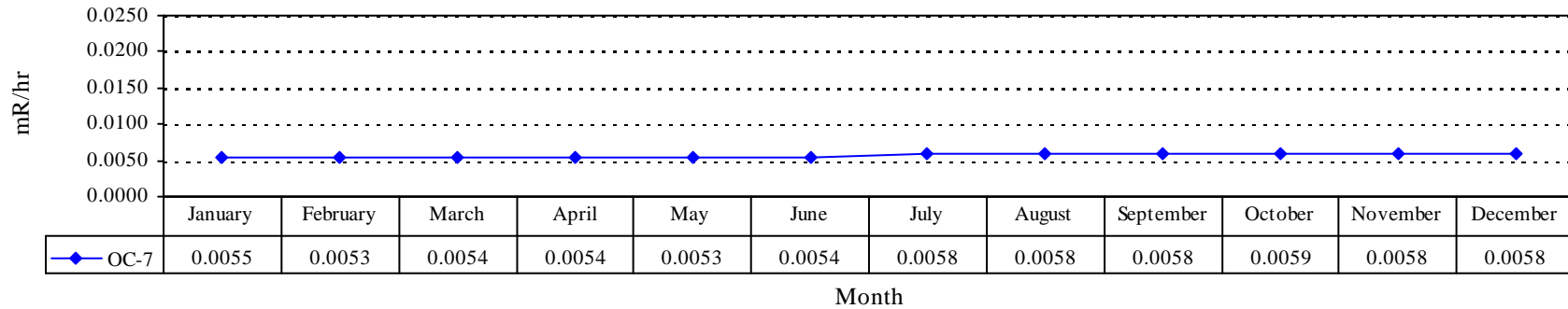
*Blank months indicate "No Data Available"*



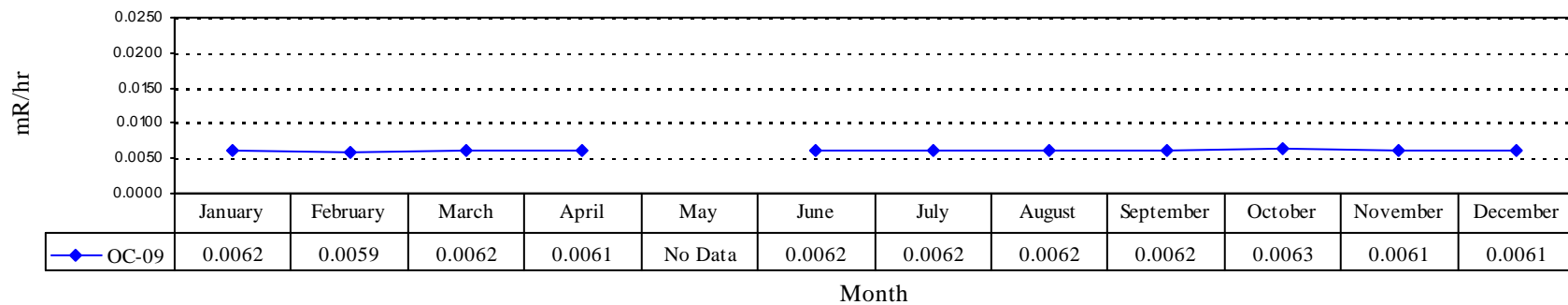
**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2010 Radiological Environmental Monitoring Program**

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

**OC 7  
2010 Ambient Radiation Levels**



**OC 9  
2010 Ambient Radiation Levels**

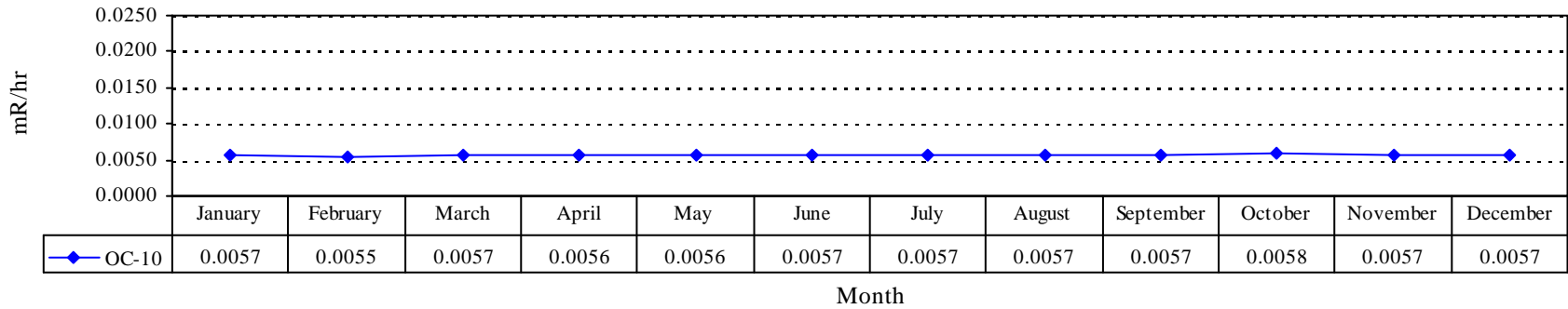


*Blank months indicate "No Data Available". OC-8 was not operational in 2010; therefore no data graph is available*

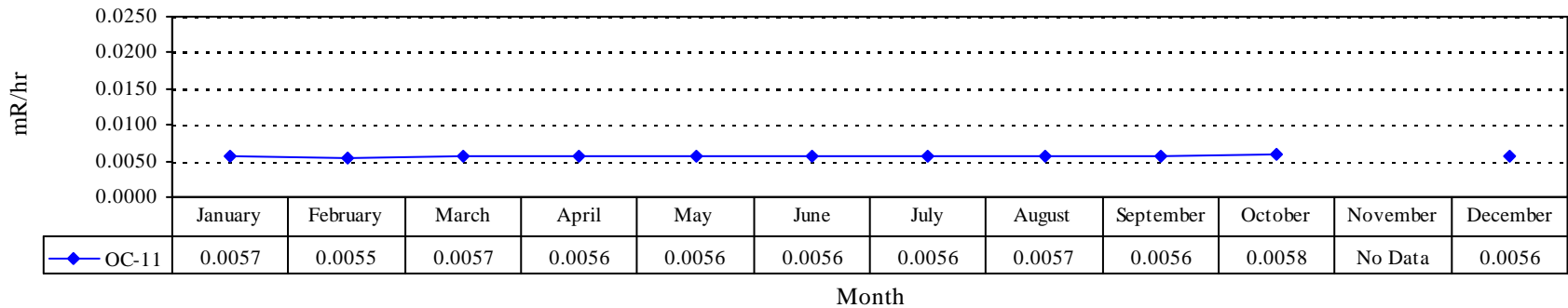
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2010 Radiological Environmental Monitoring Program**

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

**OC 10  
2010 Ambient Radiation Levels**



**OC 11  
2010 Ambient Radiation Levels**

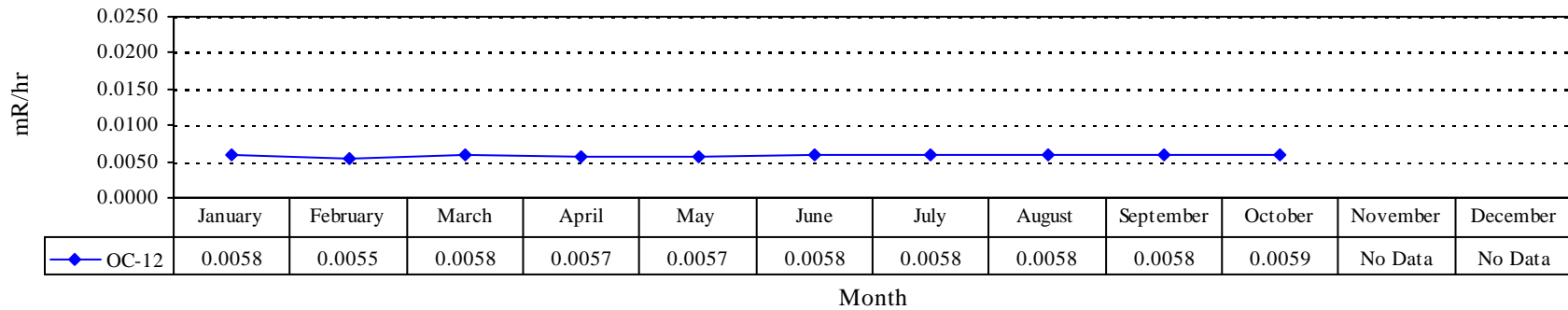


*Blank months indicate "No Data Available"*

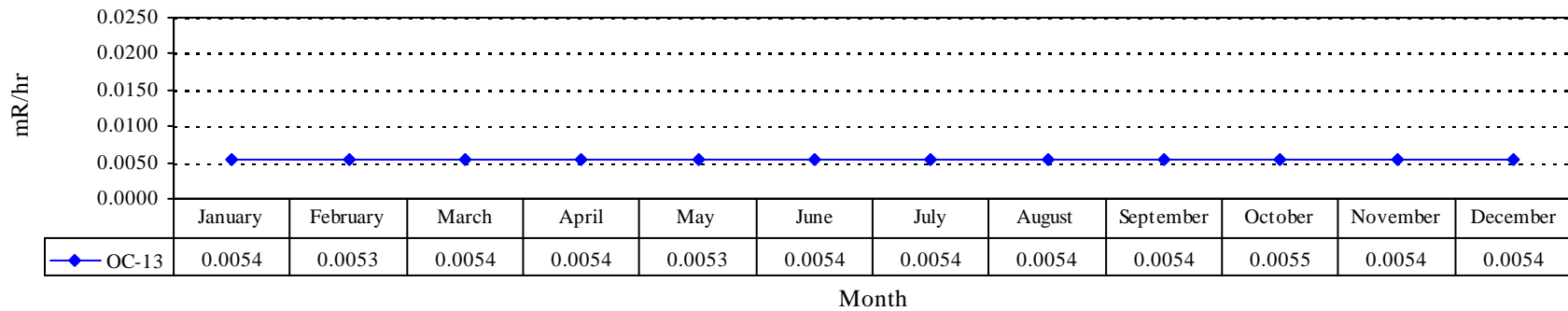
**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2010 Radiological Environmental Monitoring Program**

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

**OC 12  
2010 Ambient Radiation Levels**



**OC 13  
2010 Ambient Radiation Levels**

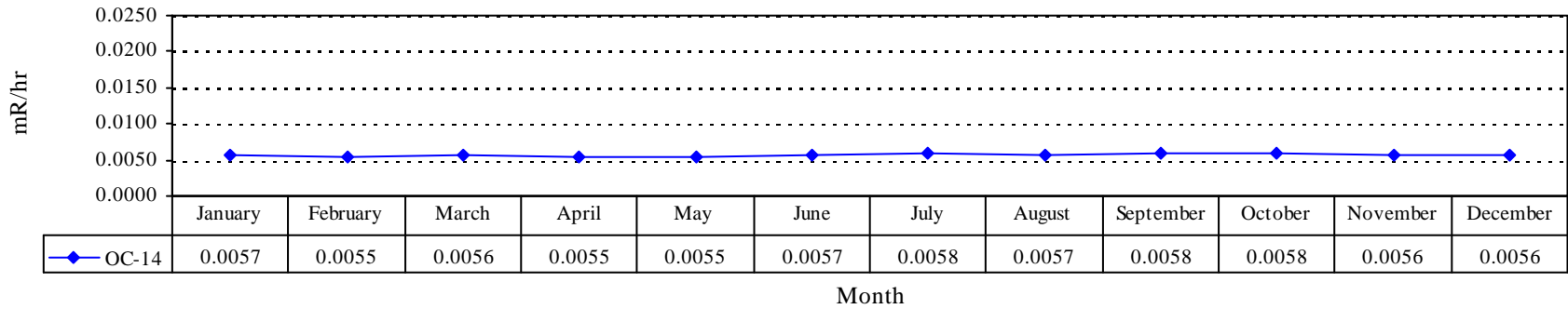


*Blank months indicate "No Data Available"*

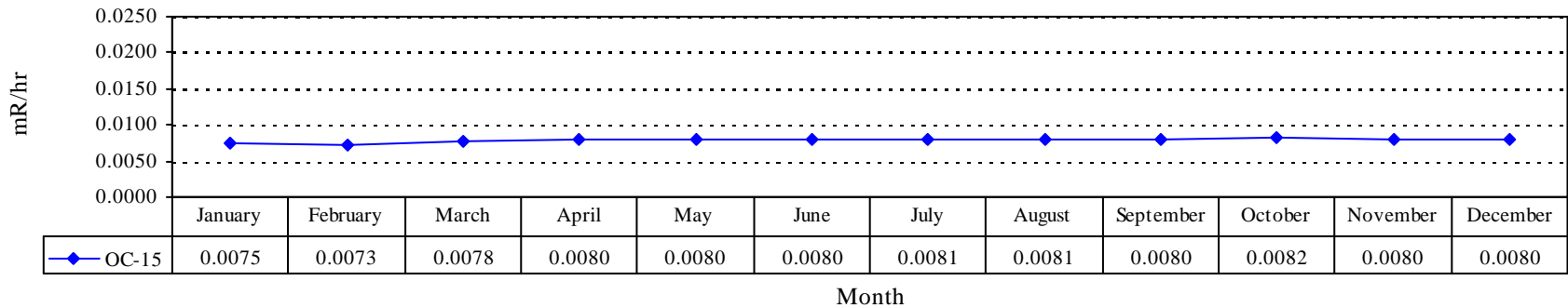
**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2010 Radiological Environmental Monitoring Program**

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

**OC 14  
2010 Ambient Radiation Levels**



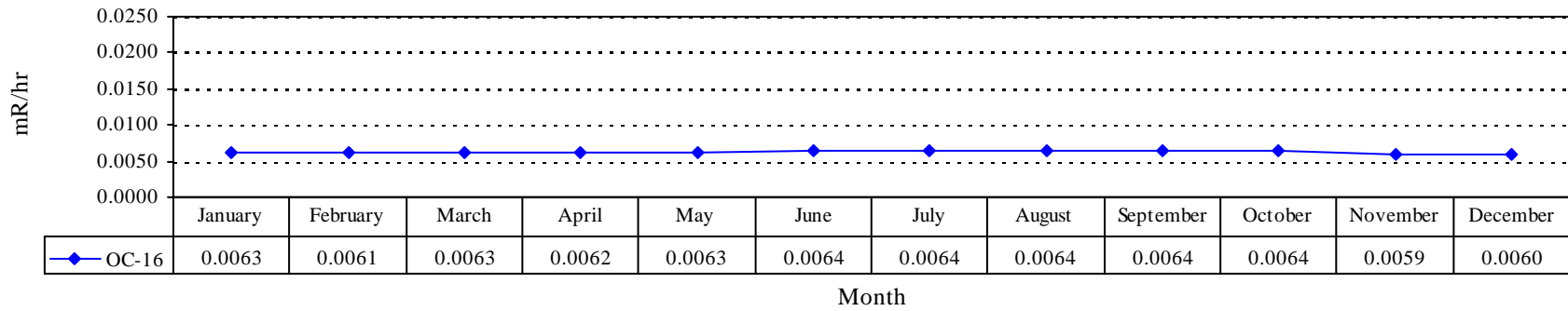
**OC 15  
2010 Ambient Radiation Levels**



**New Jersey Department of Environmental Protection  
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2010 Radiological Environmental Monitoring Program**

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

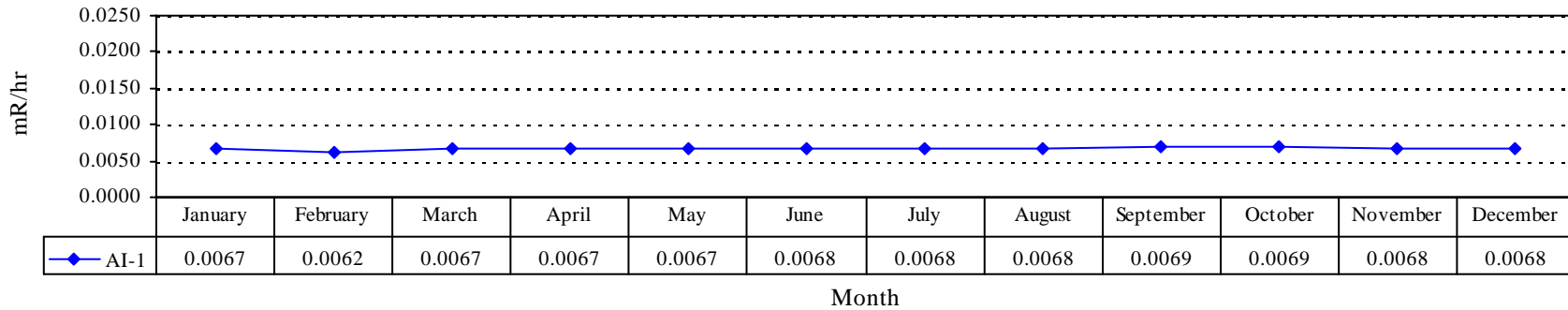
**OC 16  
2010 Ambient Radiation Levels**



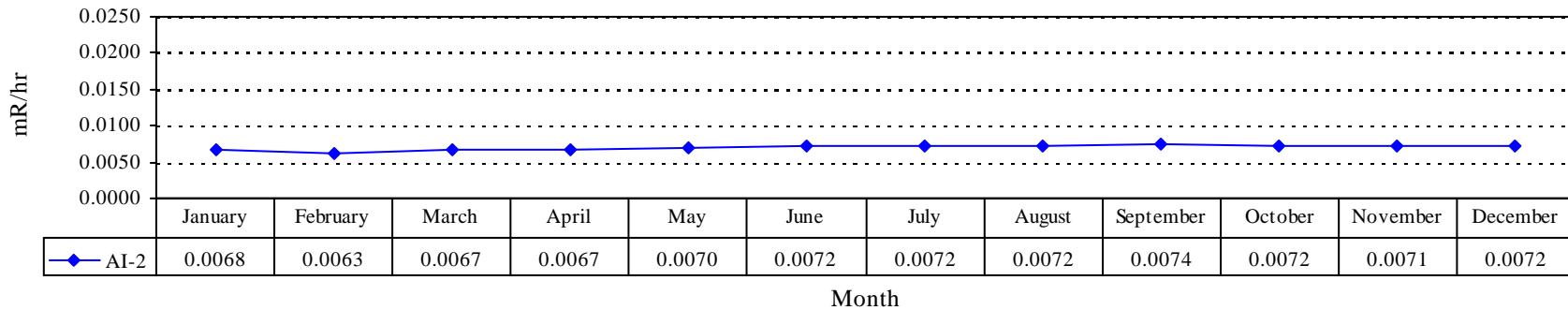
**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2010 Radiological Environmental Monitoring Program**

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

**AI 1  
2010 Ambient Radiation Levels**



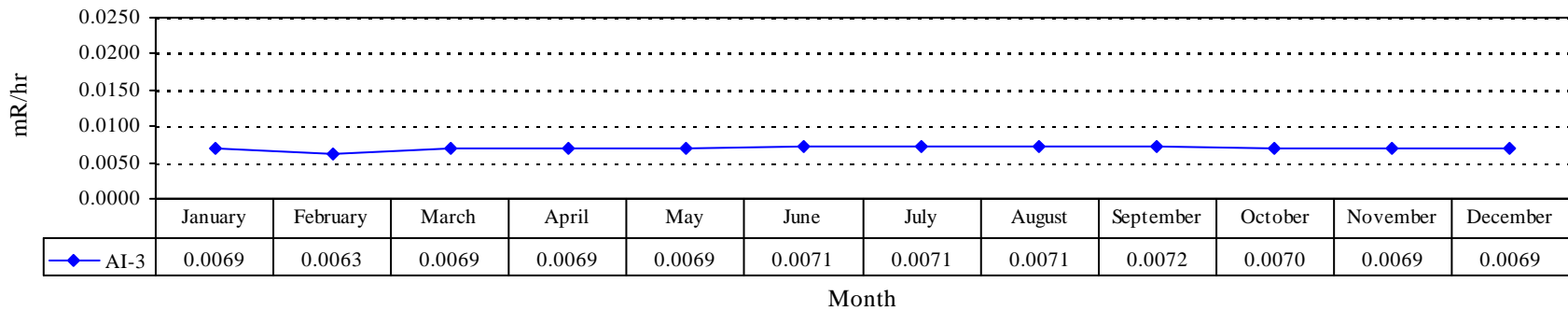
**AI 2  
2010 Ambient Radiation Levels**



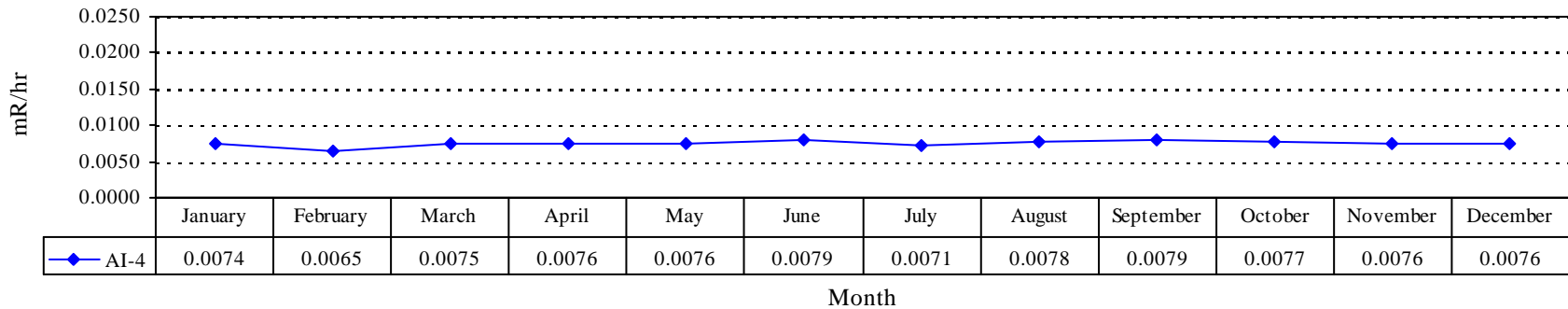
**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2010 Radiological Environmental Monitoring Program**

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

**AI 3  
2010 Ambient Radiation Levels**



**AI 4  
2010 Ambient Radiation Levels**

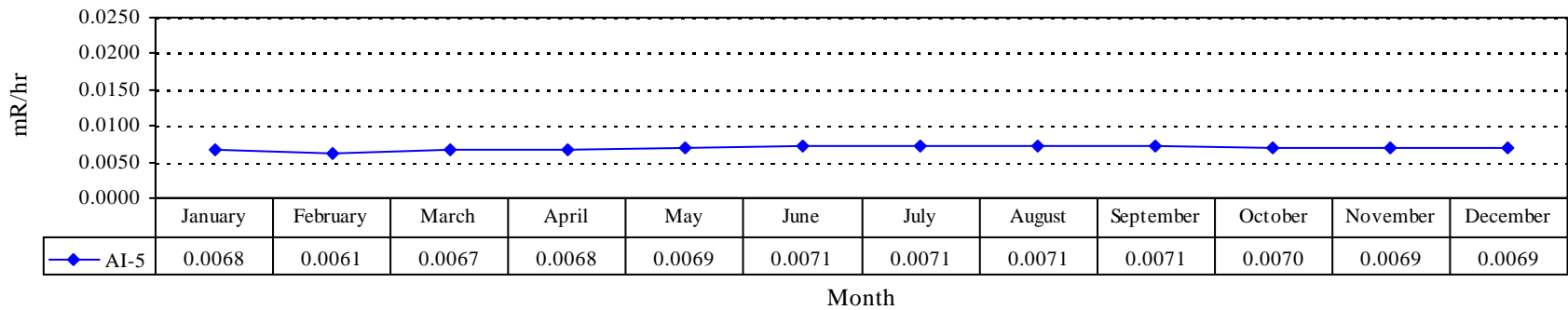


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2010 Radiological Environmental Monitoring Program**

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

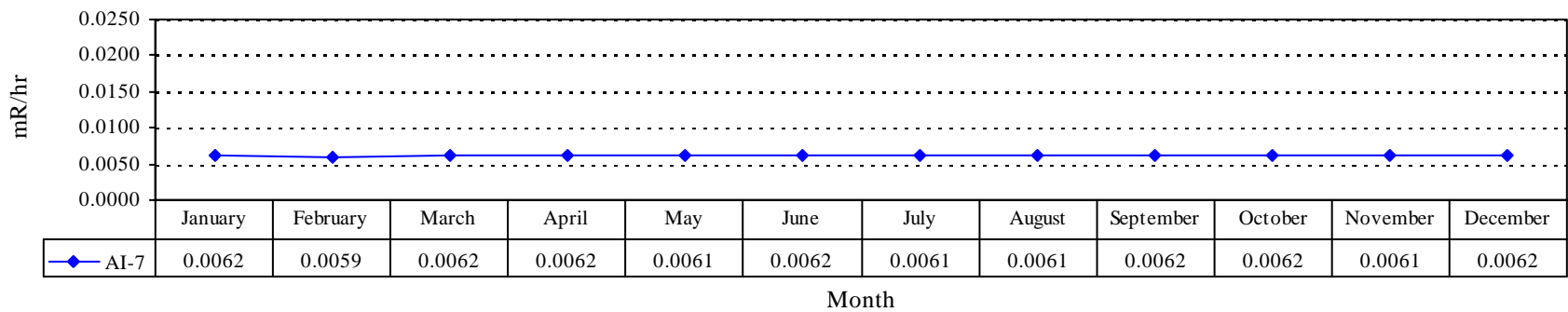
**AI 5**

**2010 Ambient Radiation Levels**



**AI 7**

**2010 Ambient Radiation Levels**



*AI-6 was not operational in 2010; therefore no data graph is available*

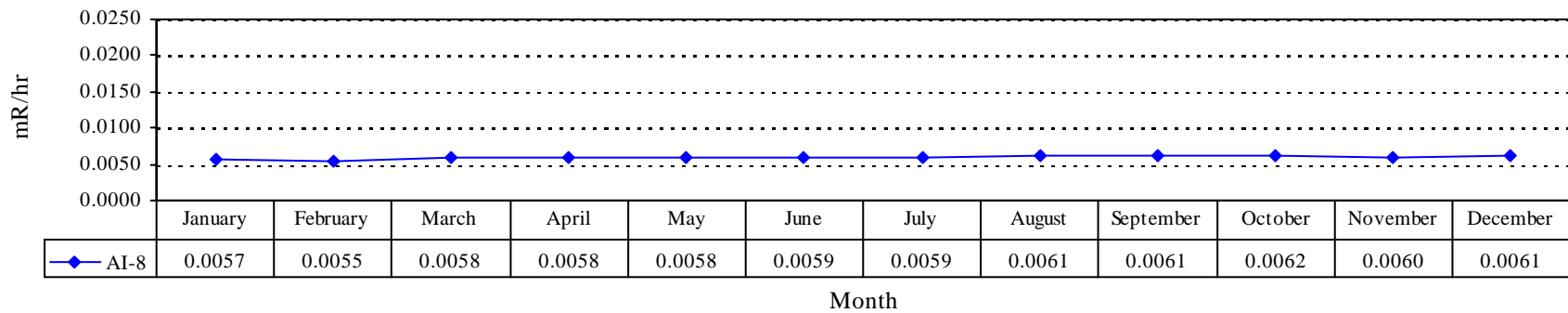


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Bureau of Nuclear Engineering  
2010 Radiological Environmental Monitoring Program**

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

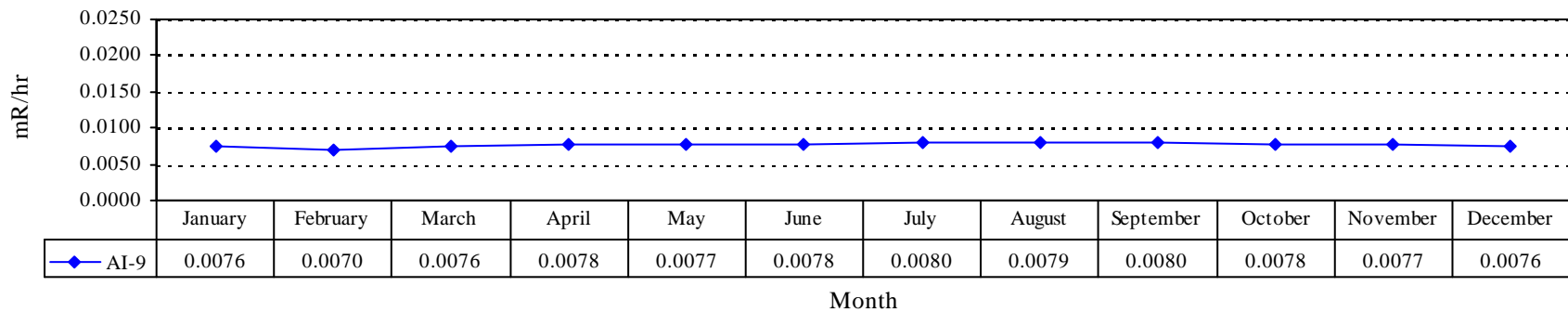
**AI 8**

**2010 Ambient Radiation Levels**



**AI 9**

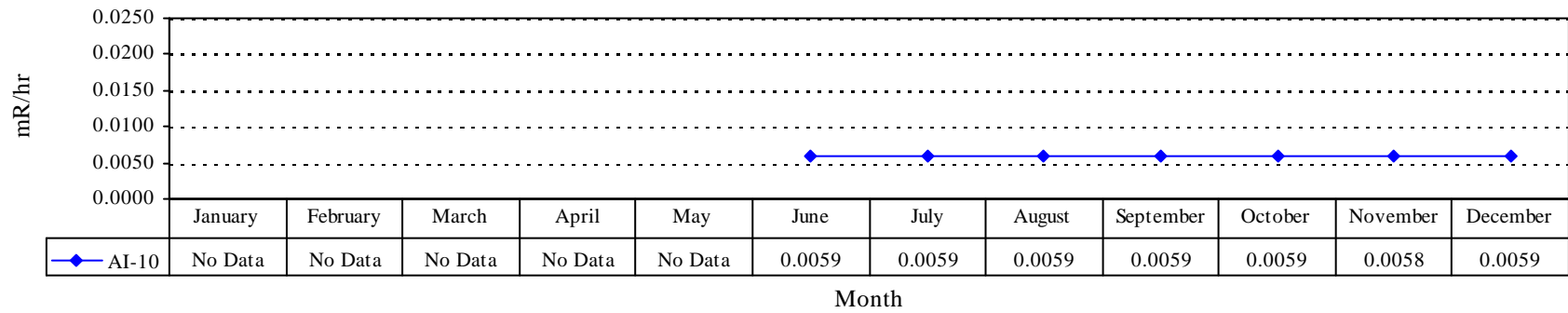
**2010 Ambient Radiation Levels**



**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2010 Radiological Environmental Monitoring Program**

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

**AI 10  
2010 Ambient Radiation Levels**



*Blank months indicate 'No Data Available'*