

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**BNE Background Locations  
Results of Analyses for Iodine-131 in Bi-Weekly Air Samples**

**BNE Office (COAI01)**

| <b><u>Collection Period</u></b> |   |          | <b><u>I-131</u></b><br><b><u>(pCi/m<sup>3</sup>)</u></b> |
|---------------------------------|---|----------|----------------------------------------------------------|
| 01/02/19                        | - | 01/14/19 | < 0.005                                                  |
| 01/14/19                        | - | 01/29/19 | < 0.005                                                  |
| 01/29/19                        | - | 02/12/19 | < 0.005                                                  |
| 02/12/19                        | - | 02/26/19 | < 0.008                                                  |
| 02/26/19                        | - | 03/13/19 | < 0.006                                                  |
| 03/13/19                        | - | 03/27/19 | < 0.010                                                  |
| 03/27/19                        | - | 04/10/19 | < 0.005                                                  |
| 04/10/19                        | - | 04/24/19 | < 0.007                                                  |
| 04/24/19                        | - | 05/08/19 | < 0.004                                                  |
| 05/08/19                        | - | 05/22/19 | < 0.007                                                  |
| 05/22/19                        | - | 06/05/19 | < 0.006                                                  |
| 06/05/19                        | - | 06/19/19 | < 0.005                                                  |
| 06/19/19                        | - | 07/03/19 | < 0.007                                                  |
| 07/03/19                        | - | 07/16/19 | < 0.005                                                  |
| 07/16/19                        | - | 07/31/19 | < 0.005                                                  |
| 07/31/19                        | - | 08/14/19 | < 0.005                                                  |
| 08/14/19                        | - | 08/28/19 | < 0.003                                                  |
| 08/28/19                        | - | 09/11/19 | < 0.004                                                  |
| 09/11/19                        | - | 09/25/19 | < 0.005                                                  |
| 09/25/19                        | - | 10/08/19 | < 0.005                                                  |
| 10/08/19                        | - | 10/23/19 | < 0.005                                                  |
| 10/23/19                        | - | 11/06/19 | < 0.004                                                  |
| 11/06/19                        | - | 11/20/19 | < 0.005                                                  |
| 11/20/19                        | - | 12/04/19 | < 0.004                                                  |
| 12/04/19                        | - | 12/18/19 | < 0.006                                                  |
| 12/18/19                        | - | 12/30/19 | < 0.006                                                  |

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**BNE Background Locations  
Results of Analyses for Iodine-131 in Bi-Weekly Air Samples**

**Brendan T. Byrne State Forest (COAI02)**

| <b><u>Collection Period</u></b> |   |          | <b><u>I-131</u></b><br><b><u>(pCi/m<sup>3</sup>)</u></b> |
|---------------------------------|---|----------|----------------------------------------------------------|
| 12/31/19                        | - | 01/14/19 | < 0.004                                                  |
| 01/14/19                        | - | 01/29/19 | < 0.003                                                  |
| 01/29/19                        | - | 02/12/19 | < 0.006                                                  |
| 02/12/19                        | - | 02/26/19 | < 0.008                                                  |
| 02/26/19                        | - | 03/13/19 | < 0.005                                                  |
| 03/13/19                        | - | 03/27/19 | < 0.009                                                  |
| 03/27/19                        | - | 04/10/19 | < 0.006                                                  |
| 04/10/19                        | - | 04/24/19 | < 0.006                                                  |
| 04/24/19                        | - | 05/08/19 | < 0.005                                                  |
| 05/08/19                        | - | 05/22/19 | < 0.005                                                  |
| 05/22/19                        | - | 06/05/19 | < 0.005                                                  |
| 06/05/19                        | - | 06/19/19 | < 0.004                                                  |
| 06/19/19                        | - | 07/03/19 | < 0.006                                                  |
| 07/03/19                        | - | 07/16/19 | < 0.005                                                  |
| 07/16/19                        | - | 07/31/19 | < 0.003                                                  |
| 07/31/19                        | - | 08/14/19 | < 0.005                                                  |
| 08/14/19                        | - | 08/28/19 | < 0.004                                                  |
| 08/28/19                        | - | 09/11/19 | < 0.004                                                  |
| 09/11/19                        | - | 09/25/19 | < 0.006                                                  |
| 09/25/19                        | - | 10/09/19 | < 0.006                                                  |
| 10/08/19                        | - | 10/23/19 | < 0.004                                                  |
| 10/23/19                        | - | 11/06/19 | < 0.004                                                  |
| 11/06/19                        | - | 11/20/19 | < 0.004                                                  |
| 11/20/19                        | - | 12/04/19 | < 0.004                                                  |
| 12/04/19                        | - | 12/18/19 | < 0.003                                                  |
| 12/18/19                        | - | 12/30/19 | < 0.004                                                  |

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Results of Analyses for Iodine-131 in Bi-Weekly Air Samples**

**Waretown Municipal Building (OCAI01)**

| <b><u>Collection Period</u></b> |   |          | <b><u>I-131</u><br/><u>(pCi/m<sup>3</sup>)</u></b> |
|---------------------------------|---|----------|----------------------------------------------------|
| 12/31/18                        | - | 01/14/19 | < 0.004                                            |
| 01/14/19                        | - | 01/29/19 | < 0.004                                            |
| 01/29/19                        | - | 02/12/19 | < 0.012                                            |
| 02/12/19                        | - | 02/26/19 | < 0.005                                            |
| 02/26/19                        | - | 03/13/19 | < 0.010                                            |
| 03/13/19                        | - | 03/27/19 | < 0.007                                            |
| 03/27/19                        | - | 04/10/19 | < 0.004                                            |
| 04/10/19                        | - | 04/24/19 | < 0.005                                            |
| 04/24/19                        | - | 05/08/19 | < 0.004                                            |
| 05/08/19                        | - | 05/22/19 | < 0.005                                            |
| 05/22/19                        | - | 06/05/19 | < 0.005                                            |
| 06/05/19                        | - | 06/19/19 | < 0.006                                            |
| 06/19/19                        | - | 07/03/19 | < 0.007                                            |
| 07/03/19                        | - | 07/16/19 | < 0.007                                            |
| 07/16/19                        | - | 07/31/19 | < 0.005                                            |
| 07/31/19                        | - | 08/14/19 | < 0.003                                            |
| 08/14/19                        | - | 08/28/19 | < 0.003                                            |
| 08/28/19                        | - | 09/11/19 | < 0.004                                            |
| 09/11/19                        | - | 09/25/19 | < 0.003                                            |
| 09/25/19                        | - | 10/09/19 | < 0.004                                            |
| 10/08/19                        | - | 10/23/19 | < 0.005                                            |
| 10/23/19                        | - | 11/06/19 | < 0.004                                            |
| 11/06/19                        | - | 11/20/19 | < 0.004                                            |
| 11/20/19                        | - | 12/04/19 | < 0.006                                            |
| 12/04/19                        | - | 12/18/19 | < 0.003                                            |
| 12/18/19                        | - | 12/30/19 | < 0.007                                            |

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Results of Analyses for Iodine-131 in Bi-Weekly Air Samples**

**Sands Point Harbor (OCAI02)**

| <b><u>Collection Period</u></b> |   |          | <b><u>I-131</u></b><br><b><u>(pCi/m<sup>3</sup>)</u></b> |
|---------------------------------|---|----------|----------------------------------------------------------|
| 12/31/18                        | - | 01/14/19 | < 0.005                                                  |
| 01/14/19                        | - | 01/29/19 | < 0.004                                                  |
| 01/29/19                        | - | 02/12/19 | < 0.008                                                  |
| 02/12/19                        | - | 02/26/19 | < 0.009                                                  |
| 02/26/19                        | - | 03/13/19 | < 0.006                                                  |
| 03/13/19                        | - | 03/27/19 | < 0.010                                                  |
| 03/27/19                        | - | 04/10/19 | < 0.007                                                  |
| 04/10/19                        | - | 04/24/19 | < 0.006                                                  |
| 04/24/19                        | - | 05/08/19 | < 0.005                                                  |
| 05/08/19                        | - | 05/22/19 | < 0.007                                                  |
| 05/22/19                        | - | 06/05/19 | < 0.005                                                  |
| 06/05/19                        | - | 06/19/19 | < 0.006                                                  |
| 06/19/19                        | - | 07/03/19 | < 0.008                                                  |
| 07/03/19                        | - | 07/16/19 | < 0.004                                                  |
| 07/16/19                        | - | 07/31/19 | < 0.004                                                  |
| 07/31/19                        | - | 08/14/19 | < 0.003                                                  |
| 08/14/19                        | - | 08/28/19 | < 0.004                                                  |
| 08/28/19                        | - | 09/11/19 | < 0.004                                                  |
| 09/11/19                        | - | 09/25/19 | < 0.005                                                  |
| 09/25/19                        | - | 10/09/19 | < 0.004                                                  |
| 10/08/19                        | - | 10/23/19 | < 0.004                                                  |
| 10/23/19                        | - | 11/06/19 | < 0.006                                                  |
| 11/06/19                        | - | 11/20/19 | < 0.004                                                  |
| 11/20/19                        | - | 12/04/19 | < 0.005                                                  |
| 12/04/19                        | - | 12/18/19 | < 0.007                                                  |
| 12/18/19                        | - | 12/30/19 | < 0.006                                                  |

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Results of Analyses for Iodine-131 in Bi-Weekly Air Samples**

**Forked River Marina (OCAI03)**

| <b><u>Collection Period</u></b> |   |          | <b><u>I-131</u></b><br><b><u>(pCi/m<sup>3</sup>)</u></b> |
|---------------------------------|---|----------|----------------------------------------------------------|
| 12/31/18                        | - | 01/14/19 | < 0.004                                                  |
| 01/14/19                        | - | 01/29/19 | < 0.005                                                  |
| 01/29/19                        | - | 02/12/19 | < 0.008                                                  |
| 02/12/19                        | - | 02/26/19 | < 0.006                                                  |
| 02/26/19                        | - | 03/13/19 | < 0.005                                                  |
| 03/13/19                        | - | 03/27/19 | < 0.008                                                  |
| 03/27/19                        | - | 04/10/19 | < 0.004                                                  |
| 04/10/19                        | - | 04/24/19 | < 0.004                                                  |
| 04/24/19                        | - | 05/08/19 | < 0.004                                                  |
| 05/08/19                        | - | 05/22/19 | < 0.008                                                  |
| 05/22/19                        | - | 06/05/19 | < 0.003                                                  |
| 06/05/19                        | - | 06/19/19 | < 0.004                                                  |
| 06/19/19                        | - | 07/03/19 | < 0.006                                                  |
| 07/03/19                        | - | 07/16/19 | < 0.006                                                  |
| 07/16/19                        | - | 07/31/19 | < 0.005                                                  |
| 07/31/19                        | - | 08/14/19 | < 0.008                                                  |
| 08/14/19                        | - | 08/28/19 | < 0.004                                                  |
| 08/28/19                        | - | 09/11/19 | < 0.004                                                  |
| 09/11/19                        | - | 09/25/19 | < 0.003                                                  |
| 09/25/19                        | - | 10/09/19 | < 0.005                                                  |
| 10/08/19                        | - | 10/23/19 | < 0.005                                                  |
| 10/23/19                        | - | 11/06/19 | < 0.005                                                  |
| 11/06/19                        | - | 11/20/19 | < 0.004                                                  |
| 11/20/19                        | - | 12/04/19 | < 0.005                                                  |
| 12/04/19                        | - | 12/18/19 | < 0.005                                                  |
| 12/18/19                        | - | 12/30/19 | < 0.004                                                  |

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Results of Analyses for Iodine-131 in Bi-Weekly Air Samples**

**Lacey Township Recreation Building (OCAI04)**

| <u>Collection Period</u> |   |          | <u>I-131</u><br><u>(pCi/m<sup>3</sup>)</u> |
|--------------------------|---|----------|--------------------------------------------|
| 12/31/18                 | - | 01/14/19 | < 0.003                                    |
| 01/14/19                 | - | 01/29/19 | < 0.004                                    |
| 01/29/19                 | - | 02/12/19 | < 0.006                                    |
| 02/12/19                 | - | 02/26/19 | < 0.009                                    |
| 02/26/19                 | - | 03/13/19 | < 0.005                                    |
| 03/13/19                 | - | 03/27/19 | < 0.006                                    |
| 03/27/19                 | - | 04/10/19 | < 0.008                                    |
| 04/10/19                 | - | 04/24/19 | < 0.007                                    |
| 04/24/19                 | - | 05/08/19 | < 0.005                                    |
| 05/08/19                 | - | 05/22/19 | < 0.002                                    |
| 05/22/19                 | - | 06/05/19 | < 0.006                                    |
| 06/05/19                 | - | 06/19/19 | < 0.006                                    |
| 06/19/19                 | - | 07/03/19 | < 0.006                                    |
| 07/03/19                 | - | 07/16/19 | < 0.006                                    |
| 07/16/19                 | - | 07/31/19 | < 0.003                                    |
| 07/31/19                 | - | 08/14/19 | < 0.005                                    |
| 08/14/19                 | - | 08/28/19 | < 0.004                                    |
| 08/28/19                 | - | 09/11/19 | < 0.004                                    |
| 09/11/19                 | - | 09/25/19 | < 0.005                                    |
| 09/25/19                 | - | 10/09/19 | < 0.004                                    |
| 10/08/19                 | - | 10/23/19 | < 0.004                                    |
| 10/23/19                 | - | 11/06/19 | < 0.004                                    |
| 11/06/19                 | - | 11/20/19 | < 0.006                                    |
| 11/20/19                 | - | 12/04/19 | < 0.004                                    |
| 12/04/19                 | - | 12/18/19 | < 0.004                                    |
| 12/18/19                 | - | 12/30/19 | < 0.005                                    |

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Results of Analyses for Iodine-131 in Bi-Weekly Air Samples**

**JCP&L Substation (OCAI05)**

| <b><u>Collection Period</u></b> |   |          | <b><u>I-131</u><br/><u>(pCi/m<sup>3</sup>)</u></b> |
|---------------------------------|---|----------|----------------------------------------------------|
| 12/31/18                        | - | 01/14/19 | < 0.009                                            |
| 01/14/19                        | - | 01/29/19 | < 0.009                                            |
| 01/29/19                        | - | 02/12/19 | < 0.006                                            |
| 02/12/19                        | - | 02/26/19 | < 0.007                                            |
| 02/26/19                        | - | 03/13/19 | < 0.007                                            |
| 03/13/19                        | - | 03/27/19 | < 0.009                                            |
| 03/27/19                        | - | 04/10/19 | < 0.006                                            |
| 04/10/19                        | - | 04/24/19 | < 0.005                                            |
| 04/24/19                        | - | 05/08/19 | < 0.005                                            |
| 05/08/19                        | - | 05/22/19 | < 0.005                                            |
| 05/22/19                        | - | 06/05/19 | < 0.009                                            |
| 06/05/19                        | - | 06/19/19 | < 0.007                                            |
| 06/19/19                        | - | 07/03/19 | < 0.007                                            |
| 07/03/19                        | - | 07/16/19 | < 0.008                                            |
| 07/16/19                        | - | 07/31/19 | < 0.004                                            |
| 07/31/19                        | - | 08/14/19 | < 0.003                                            |
| 08/14/19                        | - | 08/28/19 | < 0.004                                            |
| 08/28/19                        | - | 09/11/19 | < 0.004                                            |
| 09/11/19                        | - | 09/25/19 | < 0.004                                            |
| 09/25/19                        | - | 10/09/19 | < 0.005                                            |
| 10/08/19                        | - | 10/23/19 | < 0.003                                            |
| 10/23/19                        | - | 11/06/19 | < 0.004                                            |
| 11/06/19                        | - | 11/20/19 | < 0.004                                            |
| 11/20/19                        | - | 12/04/19 | < 0.003                                            |
| 12/04/19                        | - | 12/18/19 | < 0.005                                            |
| 12/18/19                        | - | 12/30/19 | < 0.003                                            |

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Results of Analyses for Iodine-131 in Weekly\* Air Samples**

**Finninger Farm, OC Dredge Site (OCAI06)**

| <u>Collection Period</u> |   |          | <u>I-131</u><br><u>(pCi/m<sup>3</sup>)</u> |
|--------------------------|---|----------|--------------------------------------------|
| 12/27/18                 | - | 01/02/19 | < 0.026                                    |
| 01/02/19                 | - | 01/09/19 | < 0.019                                    |
| 01/09/19                 | - | 01/16/19 | < 0.015                                    |
| 01/16/19                 | - | 01/23/19 | < 0.046                                    |
| 01/23/19                 | - | 01/31/19 | < 0.029                                    |
| 01/31/19                 | - | 02/06/19 | < 0.024                                    |
| 02/06/19                 | - | 02/14/19 | < 0.014                                    |
| 02/14/19                 | - | 02/21/19 | < 0.035                                    |
| 02/21/19                 | - | 02/27/19 | < 0.041                                    |
| 02/27/19                 | - | 03/06/19 | < 0.018                                    |
| 03/06/19                 | - | 03/13/19 | < 0.021                                    |
| 03/13/19                 | - | 03/20/19 | < 0.057                                    |
| 03/20/19                 | - | 03/27/19 | < 0.034                                    |
| 03/27/19                 | - | 04/03/19 | < 0.031                                    |
| 04/03/19                 | - | 04/09/19 | < 0.021                                    |
| 04/09/19                 | - | 04/17/19 | < 0.022                                    |
| 04/17/19                 | - | 04/24/19 | < 0.035                                    |
| 04/24/19                 | - | 05/01/19 | < 0.024                                    |
| 05/01/19                 | - | 05/09/19 | < 0.021                                    |
| 05/09/19                 | - | 05/15/19 | < 0.014                                    |
| 05/15/19                 | - | 05/21/19 | < 0.029                                    |
| 05/21/19                 | - | 05/29/19 | < 0.019                                    |
| 05/29/19                 | - | 06/05/19 | < 0.020                                    |
| 06/05/19                 | - | 06/12/19 | < 0.042                                    |
| 06/12/19                 | - | 06/19/19 | < 0.016                                    |
| 06/19/19                 | - | 06/25/19 | < 0.020                                    |

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>)

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



**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Results of Analyses for Iodine-131 in Weekly\* Air Samples**

**Finninger Farm, OC Dredge Site (OCAI06) - continued**

| <u>Collection Period</u> |   |          | <u>I-131</u><br><u>(pCi/m<sup>3</sup>)</u> |
|--------------------------|---|----------|--------------------------------------------|
| 06/25/19                 | - | 07/02/19 | < 0.041                                    |
| 07/02/19                 | - | 07/10/19 | < 0.030                                    |
| 07/10/19                 | - | 07/16/19 | < 0.042                                    |
| 07/16/19                 | - | 07/24/19 | < 0.015                                    |
| 07/24/19                 | - | 07/30/19 | < 0.025                                    |
| 07/30/19                 | - | 08/07/19 | < 0.022                                    |
| 08/07/19                 | - | 08/15/19 | < 0.017                                    |
| 08/15/19                 | - | 08/21/19 | < 0.015                                    |
| 08/21/19                 | - | 08/27/19 | < 0.019                                    |
| 08/27/19                 | - | 09/04/19 | < 0.031                                    |
| 09/04/19                 | - | 09/11/19 | < 0.018                                    |
| 09/11/19                 | - | 09/18/19 | < 0.029                                    |
| 09/18/19                 | - | 09/24/19 | < 0.022                                    |
| 09/24/19                 | - | 10/02/19 | < 0.035                                    |
| 10/02/19                 | - | 10/09/19 | < 0.025                                    |
| 10/09/19                 | - | 10/17/19 | < 0.018                                    |
| 10/17/19                 | - | 10/23/19 | < 0.023                                    |
| 10/23/19                 | - | 10/29/19 | < 0.021                                    |
| 10/29/19                 | - | 11/05/19 | < 0.018                                    |
| 11/05/19                 | - | 11/13/19 | < 0.017                                    |
| 11/13/19                 | - | 11/20/19 | < 0.012                                    |
| 11/20/19                 | - | 11/26/19 | < 0.022                                    |
| 11/26/19                 | - | 12/04/19 | < 0.013                                    |
| 12/04/19                 | - | 12/11/19 | < 0.019                                    |
| 12/11/19                 | - | 12/18/19 | < 0.019                                    |
| 12/18/19                 | - | 12/26/19 | < 0.020                                    |
| 12/26/19                 | - | 01/02/20 | < 0.016                                    |

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>)

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Results of Analyses for Iodine-131 in Bi-Weekly Air Samples**

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

| <u>Collection Period</u> |   |          | <u>I-131</u><br><u>(pCi/m<sup>3</sup>)</u> |
|--------------------------|---|----------|--------------------------------------------|
| 12/31/18                 | - | 01/14/19 | < 0.004                                    |
| 01/14/19                 | - | 01/29/19 | < 0.004                                    |
| 01/29/19                 | - | 02/12/19 | < 0.006                                    |
| 02/12/19                 | - | 02/26/19 | < 0.005                                    |
| 02/26/19                 | - | 03/13/19 | < 0.007                                    |
| 03/13/19                 | - | 03/27/19 | < 0.009                                    |
| 03/27/19                 | - | 04/10/19 | < 0.003                                    |
| 04/10/19                 | - | 04/24/19 | < 0.007                                    |
| 04/24/19                 | - | 05/08/19 | < 0.004                                    |
| 05/08/19                 | - | 05/22/19 | < 0.007                                    |
| 05/22/19                 | - | 06/05/19 | < 0.007                                    |
| 06/05/19                 | - | 06/19/19 | < 0.005                                    |
| 06/19/19                 | - | 07/03/19 | < 0.006                                    |
| 07/03/19                 | - | 07/16/19 | < 0.006                                    |
| 07/16/19                 | - | 07/31/19 | < 0.004                                    |
| 07/31/19                 | - | 08/14/19 | < 0.004                                    |
| 08/14/19                 | - | 08/28/19 | < 0.004                                    |
| 08/28/19                 | - | 09/11/19 | < 0.004                                    |
| 09/11/19                 | - | 09/25/19 | < 0.003                                    |
| 09/25/19                 | - | 10/09/19 | < 0.004                                    |
| 10/08/19                 | - | 10/23/19 | < 0.004                                    |
| 10/23/19                 | - | 11/06/19 | < 0.004                                    |
| 11/06/19                 | - | 11/20/19 | < 0.004                                    |
| 11/20/19                 | - | 12/04/19 | < 0.005                                    |
| 12/04/19                 | - | 12/18/19 | < 0.003                                    |
| 12/18/19                 | - | 12/30/19 | < 0.004                                    |

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Results of Analyses for Iodine-131 in Bi-Weekly Air Samples**

**East of US Route 9 and South of Discharge Canal Inside Fence (SE Sector) (OCAI08)**

| <u>Collection Period</u> |   |          | <u>I-131</u><br><u>(pCi/m<sup>3</sup>)</u> |
|--------------------------|---|----------|--------------------------------------------|
| 12/31/18                 | - | 01/14/19 | < 0.005                                    |
| 01/14/19                 | - | 01/29/19 | < 0.003                                    |
| 01/29/19                 | - | 02/12/19 | < 0.008                                    |
| 02/12/19                 | - | 02/26/19 | < 0.007                                    |
| 02/26/19                 | - | 03/13/19 | < 0.006                                    |
| 03/13/19                 | - | 03/27/19 | < 0.018                                    |
| 03/27/19                 | - | 04/10/19 | < 0.005                                    |
| 04/10/19                 | - | 04/24/19 | < 0.003                                    |
| 04/24/19                 | - | 05/08/19 | < 0.005                                    |
| 05/08/19                 | - | 05/22/19 | < 0.004                                    |
| 05/22/19                 | - | 06/05/19 | < 0.008                                    |
| 06/05/19                 | - | 06/19/19 | < 0.003                                    |
| 06/19/19                 | - | 07/03/19 | < 0.006                                    |
| 07/03/19                 | - | 07/16/19 | < 0.007                                    |
| 07/16/19                 | - | 07/31/19 | < 0.003                                    |
| 07/31/19                 | - | 08/14/19 | < 0.005                                    |
| 08/14/19                 | - | 08/28/19 | < 0.005                                    |
| 08/28/19                 | - | 09/11/19 | < 0.004                                    |
| 09/11/19                 | - | 09/25/19 | < 0.004                                    |
| 09/25/19                 | - | 10/09/19 | < 0.004                                    |
| 10/08/19                 | - | 10/23/19 | < 0.006                                    |
| 10/23/19                 | - | 11/06/19 | < 0.005                                    |
| 11/06/19                 | - | 11/20/19 | < 0.005                                    |
| 11/20/19                 | - | 12/04/19 | < 0.003                                    |
| 12/04/19                 | - | 12/18/19 | < 0.003                                    |
| 12/18/19                 | - | 12/30/19 | < 0.005                                    |

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Salem/Hope Creek  
Results of Analyses for Iodine-131 in Bi-Weekly Air Samples**

**Fort Elfsborg Road (AIAI01)**

| <b><u>Collection Period</u></b> |   |          | <b><u>I-131</u></b><br><b><u>(pCi/m<sup>3</sup>)</u></b> |
|---------------------------------|---|----------|----------------------------------------------------------|
| 01/02/19                        | - | 01/14/19 | < 0.005                                                  |
| 01/14/19                        | - | 01/29/19 | < 0.004                                                  |
| 01/29/19                        | - | 02/12/19 | < 0.008                                                  |
| 02/12/19                        | - | 02/26/19 | < 0.010                                                  |
| 02/26/19                        | - | 03/13/19 | < 0.009                                                  |
| 03/13/19                        | - | 03/27/19 | < 0.009                                                  |
| 03/27/19                        | - | 04/10/19 | < 0.008                                                  |
| 04/10/19                        | - | 04/24/19 | < 0.007                                                  |
| 04/24/19                        | - | 05/08/19 | < 0.003                                                  |
| 05/08/19                        | - | 05/22/19 | < 0.004                                                  |
| 05/22/19                        | - | 06/05/19 | < 0.007                                                  |
| 06/05/19                        | - | 06/19/19 | < 0.007                                                  |
| 06/19/19                        | - | 07/03/19 | < 0.004                                                  |
| 07/03/19                        | - | 07/16/19 | < 0.009                                                  |
| 07/16/19                        | - | 07/31/19 | < 0.004                                                  |
| 07/31/19                        | - | 08/14/19 | < 0.003                                                  |
| 08/14/19                        | - | 08/28/19 | < 0.005                                                  |
| 08/28/19                        | - | 09/11/19 | < 0.003                                                  |
| 09/11/19                        | - | 09/25/19 | < 0.003                                                  |
| 09/25/19                        | - | 10/08/19 | < 0.004                                                  |
| 10/08/19                        | - | 10/23/19 | < 0.006                                                  |
| 10/23/19                        | - | 11/06/19 | < 0.004                                                  |
| 11/06/19                        | - | 11/20/19 | < 0.004                                                  |
| 11/20/19                        | - | 12/04/19 | < 0.005                                                  |
| 12/04/19                        | - | 12/18/19 | < 0.004                                                  |
| 12/18/19                        | - | 12/30/19 | < 0.004                                                  |

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Salem/Hope Creek  
Results of Analyses for Iodine-131 in Bi-Weekly Air Samples**

**Plant Access Road (AIAI02)**

| <b><u>Collection Period</u></b> |   |          | <b><u>I-131</u></b><br><b><u>(pCi/m<sup>3</sup>)</u></b> |
|---------------------------------|---|----------|----------------------------------------------------------|
| 01/02/19                        | - | 01/14/19 | < 0.008                                                  |
| 01/14/19                        | - | 01/29/19 | < 0.006                                                  |
| 01/29/19                        | - | 02/12/19 | < 0.006                                                  |
| 02/12/19                        | - | 02/26/19 | < 0.006                                                  |
| 02/26/19                        | - | 03/13/19 | < 0.005                                                  |
| 03/13/19                        | - | 03/27/19 | < 0.008                                                  |
| 03/27/19                        | - | 04/10/19 | < 0.006                                                  |
| 04/10/19                        | - | 04/24/19 | < 0.005                                                  |
| 04/24/19                        | - | 05/08/19 | < 0.005                                                  |
| 05/08/19                        | - | 05/22/19 | < 0.008                                                  |
| 05/22/19                        | - | 06/05/19 | < 0.005                                                  |
| 06/05/19                        | - | 06/19/19 | < 0.006                                                  |
| 06/19/19                        | - | 07/03/19 | < 0.008                                                  |
| 07/03/19                        | - | 07/16/19 | < 0.007                                                  |
| 07/16/19                        | - | 07/31/19 | < 0.003                                                  |
| 07/31/19                        | - | 08/14/19 | < 0.003                                                  |
| 08/14/19                        | - | 08/28/19 | < 0.003                                                  |
| 08/28/19                        | - | 09/11/19 | < 0.006                                                  |
| 09/11/19                        | - | 09/25/19 | < 0.004                                                  |
| 09/25/19                        | - | 10/08/19 | < 0.005                                                  |
| 10/08/19                        | - | 10/23/19 | < 0.004                                                  |
| 10/23/19                        | - | 11/06/19 | < 0.006                                                  |
| 11/06/19                        | - | 11/20/19 | < 0.005                                                  |
| 11/20/19                        | - | 12/04/19 | < 0.004                                                  |
| 12/04/19                        | - | 12/18/19 | < 0.005                                                  |
| 12/18/19                        | - | 12/30/19 | < 0.004                                                  |

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Salem/Hope Creek  
Results of Analyses for Iodine-131 in Bi-Weekly Air Samples**

**Lower Alloways Creek School (AIAI03)**

| <b><u>Collection Period</u></b> |   |          | <b><u>I-131</u></b><br><b><u>(pCi/m<sup>3</sup>)</u></b> |
|---------------------------------|---|----------|----------------------------------------------------------|
| 01/02/19                        | - | 01/14/19 | < 0.005                                                  |
| 01/14/19                        | - | 01/29/19 | < 0.004                                                  |
| 01/29/19                        | - | 02/12/19 | < 0.006                                                  |
| 02/12/19                        | - | 02/26/19 | < 0.004                                                  |
| 02/26/19                        | - | 03/13/19 | < 0.005                                                  |
| 03/13/19                        | - | 03/27/19 | < 0.004                                                  |
| 03/27/19                        | - | 04/10/19 | < 0.004                                                  |
| 04/10/19                        | - | 04/24/19 | < 0.008                                                  |
| 04/24/19                        | - | 05/08/19 | < 0.005                                                  |
| 05/08/19                        | - | 05/22/19 | < 0.004                                                  |
| 05/22/19                        | - | 06/05/19 | < 0.008                                                  |
| 06/05/19                        | - | 06/19/19 | < 0.005                                                  |
| 06/19/19                        | - | 07/03/19 | < 0.004                                                  |
| 07/03/19                        | - | 07/16/19 | < 0.004                                                  |
| 07/16/19                        | - | 07/31/19 | < 0.001                                                  |
| 07/31/19                        | - | 08/14/19 | < 0.004                                                  |
| 08/14/19                        | - | 08/28/19 | < 0.003                                                  |
| 08/28/19                        | - | 09/11/19 | < 0.005                                                  |
| 09/11/19                        | - | 09/25/19 | < 0.005                                                  |
| 09/25/19                        | - | 10/08/19 | < 0.004                                                  |
| 10/08/19                        | - | 10/23/19 | < 0.004                                                  |
| 10/23/19                        | - | 11/06/19 | < 0.003                                                  |
| 11/06/19                        | - | 11/20/19 | < 0.003                                                  |
| 11/20/19                        | - | 12/04/19 | < 0.004                                                  |
| 12/04/19                        | - | 12/18/19 | < 0.004                                                  |
| 12/18/19                        | - | 12/30/19 | < 0.007                                                  |

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Salem/Hope Creek  
Results of Analyses for Iodine-131 in Bi-Weekly Air Samples**

**SE Sector, PSE&G Owner Controlled Area (AIAI04)**

| <b><u>Collection Period</u></b> |   |          | <b><u>I-131</u></b><br><b><u>(pCi/m<sup>3</sup>)</u></b> |
|---------------------------------|---|----------|----------------------------------------------------------|
| 01/02/19                        | - | 01/14/19 | < 0.005                                                  |
| 01/14/19                        | - | 01/29/19 | < 0.004                                                  |
| 01/29/19                        | - | 02/12/19 | < 0.005                                                  |
| 02/12/19                        | - | 02/26/19 | < 0.007                                                  |
| 02/26/19                        | - | 03/13/19 | < 0.006                                                  |
| 03/13/19                        | - | 03/27/19 | < 0.006                                                  |
| 03/27/19                        | - | 04/10/19 | < 0.005                                                  |
| 04/10/19                        | - | 04/24/19 | < 0.004                                                  |
| 04/24/19                        | - | 05/08/19 | < 0.004                                                  |
| 05/08/19                        | - | 05/22/19 | < 0.006                                                  |
| 05/22/19                        | - | 06/05/19 | < 0.004                                                  |
| 06/05/19                        | - | 06/19/19 | < 0.005                                                  |
| 06/19/19                        | - | 07/03/19 | < 0.010                                                  |
| 07/03/19                        | - | 07/16/19 | < 0.005                                                  |
| 07/16/19                        | - | 07/31/19 | < 0.005                                                  |
| 07/31/19                        | - | 08/14/19 | < 0.003                                                  |
| 08/14/19                        | - | 08/28/19 | < 0.004                                                  |
| 08/28/19                        | - | 09/11/19 | < 0.004                                                  |
| 09/11/19                        | - | 09/25/19 | < 0.003                                                  |
| 09/25/19                        | - | 10/08/19 | < 0.005                                                  |
| 10/08/19                        | - | 10/23/19 | < 0.004                                                  |
| 10/23/19                        | - | 11/06/19 | < 0.004                                                  |
| 11/06/19                        | - | 11/20/19 | < 0.005                                                  |
| 11/20/19                        | - | 12/04/19 | < 0.004                                                  |
| 12/04/19                        | - | 12/18/19 | < 0.004                                                  |
| 12/18/19                        | - | 12/30/19 | < 0.005                                                  |

Results in picoCuries per cubic meter (pCi/m<sup>3</sup>)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**BNE Background Locations  
Gross Beta Activity in Bi-Weekly Air Particulate Samples**

**BNE Office (COAP01)**

| <b><u>Collection Period</u></b> |   |          | <b><u>Particulate Gross Beta</u></b><br><b><u>(pCi/m<sup>3</sup>)</u></b> |
|---------------------------------|---|----------|---------------------------------------------------------------------------|
| 01/02/19                        | - | 01/14/19 | 0.021 ± 0.002                                                             |
| 01/14/19                        | - | 01/29/19 | 0.021 ± 0.002                                                             |
| 01/29/19                        | - | 02/12/19 | 0.021 ± 0.002                                                             |
| 02/12/19                        | - | 02/26/19 | 0.023 ± 0.002                                                             |
| 02/26/19                        | - | 03/13/19 | 0.022 ± 0.002                                                             |
| 03/13/19                        | - | 03/27/19 | 0.016 ± 0.002                                                             |
| 03/27/19                        | - | 04/10/19 | 0.008 ± 0.001                                                             |
| 04/10/19                        | - | 04/24/19 | 0.011 ± 0.001                                                             |
| 04/24/19                        | - | 05/08/19 | 0.011 ± 0.001                                                             |
| 05/08/19                        | - | 05/22/19 | 0.015 ± 0.002                                                             |
| 05/22/19                        | - | 06/05/19 | 0.013 ± 0.002                                                             |
| 06/05/19                        | - | 06/19/19 | 0.016 ± 0.002                                                             |
| 06/19/19                        | - | 07/03/19 | 0.019 ± 0.002                                                             |
| 07/03/19                        | - | 07/16/19 | 0.016 ± 0.002                                                             |
| 07/16/19                        | - | 07/31/19 | 0.022 ± 0.002                                                             |
| 07/31/19                        | - | 08/14/19 | 0.019 ± 0.002                                                             |
| 08/14/19                        | - | 08/28/19 | 0.023 ± 0.002                                                             |
| 08/28/19                        | - | 09/11/19 | 0.021 ± 0.002                                                             |
| 09/11/19                        | - | 09/25/19 | 0.023 ± 0.002                                                             |
| 09/25/19                        | - | 10/08/19 | 0.018 ± 0.002                                                             |
| 10/08/19                        | - | 10/23/19 | 0.020 ± 0.002                                                             |
| 10/23/19                        | - | 11/06/19 | 0.017 ± 0.002                                                             |
| 11/06/19                        | - | 11/20/19 | 0.007 ± 0.001                                                             |
| 11/20/19                        | - | 12/04/19 | 0.015 ± 0.002                                                             |
| 12/04/19                        | - | 12/18/19 | 0.016 ± 0.002                                                             |
| 12/18/19                        | - | 12/30/19 | 0.027 ± 0.002                                                             |

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



**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**BNE Background Locations  
Gross Beta Activity in Bi-Weekly Air Particulate Samples**

**Brendan T. Byrne State Forest (COAP02)**

| <u>Collection Period</u> |   |          | <u>Particulate Gross Beta</u><br><u>(pCi/m<sup>3</sup>)</u> |
|--------------------------|---|----------|-------------------------------------------------------------|
| 12/31/18                 | - | 01/14/19 | 0.018 ± 0.002                                               |
| 01/14/19                 | - | 01/29/19 | 0.018 ± 0.002                                               |
| 01/29/19                 | - | 02/12/19 | 0.021 ± 0.002                                               |
| 02/12/19                 | - | 02/26/19 | 0.017 ± 0.002                                               |
| 02/26/19                 | - | 03/13/19 | 0.023 ± 0.002                                               |
| 03/13/19                 | - | 03/27/19 | 0.017 ± 0.002                                               |
| 03/27/19                 | - | 04/10/19 | 0.014 ± 0.001                                               |
| 04/10/19                 | - | 04/24/19 | 0.013 ± 0.001                                               |
| 04/24/19                 | - | 05/08/19 | 0.012 ± 0.001                                               |
| 05/08/19                 | - | 05/22/19 | 0.014 ± 0.002                                               |
| 05/22/19                 | - | 06/05/19 | 0.013 ± 0.001                                               |
| 06/05/19                 | - | 06/19/19 | 0.016 ± 0.002                                               |
| 06/19/19                 | - | 07/03/19 | 0.018 ± 0.002                                               |
| 07/03/19                 | - | 07/16/19 | 0.020 ± 0.002                                               |
| 07/16/19                 | - | 07/31/19 | 0.021 ± 0.002                                               |
| 07/31/19                 | - | 08/14/19 | 0.024 ± 0.002                                               |
| 08/14/19                 | - | 08/28/19 | 0.021 ± 0.002                                               |
| 08/28/19                 | - | 09/11/19 | 0.021 ± 0.002                                               |
| 09/11/19                 | - | 09/25/19 | 0.022 ± 0.002                                               |
| 09/25/19                 | - | 10/09/19 | 0.019 ± 0.002                                               |
| 10/08/19                 | - | 10/23/19 | 0.021 ± 0.002                                               |
| 10/23/19                 | - | 11/06/19 | 0.019 ± 0.002                                               |
| 11/06/19                 | - | 11/20/19 | 0.026 ± 0.002                                               |
| 11/20/19                 | - | 12/04/19 | 0.020 ± 0.002                                               |
| 12/04/19                 | - | 12/18/19 | 0.018 ± 0.002                                               |
| 12/18/19                 | - | 12/30/19 | 0.031 ± 0.003                                               |

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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

**Waretown Municipal Building (OCAP01)**

| <b><u>Collection Period</u></b> |   |          | <b><u>Particulate Gross Beta</u></b><br><b><u>(pCi/m<sup>3</sup>)</u></b> |
|---------------------------------|---|----------|---------------------------------------------------------------------------|
| 12/31/18                        | - | 01/14/19 | 0.019 ± 0.002                                                             |
| 01/14/19                        | - | 01/29/19 | 0.018 ± 0.002                                                             |
| 01/29/19                        | - | 02/12/19 | 0.020 ± 0.002                                                             |
| 02/12/19                        | - | 02/26/19 | 0.018 ± 0.002                                                             |
| 02/26/19                        | - | 03/13/19 | 0.022 ± 0.002                                                             |
| 03/13/19                        | - | 03/27/19 | 0.017 ± 0.002                                                             |
| 03/27/19                        | - | 04/10/19 | 0.014 ± 0.001                                                             |
| 04/10/19                        | - | 04/24/19 | 0.011 ± 0.001                                                             |
| 04/24/19                        | - | 05/08/19 | 0.011 ± 0.001                                                             |
| 05/08/19                        | - | 05/22/19 | 0.016 ± 0.002                                                             |
| 05/22/19                        | - | 06/05/19 | 0.012 ± 0.001                                                             |
| 06/05/19                        | - | 06/19/19 | 0.013 ± 0.002                                                             |
| 06/19/19                        | - | 07/03/19 | 0.018 ± 0.002                                                             |
| 07/03/19                        | - | 07/16/19 | 0.020 ± 0.002                                                             |
| 07/16/19                        | - | 07/31/19 | 0.020 ± 0.002                                                             |
| 07/31/19                        | - | 08/14/19 | 0.023 ± 0.002                                                             |
| 08/14/19                        | - | 08/28/19 | 0.018 ± 0.002                                                             |
| 08/28/19                        | - | 09/11/19 | 0.021 ± 0.002                                                             |
| 09/11/19                        | - | 09/25/19 | 0.021 ± 0.002                                                             |
| 09/25/19                        | - | 10/09/19 | 0.017 ± 0.002                                                             |
| 10/08/19                        | - | 10/23/19 | 0.017 ± 0.002                                                             |
| 10/23/19                        | - | 11/06/19 | 0.014 ± 0.002                                                             |
| 11/06/19                        | - | 11/20/19 | 0.019 ± 0.002                                                             |
| 11/20/19                        | - | 12/04/19 | 0.018 ± 0.002                                                             |
| 12/04/19                        | - | 12/18/19 | 0.016 ± 0.002                                                             |
| 12/18/19                        | - | 12/30/19 | 0.030 ± 0.002                                                             |

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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

**Sands Point Harbor (OCAP02)**

| <u>Collection Period</u> |   |          | <u>Particulate Gross Beta</u><br><u>(pCi/m<sup>3</sup>)</u> |
|--------------------------|---|----------|-------------------------------------------------------------|
| 12/31/18                 | - | 01/14/19 | 0.023 ± 0.002                                               |
| 01/14/19                 | - | 01/29/19 | 0.020 ± 0.002                                               |
| 01/29/19                 | - | 02/12/19 | 0.020 ± 0.002                                               |
| 02/12/19                 | - | 02/26/19 | 0.023 ± 0.002                                               |
| 02/26/19                 | - | 03/13/19 | 0.026 ± 0.002                                               |
| 03/13/19                 | - | 03/27/19 | 0.019 ± 0.002                                               |
| 03/27/19                 | - | 04/10/19 | 0.014 ± 0.002                                               |
| 04/10/19                 | - | 04/24/19 | 0.014 ± 0.002                                               |
| 04/24/19                 | - | 05/08/19 | 0.013 ± 0.002                                               |
| 05/08/19                 | - | 05/22/19 | 0.016 ± 0.002                                               |
| 05/22/19                 | - | 06/05/19 | 0.011 ± 0.001                                               |
| 06/05/19                 | - | 06/19/19 | 0.015 ± 0.002                                               |
| 06/19/19                 | - | 07/03/19 | 0.016 ± 0.002                                               |
| 07/03/19                 | - | 07/16/19 | 0.020 ± 0.002                                               |
| 07/16/19                 | - | 07/31/19 | 0.019 ± 0.002                                               |
| 07/31/19                 | - | 08/14/19 | 0.023 ± 0.002                                               |
| 08/14/19                 | - | 08/28/19 | 0.019 ± 0.002                                               |
| 08/28/19                 | - | 09/11/19 | 0.019 ± 0.002                                               |
| 09/11/19                 | - | 09/25/19 | 0.020 ± 0.002                                               |
| 09/25/19                 | - | 10/09/19 | 0.016 ± 0.002                                               |
| 10/08/19                 | - | 10/23/19 | 0.017 ± 0.002                                               |
| 10/23/19                 | - | 11/06/19 | 0.014 ± 0.002                                               |
| 11/06/19                 | - | 11/20/19 | 0.020 ± 0.002                                               |
| 11/20/19                 | - | 12/04/19 | 0.016 ± 0.002                                               |
| 12/04/19                 | - | 12/18/19 | 0.014 ± 0.002                                               |
| 12/18/19                 | - | 12/30/19 | 0.027 ± 0.002                                               |

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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

**Forked River Marina (OCAP03)**

| <b><u>Collection Period</u></b> |   |          | <b><u>Particulate Gross Beta</u></b><br><b><u>(pCi/m<sup>3</sup>)</u></b> |
|---------------------------------|---|----------|---------------------------------------------------------------------------|
| 12/31/18                        | - | 01/14/19 | 0.018 ± 0.002                                                             |
| 01/14/19                        | - | 01/29/19 | 0.021 ± 0.002                                                             |
| 01/29/19                        | - | 02/12/19 | 0.022 ± 0.002                                                             |
| 02/12/19                        | - | 02/26/19 | 0.023 ± 0.002                                                             |
| 02/26/19                        | - | 03/13/19 | 0.020 ± 0.002                                                             |
| 03/13/19                        | - | 03/27/19 | 0.015 ± 0.002                                                             |
| 03/27/19                        | - | 04/10/19 | 0.016 ± 0.002                                                             |
| 04/10/19                        | - | 04/24/19 | 0.013 ± 0.001                                                             |
| 04/24/19                        | - | 05/08/19 | 0.012 ± 0.001                                                             |
| 05/08/19                        | - | 05/22/19 | 0.015 ± 0.002                                                             |
| 05/22/19                        | - | 06/05/19 | 0.012 ± 0.001                                                             |
| 06/05/19                        | - | 06/19/19 | 0.015 ± 0.002                                                             |
| 06/19/19                        | - | 07/03/19 | 0.018 ± 0.002                                                             |
| 07/03/19                        | - | 07/16/19 | 0.018 ± 0.002                                                             |
| 07/16/19                        | - | 07/31/19 | 0.020 ± 0.002                                                             |
| 07/31/19                        | - | 08/14/19 | 0.026 ± 0.003                                                             |
| 08/14/19                        | - | 08/28/19 | 0.018 ± 0.002                                                             |
| 08/28/19                        | - | 09/11/19 | 0.018 ± 0.002                                                             |
| 09/11/19                        | - | 09/25/19 | 0.022 ± 0.002                                                             |
| 09/25/19                        | - | 10/09/19 | 0.017 ± 0.002                                                             |
| 10/08/19                        | - | 10/23/19 | 0.017 ± 0.002                                                             |
| 10/23/19                        | - | 11/06/19 | 0.015 ± 0.002                                                             |
| 11/06/19                        | - | 11/20/19 | 0.020 ± 0.002                                                             |
| 11/20/19                        | - | 12/04/19 | 0.017 ± 0.002                                                             |
| 12/04/19                        | - | 12/18/19 | 0.015 ± 0.002                                                             |
| 12/18/19                        | - | 12/30/19 | 0.028 ± 0.002                                                             |

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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

**Lacey Twp. Recreation Building (OCAP04)**

| <u>Collection Period</u> |   |          | <u>Particulate Gross Beta</u><br><u>(pCi/m<sup>3</sup>)</u> |
|--------------------------|---|----------|-------------------------------------------------------------|
| 12/31/18                 | - | 01/14/19 | 0.020 ± 0.002                                               |
| 01/14/19                 | - | 01/29/19 | 0.018 ± 0.002                                               |
| 01/29/19                 | - | 02/12/19 | 0.020 ± 0.002                                               |
| 02/12/19                 | - | 02/26/19 | 0.018 ± 0.002                                               |
| 02/26/19                 | - | 03/13/19 | 0.020 ± 0.002                                               |
| 03/13/19                 | - | 03/27/19 | 0.016 ± 0.002                                               |
| 03/27/19                 | - | 04/10/19 | 0.014 ± 0.002                                               |
| 04/10/19                 | - | 04/24/19 | 0.013 ± 0.001                                               |
| 04/24/19                 | - | 05/08/19 | 0.011 ± 0.001                                               |
| 05/08/19                 | - | 05/22/19 | 0.016 ± 0.002                                               |
| 05/22/19                 | - | 06/05/19 | 0.013 ± 0.001                                               |
| 06/05/19                 | - | 06/19/19 | 0.016 ± 0.002                                               |
| 06/19/19                 | - | 07/03/19 | 0.014 ± 0.002                                               |
| 07/03/19                 | - | 07/16/19 | 0.021 ± 0.002                                               |
| 07/16/19                 | - | 07/31/19 | 0.018 ± 0.002                                               |
| 07/31/19                 | - | 08/14/19 | 0.022 ± 0.002                                               |
| 08/14/19                 | - | 08/28/19 | 0.020 ± 0.002                                               |
| 08/28/19                 | - | 09/11/19 | 0.021 ± 0.002                                               |
| 09/11/19                 | - | 09/25/19 | 0.023 ± 0.002                                               |
| 09/25/19                 | - | 10/09/19 | 0.020 ± 0.002                                               |
| 10/08/19                 | - | 10/23/19 | 0.021 ± 0.002                                               |
| 10/23/19                 | - | 11/06/19 | 0.019 ± 0.002                                               |
| 11/06/19                 | - | 11/20/19 | 0.021 ± 0.002                                               |
| 11/20/19                 | - | 12/04/19 | 0.021 ± 0.002                                               |
| 12/04/19                 | - | 12/18/19 | 0.017 ± 0.002                                               |
| 12/18/19                 | - | 12/30/19 | 0.033 ± 0.003                                               |

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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

**JCP&L Substation (OCAP05)**

| <u>Collection Period</u> |   |          | <u>Particulate Gross Beta</u><br><u>(pCi/m<sup>3</sup>)</u> |
|--------------------------|---|----------|-------------------------------------------------------------|
| 12/31/18                 | - | 01/14/19 | 0.018 ± 0.002                                               |
| 01/14/19                 | - | 01/29/19 | 0.018 ± 0.002                                               |
| 01/29/19                 | - | 02/12/19 | 0.022 ± 0.002                                               |
| 02/12/19                 | - | 02/26/19 | 0.019 ± 0.002                                               |
| 02/26/19                 | - | 03/13/19 | 0.022 ± 0.002                                               |
| 03/13/19                 | - | 03/27/19 | 0.016 ± 0.002                                               |
| 03/27/19                 | - | 04/10/19 | 0.014 ± 0.002                                               |
| 04/10/19                 | - | 04/24/19 | 0.011 ± 0.001                                               |
| 04/24/19                 | - | 05/08/19 | 0.012 ± 0.001                                               |
| 05/08/19                 | - | 05/22/19 | 0.015 ± 0.002                                               |
| 05/22/19                 | - | 06/05/19 | 0.013 ± 0.002                                               |
| 06/05/19                 | - | 06/19/19 | 0.016 ± 0.002                                               |
| 06/19/19                 | - | 07/03/19 | 0.018 ± 0.002                                               |
| 07/03/19                 | - | 07/16/19 | 0.019 ± 0.002                                               |
| 07/16/19                 | - | 07/31/19 | 0.019 ± 0.002                                               |
| 07/31/19                 | - | 08/14/19 | 0.022 ± 0.002                                               |
| 08/14/19                 | - | 08/28/19 | 0.020 ± 0.002                                               |
| 08/28/19                 | - | 09/11/19 | 0.019 ± 0.002                                               |
| 09/11/19                 | - | 09/25/19 | 0.020 ± 0.002                                               |
| 09/25/19                 | - | 10/09/19 | 0.016 ± 0.002                                               |
| 10/08/19                 | - | 10/23/19 | 0.019 ± 0.002                                               |
| 10/23/19                 | - | 11/06/19 | 0.016 ± 0.002                                               |
| 11/06/19                 | - | 11/20/19 | 0.022 ± 0.002                                               |
| 11/20/19                 | - | 12/04/19 | 0.016 ± 0.002                                               |
| 12/04/19                 | - | 12/18/19 | 0.015 ± 0.002                                               |
| 12/18/19                 | - | 12/30/19 | 0.029 ± 0.002                                               |

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Gross Beta Activity in Weekly\* Air Particulate Samples**

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

| <u>Collection Period</u> |   |          | <u>Particulate Gross Beta</u><br><u>(pCi/m<sup>3</sup>)</u> |
|--------------------------|---|----------|-------------------------------------------------------------|
| 12/27/18                 | - | 01/02/19 | 0.032 ± 0.006                                               |
| 01/02/19                 | - | 01/09/19 | 0.037 ± 0.006                                               |
| 01/09/19                 | - | 01/16/19 | 0.027 ± 0.005                                               |
| 01/16/19                 | - | 01/23/19 | 0.031 ± 0.005                                               |
| 01/23/19                 | - | 01/31/19 | 0.031 ± 0.005                                               |
| 01/31/19                 | - | 02/06/19 | 0.044 ± 0.006                                               |
| 02/06/19                 | - | 02/14/19 | 0.027 ± 0.004                                               |
| 02/14/19                 | - | 02/21/19 | 0.033 ± 0.005                                               |
| 02/21/19                 | - | 02/27/19 | 0.040 ± 0.006                                               |
| 02/27/19                 | - | 03/06/19 | 0.035 ± 0.005                                               |
| 03/06/19                 | - | 03/13/19 | 0.038 ± 0.005                                               |
| 03/13/19                 | - | 03/20/19 | 0.029 ± 0.005                                               |
| 03/20/19                 | - | 03/27/19 | 0.030 ± 0.005                                               |
| 03/27/19                 | - | 04/03/19 | 0.019 ± 0.004                                               |
| 04/03/19                 | - | 04/09/19 | 0.073 ± 0.008                                               |
| 04/09/19                 | - | 04/17/19 | 0.025 ± 0.004                                               |
| 04/17/19                 | - | 04/24/17 | 0.020 ± 0.004                                               |
| 04/24/19                 | - | 05/01/19 | 0.017 ± 0.004                                               |
| 05/01/19                 | - | 05/09/19 | 0.020 ± 0.004                                               |
| 05/09/19                 | - | 05/15/19 | 0.018 ± 0.004                                               |
| 05/15/19                 | - | 05/21/19 | 0.039 ± 0.006                                               |
| 05/21/19                 | - | 05/29/19 | 0.018 ± 0.004                                               |
| 05/29/19                 | - | 06/05/19 | 0.024 ± 0.004                                               |
| 06/05/19                 | - | 06/12/19 | 0.027 ± 0.005                                               |
| 06/12/19                 | - | 06/19/19 | 0.026 ± 0.005                                               |
| 06/19/19                 | - | 06/25/19 | 0.023 ± 0.005                                               |

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

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Gross Beta Activity in Weekly\* Air Particulate Samples**

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

| <u>Collection Period</u> |   |          | <u>Particulate Gross Beta</u><br><u>(pCi/m<sup>3</sup>)</u> |
|--------------------------|---|----------|-------------------------------------------------------------|
| 06/25/19                 | - | 07/02/19 | 0.039 ± 0.006                                               |
| 07/02/19                 | - | 07/10/19 | 0.036 ± 0.005                                               |
| 07/10/19                 | - | 07/16/19 | 0.037 ± 0.006                                               |
| 07/16/19                 | - | 07/24/19 | 0.033 ± 0.005                                               |
| 07/24/19                 | - | 07/30/19 | 0.034 ± 0.006                                               |
| 07/30/19                 | - | 08/07/19 | 0.044 ± 0.005                                               |
| 08/07/19                 | - | 08/15/19 | 0.040 ± 0.005                                               |
| 08/15/19                 | - | 08/21/19 | 0.040 ± 0.006                                               |
| 08/21/19                 | - | 08/27/19 | 0.030 ± 0.005                                               |
| 08/27/19                 | - | 09/04/19 | 0.029 ± 0.005                                               |
| 09/04/19                 | - | 09/11/19 | 0.037 ± 0.005                                               |
| 09/11/19                 | - | 09/18/19 | 0.035 ± 0.005                                               |
| 09/18/19                 | - | 09/24/19 | 0.038 ± 0.006                                               |
| 09/24/19                 | - | 10/02/19 | 0.040 ± 0.005                                               |
| 10/02/19                 | - | 10/09/19 | 0.027 ± 0.005                                               |
| 10/09/19                 | - | 10/17/19 | 0.039 ± 0.005                                               |
| 10/17/19                 | - | 10/23/19 | 0.031 ± 0.006                                               |
| 10/23/19                 | - | 10/29/19 | 0.033 ± 0.006                                               |
| 10/29/19                 | - | 11/05/19 | 0.024 ± 0.004                                               |
| 11/05/19                 | - | 11/13/19 | 0.040 ± 0.005                                               |
| 11/13/19                 | - | 11/20/19 | 0.035 ± 0.005                                               |
| 11/20/19                 | - | 11/26/19 | 0.043 ± 0.006                                               |
| 11/26/19                 | - | 12/04/19 | 0.024 ± 0.005                                               |
| 12/04/19                 | - | 12/11/19 | 0.029 ± 0.005                                               |
| 12/11/19                 | - | 12/18/19 | 0.028 ± 0.005                                               |
| 12/18/19                 | - | 12/26/19 | 0.046 ± 0.005                                               |
| 12/26/19                 | - | 01/02/20 | 0.041 ± 0.005                                               |

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

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



**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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

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

| <u>Collection Period</u> |   |          | <u>Particulate Gross Beta</u><br><u>(pCi/m<sup>3</sup>)</u> |
|--------------------------|---|----------|-------------------------------------------------------------|
| 12/31/18                 | - | 01/14/19 | 0.020 ± 0.002                                               |
| 01/14/19                 | - | 01/29/19 | 0.016 ± 0.002                                               |
| 01/29/19                 | - | 02/12/19 | 0.020 ± 0.002                                               |
| 02/12/19                 | - | 02/26/19 | 0.021 ± 0.002                                               |
| 02/26/19                 | - | 03/13/19 | 0.024 ± 0.002                                               |
| 03/13/19                 | - | 03/27/19 | 0.020 ± 0.002                                               |
| 03/27/19                 | - | 04/10/19 | 0.015 ± 0.002                                               |
| 04/10/19                 | - | 04/24/19 | 0.013 ± 0.002                                               |
| 04/24/19                 | - | 05/08/19 | 0.012 ± 0.002                                               |
| 05/08/19                 | - | 05/22/19 | 0.014 ± 0.002                                               |
| 05/22/19                 | - | 06/05/19 | 0.013 ± 0.001                                               |
| 06/05/19                 | - | 06/19/19 | 0.015 ± 0.002                                               |
| 06/19/19                 | - | 07/03/19 | 0.016 ± 0.002                                               |
| 07/03/19                 | - | 07/16/19 | 0.019 ± 0.002                                               |
| 07/16/19                 | - | 07/31/19 | 0.019 ± 0.002                                               |
| 07/31/19                 | - | 08/14/19 | 0.022 ± 0.002                                               |
| 08/14/19                 | - | 08/28/19 | 0.020 ± 0.002                                               |
| 08/28/19                 | - | 09/11/19 | 0.018 ± 0.002                                               |
| 09/11/19                 | - | 09/25/19 | 0.023 ± 0.002                                               |
| 09/25/19                 | - | 10/09/19 | 0.017 ± 0.002                                               |
| 10/08/19                 | - | 10/23/19 | 0.018 ± 0.002                                               |
| 10/23/19                 | - | 11/06/19 | 0.015 ± 0.002                                               |
| 11/06/19                 | - | 11/20/19 | 0.018 ± 0.002                                               |
| 11/20/19                 | - | 12/04/19 | 0.017 ± 0.002                                               |
| 12/04/19                 | - | 12/18/19 | 0.014 ± 0.002                                               |
| 12/18/19                 | - | 12/30/19 | 0.028 ± 0.002                                               |

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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

**East of US Route 9 and South of Discharge Canal Inside Fence (SE Sector) (OCAP08)**

| <u>Collection Period</u> |   |          | <u>Particulate Gross Beta</u><br><u>(pCi/m<sup>3</sup>)</u> |
|--------------------------|---|----------|-------------------------------------------------------------|
| 12/31/18                 | - | 01/14/19 | 0.019 ± 0.002                                               |
| 01/14/19                 | - | 01/29/19 | 0.018 ± 0.002                                               |
| 01/29/19                 | - | 02/12/19 | 0.020 ± 0.002                                               |
| 02/12/19                 | - | 02/26/19 | 0.024 ± 0.002                                               |
| 02/26/19                 | - | 03/13/19 | 0.022 ± 0.002                                               |
| 03/13/19                 | - | 03/27/19 | 0.018 ± 0.002                                               |
| 03/27/19                 | - | 04/10/19 | 0.017 ± 0.002                                               |
| 04/10/19                 | - | 04/24/19 | 0.010 ± 0.001                                               |
| 04/24/19                 | - | 05/08/19 | 0.011 ± 0.001                                               |
| 05/08/19                 | - | 05/22/19 | 0.014 ± 0.002                                               |
| 05/22/19                 | - | 06/05/19 | 0.013 ± 0.001                                               |
| 06/05/19                 | - | 06/19/19 | 0.015 ± 0.002                                               |
| 06/19/19                 | - | 07/03/19 | 0.017 ± 0.002                                               |
| 07/03/19                 | - | 07/16/19 | 0.019 ± 0.002                                               |
| 07/16/19                 | - | 07/31/19 | 0.020 ± 0.002                                               |
| 07/31/19                 | - | 08/14/19 | 0.024 ± 0.002                                               |
| 08/14/19                 | - | 08/28/19 | 0.020 ± 0.002                                               |
| 08/28/19                 | - | 09/11/19 | 0.019 ± 0.002                                               |
| 09/11/19                 | - | 09/25/19 | 0.021 ± 0.002                                               |
| 09/25/19                 | - | 10/09/19 | 0.017 ± 0.002                                               |
| 10/08/19                 | - | 10/23/19 | 0.019 ± 0.002                                               |
| 10/23/19                 | - | 11/06/19 | 0.015 ± 0.002                                               |
| 11/06/19                 | - | 11/20/19 | 0.019 ± 0.002                                               |
| 11/20/19                 | - | 12/04/19 | 0.016 ± 0.002                                               |
| 12/04/19                 | - | 12/18/19 | 0.014 ± 0.002                                               |
| 12/18/19                 | - | 12/30/19 | 0.028 ± 0.002                                               |

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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

**Fort Elfsborg Road (AIAP01)**

| <u>Collection Period</u> |   |          | <u>Particulate Gross Beta</u><br><u>(pCi/m<sup>3</sup>)</u> |
|--------------------------|---|----------|-------------------------------------------------------------|
| 01/02/19                 | - | 01/14/19 | 0.020 ± 0.002                                               |
| 01/14/19                 | - | 01/29/19 | 0.018 ± 0.002                                               |
| 01/29/19                 | - | 02/12/19 | 0.021 ± 0.002                                               |
| 02/12/19                 | - | 02/26/19 | 0.021 ± 0.002                                               |
| 02/26/19                 | - | 03/13/19 | 0.024 ± 0.002                                               |
| 03/13/19                 | - | 03/27/19 | 0.018 ± 0.002                                               |
| 03/27/19                 | - | 04/10/19 | 0.015 ± 0.002                                               |
| 04/10/19                 | - | 04/24/19 | 0.013 ± 0.001                                               |
| 04/24/19                 | - | 05/08/19 | 0.013 ± 0.001                                               |
| 05/08/19                 | - | 05/22/19 | 0.017 ± 0.002                                               |
| 05/22/19                 | - | 06/05/19 | 0.016 ± 0.002                                               |
| 06/05/19                 | - | 06/19/19 | 0.018 ± 0.002                                               |
| 06/19/19                 | - | 07/03/19 | 0.018 ± 0.002                                               |
| 07/03/19                 | - | 07/16/19 | 0.020 ± 0.002                                               |
| 07/16/19                 | - | 07/31/19 | 0.024 ± 0.002                                               |
| 07/31/19                 | - | 08/14/19 | 0.025 ± 0.002                                               |
| 08/14/19                 | - | 08/28/19 | 0.024 ± 0.002                                               |
| 08/28/19                 | - | 09/11/19 | 0.024 ± 0.002                                               |
| 09/11/19                 | - | 09/25/19 | 0.024 ± 0.002                                               |
| 09/25/19                 | - | 10/08/19 | 0.024 ± 0.002                                               |
| 10/08/19                 | - | 10/23/19 | 0.024 ± 0.002                                               |
| 10/23/19                 | - | 11/06/19 | 0.022 ± 0.002                                               |
| 11/06/19                 | - | 11/20/19 | 0.026 ± 0.002                                               |
| 11/20/19                 | - | 12/04/19 | 0.021 ± 0.002                                               |
| 12/04/19                 | - | 12/18/19 | 0.021 ± 0.002                                               |
| 12/18/19                 | - | 12/30/19 | 0.036 ± 0.003                                               |

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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

**Plant Access Road (AIAP02)**

| <b><u>Collection Period</u></b> |   |          | <b><u>Particulate Gross Beta</u></b><br><b><u>(pCi/m<sup>3</sup>)</u></b> |
|---------------------------------|---|----------|---------------------------------------------------------------------------|
| 01/02/19                        | - | 01/14/19 | 0.020 ± 0.002                                                             |
| 01/14/19                        | - | 01/29/19 | 0.022 ± 0.002                                                             |
| 01/29/19                        | - | 02/12/19 | 0.021 ± 0.002                                                             |
| 02/12/19                        | - | 02/26/19 | 0.020 ± 0.002                                                             |
| 02/26/19                        | - | 03/13/19 | 0.022 ± 0.002                                                             |
| 03/13/19                        | - | 03/27/19 | 0.019 ± 0.002                                                             |
| 03/27/19                        | - | 04/10/19 | 0.017 ± 0.002                                                             |
| 04/10/19                        | - | 04/24/19 | 0.012 ± 0.002                                                             |
| 04/24/19                        | - | 05/08/19 | 0.013 ± 0.002                                                             |
| 05/08/19                        | - | 05/22/19 | 0.015 ± 0.002                                                             |
| 05/22/19                        | - | 06/05/19 | 0.014 ± 0.002                                                             |
| 06/05/19                        | - | 06/19/19 | 0.017 ± 0.002                                                             |
| 06/19/19                        | - | 07/03/19 | 0.017 ± 0.002                                                             |
| 07/03/19                        | - | 07/16/19 | 0.020 ± 0.002                                                             |
| 07/16/19                        | - | 07/31/19 | 0.024 ± 0.002                                                             |
| 07/31/19                        | - | 08/14/19 | 0.028 ± 0.002                                                             |
| 08/14/19                        | - | 08/28/19 | 0.019 ± 0.002                                                             |
| 08/28/19                        | - | 09/11/19 | 0.023 ± 0.002                                                             |
| 09/11/19                        | - | 09/25/19 | 0.024 ± 0.002                                                             |
| 09/25/19                        | - | 10/08/19 | 0.019 ± 0.002                                                             |
| 10/08/19                        | - | 10/23/19 | 0.021 ± 0.002                                                             |
| 10/23/19                        | - | 11/06/19 | 0.017 ± 0.002                                                             |
| 11/06/19                        | - | 11/20/19 | 0.020 ± 0.002                                                             |
| 11/20/19                        | - | 12/04/19 | 0.018 ± 0.002                                                             |
| 12/04/19                        | - | 12/18/19 | 0.016 ± 0.002                                                             |
| 12/18/19                        | - | 12/30/19 | 0.029 ± 0.002                                                             |

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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

**Lower Alloways Creek School (AIAP03)**

| <b><u>Collection Period</u></b> |   |          | <b><u>Particulate Gross Beta</u></b><br><b><u>(pCi/m<sup>3</sup>)</u></b> |
|---------------------------------|---|----------|---------------------------------------------------------------------------|
| 01/02/19                        | - | 01/14/19 | 0.022 ± 0.002                                                             |
| 01/14/19                        | - | 01/29/19 | 0.019 ± 0.002                                                             |
| 01/29/19                        | - | 02/12/19 | 0.021 ± 0.002                                                             |
| 02/12/19                        | - | 02/26/19 | 0.021 ± 0.002                                                             |
| 02/26/19                        | - | 03/13/19 | 0.027 ± 0.002                                                             |
| 03/13/19                        | - | 03/27/19 | 0.022 ± 0.002                                                             |
| 03/27/19                        | - | 04/10/19 | 0.017 ± 0.002                                                             |
| 04/10/19                        | - | 04/24/19 | 0.014 ± 0.002                                                             |
| 04/24/19                        | - | 05/08/19 | 0.013 ± 0.002                                                             |
| 05/08/19                        | - | 05/22/19 | 0.018 ± 0.002                                                             |
| 05/22/19                        | - | 06/05/19 | 0.016 ± 0.002                                                             |
| 06/05/19                        | - | 06/19/19 | 0.016 ± 0.002                                                             |
| 06/19/19                        | - | 07/03/19 | 0.017 ± 0.002                                                             |
| 07/03/19                        | - | 07/16/19 | 0.020 ± 0.002                                                             |
| 07/16/19                        | - | 07/31/19 | 0.023 ± 0.002                                                             |
| 07/31/19                        | - | 08/14/19 | 0.026 ± 0.002                                                             |
| 08/14/19                        | - | 08/28/19 | 0.020 ± 0.002                                                             |
| 08/28/19                        | - | 09/11/19 | 0.022 ± 0.002                                                             |
| 09/11/19                        | - | 09/25/19 | 0.024 ± 0.002                                                             |
| 09/25/19                        | - | 10/08/19 | 0.019 ± 0.002                                                             |
| 10/08/19                        | - | 10/23/19 | 0.020 ± 0.002                                                             |
| 10/23/19                        | - | 11/06/19 | 0.016 ± 0.002                                                             |
| 11/06/19                        | - | 11/20/19 | 0.020 ± 0.002                                                             |
| 11/20/19                        | - | 12/04/19 | 0.017 ± 0.002                                                             |
| 12/04/19                        | - | 12/18/19 | 0.016 ± 0.002                                                             |
| 12/18/19                        | - | 12/30/19 | 0.028 ± 0.002                                                             |

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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

**SE Sector, PSE&G Owner Controlled Area (AIAP04)**

| <u>Collection Period</u> |   |          | <u>Particulate Gross Beta</u><br><u>(pCi/m<sup>3</sup>)</u> |
|--------------------------|---|----------|-------------------------------------------------------------|
| 01/02/19                 | - | 01/14/19 | 0.018 ± 0.002                                               |
| 01/14/19                 | - | 01/29/19 | 0.022 ± 0.002                                               |
| 01/29/19                 | - | 02/12/19 | 0.025 ± 0.002                                               |
| 02/12/19                 | - | 02/26/19 | 0.026 ± 0.002                                               |
| 02/26/19                 | - | 03/13/19 | 0.022 ± 0.002                                               |
| 03/13/19                 | - | 03/27/19 | 0.016 ± 0.002                                               |
| 03/27/19                 | - | 04/10/19 | 0.017 ± 0.002                                               |
| 04/10/19                 | - | 04/24/19 | 0.012 ± 0.001                                               |
| 04/24/19                 | - | 05/08/19 | 0.013 ± 0.001                                               |
| 05/08/19                 | - | 05/22/19 | 0.018 ± 0.002                                               |
| 05/22/19                 | - | 06/05/19 | 0.013 ± 0.002                                               |
| 06/05/19                 | - | 06/19/19 | 0.018 ± 0.002                                               |
| 06/19/19                 | - | 07/03/19 | 0.018 ± 0.002                                               |
| 07/03/19                 | - | 07/16/19 | 0.021 ± 0.002                                               |
| 07/16/19                 | - | 07/31/19 | 0.021 ± 0.002                                               |
| 07/31/19                 | - | 08/14/19 | 0.026 ± 0.002                                               |
| 08/14/19                 | - | 08/28/19 | 0.022 ± 0.002                                               |
| 08/29/19                 | - | 09/11/19 | 0.023 ± 0.002                                               |
| 09/11/19                 | - | 09/25/19 | 0.022 ± 0.002                                               |
| 09/25/19                 | - | 10/08/19 | 0.019 ± 0.002                                               |
| 10/08/19                 | - | 10/23/19 | 0.018 ± 0.002                                               |
| 10/23/19                 | - | 11/06/19 | 0.018 ± 0.002                                               |
| 11/06/19                 | - | 11/20/19 | 0.022 ± 0.002                                               |
| 11/20/19                 | - | 12/04/19 | 0.016 ± 0.002                                               |
| 12/04/19                 | - | 12/18/19 | 0.018 ± 0.002                                               |
| 12/18/19                 | - | 12/30/19 | 0.028 ± 0.002                                               |

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**BNE Background Location  
Results of Analyses 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> |
|--------------------------|---|----------|--------------|---------------|---------------|-------------|--------------|--------------|
| 01/02/19                 | - | 03/27/19 | < 0.3        | < 0.4         | < 0.3         | 136 ± 19    | < 111.0      | < 64.4       |
| 03/27/19                 | - | 07/03/19 | < 0.3        | < 0.3         | < 0.2         | 131 ± 16    | < 26.0       | < 16.5       |
| 07/03/19                 | - | 10/08/19 | < 0.3        | < 0.4         | < 0.3         | 139 ± 18    | < 31.4       | < 15.0       |
| 10/08/19                 | - | 12/30/19 | < 0.1        | < 0.3         | < 0.3         | 93 ± 13     | < 25.9       | < 21.4       |

**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> |
|--------------------------|---|----------|--------------|---------------|---------------|-------------|--------------|--------------|
| 12/31/18                 | - | 03/27/19 | < 0.3        | < 0.2         | < 0.2         | 143 ± 17    | < 81.7       | < 43.8       |
| 03/27/19                 | - | 07/03/19 | < 0.3        | < 0.3         | < 0.2         | 118 ± 14    | < 19.1       | < 9.7        |
| 07/03/19                 | - | 10/08/19 | < 0.3        | < 0.3         | < 0.2         | 142 ± 17    | < 40.5       | < 12.4       |
| 10/09/19                 | - | 12/30/19 | < 0.2        | < 0.3         | < 0.3         | 94 ± 13     | < 33.6       | < 26.9       |

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

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Results of Analyses 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> |
|--------------------------|------------|--------------|---------------|---------------|-------------|--------------|--------------|
| 12/31/18                 | - 03/27/19 | < 0.2        | < 0.3         | < 0.3         | 135 ± 18    | < 41.9       | < 15.3       |
| 03/27/19                 | - 07/03/19 | < 0.2        | < 0.2         | < 0.2         | 129 ± 15    | < 22.4       | < 11.8       |
| 07/03/19                 | - 10/08/19 | < 0.3        | < 0.3         | < 0.2         | 139 ± 17    | < 43.1       | < 29.5       |
| 10/09/19                 | - 12/30/19 | < 0.2        | < 0.3         | < 0.3         | 101 ± 13    | < 25.3       | < 23.1       |

**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> |
|--------------------------|------------|--------------|---------------|---------------|-------------|--------------|--------------|
| 12/31/18                 | - 03/27/19 | < 0.5        | < 0.4         | < 0.4         | 155 ± 21    | < 55.4       | < 33.7       |
| 03/27/19                 | - 07/03/19 | < 0.3        | < 0.2         | < 0.2         | 119 ± 15    | < 15.6       | < 7.0        |
| 07/03/19                 | - 10/08/19 | < 0.3        | < 0.3         | < 0.2         | 119 ± 16    | < 37.4       | < 14.0       |
| 10/09/19                 | - 12/30/19 | < 0.2        | < 0.3         | < 0.3         | 88 ± 13     | < 34.6       | < 25.6       |

**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> |
|--------------------------|------------|--------------|---------------|---------------|-------------|--------------|--------------|
| 12/31/18                 | - 03/27/19 | < 0.4        | < 0.2         | < 0.3         | 138 ± 17    | < 36.1       | < 21.7       |
| 03/27/19                 | - 07/03/19 | < 0.2        | < 0.2         | < 0.2         | 128 ± 15    | < 15.8       | < 8.6        |
| 07/03/19                 | - 10/08/19 | < 0.3        | < 0.3         | < 0.3         | 149 ± 18    | < 31.7       | < 15.2       |
| 10/09/19                 | - 12/30/19 | < 0.3        | < 0.3         | < 0.2         | 98 ± 13     | < 29.7       | < 24.9       |

**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> |
|--------------------------|------------|--------------|---------------|---------------|-------------|--------------|--------------|
| 12/31/18                 | - 03/27/19 | < 0.3        | < 0.3         | < 0.3         | 133 ± 16    | < 46.4       | < 16.4       |
| 03/27/19                 | - 07/03/19 | < 0.3        | < 0.2         | < 0.2         | 128 ± 16    | < 26.7       | < 9.4        |
| 07/03/19                 | - 10/08/19 | < 0.2        | < 0.1         | < 0.2         | 143 ± 17    | < 44.1       | < 19.0       |
| 10/09/19                 | - 12/30/19 | < 0.4        | < 0.3         | < 0.3         | 102 ± 13    | < 30.4       | < 15.2       |

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

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



**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Results of Analyses 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> |
|--------------------------|---|----------|--------------|---------------|---------------|-------------|--------------|--------------|
| 12/31/18                 | - | 03/27/19 | < 0.3        | < 0.3         | < 0.2         | 130 ± 17    | < 45.7       | < 32.4       |
| 03/27/19                 | - | 07/03/19 | < 0.3        | < 0.2         | < 0.1         | 124 ± 15    | < 24.3       | < 13.8       |
| 07/03/19                 | - | 10/08/19 | < 0.2        | < 0.2         | < 0.2         | 124 ± 15    | < 33.2       | < 21.6       |
| 10/09/19                 | - | 12/30/19 | < 0.3        | < 0.2         | < 0.2         | 101 ± 13    | < 38.6       | < 17.7       |

**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> |
|--------------------------|---|----------|--------------|---------------|---------------|-------------|--------------|--------------|
| 01/02/19                 | - | 04/03/19 | < 0.8        | < 0.6         | < 0.5         | 122 ± 21    | < 91.9       | < 52.7       |
| 04/03/19                 | - | 07/02/19 | < 0.9        | < 0.8         | < 0.9         | 94 ± 20     | < 58.7       | < 36.4       |
| 07/02/19                 | - | 10/02/19 | < 0.5        | < 0.5         | < 0.5         | 118 ± 27    | < 56.0       | < 31.2       |
| 10/02/19                 | - | 01/02/20 | < 0.7        | < 0.5         | < 0.5         | 105 ± 17    | < 43.9       | < 26.9       |

**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> |
|--------------------------|---|----------|--------------|---------------|---------------|-------------|--------------|--------------|
| 12/31/18                 | - | 03/27/19 | < 0.2        | < 0.2         | < 0.2         | 130 ± 16    | < 78.7       | < 182.0      |
| 03/27/19                 | - | 07/03/19 | < 0.5        | < 0.4         | < 0.4         | 128 ± 18    | < 24.3       | < 9.5        |
| 07/03/19                 | - | 10/08/19 | < 0.2        | < 0.2         | < 0.3         | 131 ± 18    | < 27.5       | < 14.9       |
| 10/09/19                 | - | 12/30/19 | < 0.3        | < 0.4         | < 0.3         | 99 ± 13     | < 44.1       | < 32.6       |

**East of US Route 9 & South of the Discharge Canal Inside Fence (SE Sector) (OCAP08)**

| <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> |
|--------------------------|---|----------|--------------|---------------|---------------|-------------|--------------|--------------|
| 12/31/18                 | - | 03/27/19 | < 0.3        | < 0.3         | < 0.2         | 133 ± 16    | < 82.6       | < 36.0       |
| 03/27/19                 | - | 07/03/19 | < 0.3        | < 0.2         | < 0.2         | 114 ± 14    | < 19.0       | < 11.0       |
| 07/03/19                 | - | 10/08/19 | < 0.3        | < 0.2         | < 0.2         | 141 ± 18    | < 36.1       | < 18.1       |
| 10/09/19                 | - | 12/30/19 | < 0.3        | < 0.4         | < 0.3         | 111 ± 14    | < 29.7       | < 16.2       |

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

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Salem / Hope Creek  
Results of Analyses 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> |
|--------------------------|---|----------|--------------|---------------|---------------|-------------|--------------|--------------|
| 01/02/19                 | - | 03/27/19 | < 0.3        | < 0.2         | < 0.3         | 131 ± 17    | < 40.4       | < 22.8       |
| 03/27/19                 | - | 07/03/19 | < 0.2        | < 0.2         | < 0.2         | 132 ± 15    | < 31.8       | < 15.3       |
| 07/03/19                 | - | 10/08/19 | < 0.2        | < 0.2         | < 0.2         | 134 ± 17    | < 36.2       | < 11.4       |
| 10/08/19                 | - | 12/30/19 | < 0.3        | < 0.4         | < 0.3         | 98 ± 14     | < 30.7       | < 24.0       |

**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> |
|--------------------------|---|----------|--------------|---------------|---------------|-------------|--------------|--------------|
| 01/02/19                 | - | 03/27/19 | < 0.4        | < 0.3         | < 0.2         | 123 ± 16    | < 42.4       | < 24.5       |
| 03/27/19                 | - | 07/03/19 | < 0.2        | < 0.2         | < 0.2         | 135 ± 15    | < 37.9       | < 11.0       |
| 07/03/19                 | - | 10/08/19 | < 0.3        | < 0.2         | < 0.2         | 134 ± 17    | < 27.7       | < 15.0       |
| 10/08/19                 | - | 12/30/19 | < 0.2        | < 0.2         | < 0.2         | 86 ± 12     | < 23.9       | < 26.0       |

**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> |
|--------------------------|---|----------|--------------|---------------|---------------|-------------|--------------|--------------|
| 01/02/19                 | - | 03/27/19 | < 0.3        | < 0.3         | < 0.2         | 137 ± 17    | < 82.1       | < 48.4       |
| 03/27/19                 | - | 07/03/19 | < 0.3        | < 0.2         | < 0.3         | 140 ± 17    | < 37.6       | < 7.1        |
| 07/03/19                 | - | 10/08/19 | < 0.2        | < 0.2         | < 0.2         | 131 ± 16    | < 29.2       | < 13.3       |
| 10/08/19                 | - | 12/30/19 | < 0.3        | < 0.2         | < 0.2         | 94 ± 13     | < 23.1       | < 21.5       |

**SE Sector, PSE&G Owner Controlled Area (AIAP04)**

| <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> |
|--------------------------|---|----------|--------------|---------------|---------------|-------------|--------------|--------------|
| 01/02/19                 | - | 03/27/19 | < 0.3        | < 0.3         | < 0.2         | 139 ± 17    | < 106.0      | < 58.5       |
| 03/27/19                 | - | 07/03/19 | < 0.2        | < 0.3         | < 0.2         | 136 ± 16    | < 20.3       | < 9.4        |
| 07/03/19                 | - | 10/08/19 | < 0.3        | < 0.3         | < 0.3         | 134 ± 17    | < 27.0       | < 10.9       |
| 10/08/19                 | - | 12/30/19 | < 0.3        | < 0.3         | < 0.2         | 100 ± 12    | < 34.3       | < 30.8       |

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

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Results of Analyses 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> |
|------------------------|--------------|--------------|---------------|---------------|-------------|--------------|--------------|
| 06/03/19 – Clams       | < 18         | < 22         | < 19          | < 21          | 1,690 ± 456 | < 87         | < 246        |
| 10/01/19 – Clams       | < 7          | < 9          | < 8           | < 7           | 1,700 ± 270 | < 48         | < 56         |
| 09/30/19 - Crabs       | < 12         | < 17         | < 14          | < 13          | 2,240 ± 343 | < 113        | < 70         |

**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> |
|------------------------|--------------|--------------|---------------|---------------|-------------|--------------|--------------|
| 06/03/19 – Clams       | < 11         | < 12         | < 13          | < 11          | 1,820 ± 335 | < 108        | < 166        |
| 06/06/19–American Eel  | < 7          | < 14         | < 12          | < 13          | 2,830 ± 428 | < 151        | < 225        |
| 09/30/19 – Clams       | < 12         | < 11         | < 10          | < 10          | 1,360 ± 274 | < 82         | < 59         |
| 09/27/19–American Eel  | < 8          | < 9          | < 8           | < 7           | 2,050 ± 308 | < 244        | < 166        |

**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> |
|------------------------|--------------|--------------|---------------|---------------|-------------|--------------|--------------|
| 06/05/19 – Clams       | < 6          | < 10         | < 7           | < 7           | 1,990 ± 328 | < 125        | < 152        |
| 10/02/19 – Clams       | < 7          | < 7          | < 9           | < 9           | 1,660 ± 266 | < 101        | < 69         |

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

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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

**Delaware River – Near Plant Discharge Outfall Area – Salem NGS (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> |
|-------------------------|--------------|--------------|---------------|---------------|-------------|--------------|--------------|
| 05/03/19 – Striped Bass | < 8          | < 7          | < 7           | < 7           | 3,290 ± 364 | < 176        | < 161        |
| 06/27/19 - Crab         | < 16         | < 14         | < 17          | < 15          | 3,390 ± 508 | < 110        | < 102        |
| 08/28/19 - Crab         | < 10         | < 10         | < 10          | < 9           | 3,810 ± 493 | < 135        | < 112        |

**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> |
|-------------------------|--------------|--------------|---------------|---------------|-------------|--------------|--------------|
| 05/04/19 – Catfish      | < 4          | < 4          | < 4           | < 4           | 2,910 ± 304 | < 89         | < 82         |
| 05/04/19 – Striped Bass | < 8          | < 8          | < 8           | < 8           | 3,700 ± 526 | < 109        | < 102        |
| 06/27/19 - Crab         | < 18         | < 24         | < 21          | < 18          | 3,200 ± 543 | < 76         | < 64         |
| 08/28/19 - Crab         | < 9          | < 8          | < 9           | < 9           | 1,850 ± 290 | < 104        | < 56         |
| 09/25/19 - Catfish      | < 15         | < 14         | < 15          | < 15          | 3,320 ± 460 | < 138        | < 69         |

**Delaware River – One Mile West of Mad Horse Creek (AIFS03)**

| <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> |
|-------------------------|--------------|--------------|---------------|---------------|-------------|--------------|--------------|
| 05/04/19 – Catfish      | < 5          | < 5          | < 6           | < 5           | 2,140 ± 229 | < 110        | < 107        |
| 09/25/19 – Striped Bass | < 10         | < 9          | < 9           | < 9           | 3,130 ± 360 | < 138        | < 92         |

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

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Results of Analyses 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>Mn-54</u> | <u>K-40</u>    |
|------------------------|-------------|--------------|--------------|---------------|---------------|--------------|----------------|
| 06/03/19               | 514 ± 219   | < 19         | < 24         | < 31          | < 22          | < 22         | 13,000 ± 1,460 |
| 09/30/19               | < 177       | < 20         | < 22         | < 31          | < 23          | < 25         | 15,300 ± 1,540 |

**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>Mn-54</u> | <u>K-40</u> |
|------------------------|-------------|--------------|--------------|---------------|---------------|--------------|-------------|
| 06/03/19               | < 77        | < 9          | < 10         | < 13          | 19 ± 13       | < 9          | 2,980 ± 335 |
| 09/30/19               | 114 ± 49    | < 6          | 8 ± 7        | < 7           | 6 ± 6         | < 6          | 998 ± 159   |

**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>Mn-54</u> | <u>K-40</u>    |
|------------------------|-------------|--------------|--------------|---------------|---------------|--------------|----------------|
| 06/05/19               | < 199       | < 23         | < 26         | < 33          | 40 ± 27       | < 25         | 18,600 ± 2,020 |
| 10/01/19               | < 152       | < 18         | < 23         | < 29          | 25 ± 23       | < 20         | 13,600 ± 1,560 |

**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>Mn-54</u> | <u>K-40</u>    |
|------------------------|-------------|--------------|--------------|---------------|---------------|--------------|----------------|
| 06/03/19               | 133 ± 88    | < 6          | < 8          | < 11          | < 9           | < 8          | 1,840 ± 261    |
| 10/01/19               | < 183       | < 20         | < 22         | < 23          | < 19          | < 15         | 10,400 ± 1,360 |

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

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  
2019 Radiological Environmental Monitoring Program**

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

**Delaware River Near Site Helipad (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>Mn-54</u> | <u>K-40</u>    |
|------------------------|-------------|--------------|--------------|---------------|---------------|--------------|----------------|
| 05/22/19               | < 78        | < 10         | < 9          | < 13          | < 9           | < 9          | 5,940 ± 579    |
| 12/04/19               | < 122       | < 16         | < 17         | < 22          | < 17          | < 18         | 10,700 ± 1,380 |

**Delaware River Near Plant Discharge Outfall Area – Salem Station NGS (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>Mn-54</u> | <u>K-40</u> |
|------------------------|-------------|--------------|--------------|---------------|---------------|--------------|-------------|
| 05/22/19               | < 91        | < 10         | < 10         | < 14          | < 10          | < 9          | 4,020 ± 470 |
| 12/04/19               | < 75        | < 7          | < 9          | < 13          | < 9           | < 10         | 3,160 ± 398 |

**Delaware River - Near Hope Creek NGS Cooling Tower Blow Down Discharge Line Outfall (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>Mn-54</u> | <u>K-40</u> |
|------------------------|-------------|--------------|--------------|---------------|---------------|--------------|-------------|
| 05/22/19               | < 150       | < 15         | < 15         | < 22          | < 16          | < 15         | 8,350 ± 827 |
| 12/04/19               | < 159       | < 15         | < 14         | < 23          | < 18          | < 16         | 5,580 ± 694 |

**Delaware River Near 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>Mn-54</u> | <u>K-40</u> |
|------------------------|-------------|--------------|--------------|---------------|---------------|--------------|-------------|
| 05/22/19               | < 173       | < 17         | < 16         | < 23          | < 15          | < 14         | 6,730 ± 737 |
| 12/04/19               | < 193       | < 21         | < 21         | < 36          | < 23          | < 26         | 4,450 ± 571 |

**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>Mn-54</u> | <u>K-40</u>    |
|------------------------|-------------|--------------|--------------|---------------|---------------|--------------|----------------|
| 05/22/19               | 919 ± 236   | < 20         | < 20         | < 28          | 50 ± 20       | < 19         | 17,500 ± 1,830 |
| 12/04/19               | < 172       | < 21         | < 20         | < 24          | < 23          | < 22         | 11,500 ± 1,170 |

**Delaware River Bank – 1.0 Miles W of Mad Horse Creek (AIAQ06)**

| <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>Mn-54</u> | <u>K-40</u>    |
|------------------------|-------------|--------------|--------------|---------------|---------------|--------------|----------------|
| 05/22/19               | < 156       | < 17         | < 17         | < 24          | < 16          | < 17         | 16,800 ± 1,760 |
| 12/04/19               | < 141       | < 16         | < 19         | < 28          | < 15          | < 17         | 14,500 ± 1,800 |

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

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  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Results of Analyses of Gamma Emitters in Vegetable Samples**

**Oyster Creek Onsite Garden - ESE (OCVE01)**

| <u>Sample</u> | <u>Collection<br/>Date</u> | <u>Co-58</u> | <u>Co-60</u> | <u>Cs-134</u> | <u>Cs-137</u> | <u>K-40</u> |
|---------------|----------------------------|--------------|--------------|---------------|---------------|-------------|
| Cabbage       | 06/26/19                   | < 8          | < 10         | < 9           | < 8           | 1,880 ± 280 |
| Collards      | 06/26/19                   | < 8          | < 9          | < 8           | < 9           | 2,850 ± 358 |
| Kale          | 06/26/19                   | < 9          | < 12         | < 11          | 19 ± 13       | 3,560 ± 414 |
| Cabbage       | 07/31/19                   | < 15         | < 16         | < 12          | < 12          | 1,650 ± 314 |
| Collards      | 07/31/19                   | < 13         | < 14         | < 16          | < 15          | 2,430 ± 369 |
| Kale          | 07/31/19                   | < 14         | < 16         | < 15          | < 14          | 2,400 ± 359 |
| Cabbage       | 08/28/19                   | < 15         | < 16         | < 14          | < 12          | 1,430 ± 346 |
| Collards      | 08/28/19                   | < 18         | < 19         | < 21          | < 22          | 2,120 ± 433 |
| Kale          | 08/28/19                   | < 18         | < 18         | < 16          | < 21          | 1,900 ± 459 |
| Cabbage       | 09/25/19                   | < 10         | < 11         | < 12          | < 13          | 1,620 ± 263 |
| Kale          | 09/25/19                   | < 31         | < 32         | < 24          | < 27          | 2,900 ± 676 |
| Cabbage       | 10/24/19                   | < 21         | < 20         | < 23          | < 25          | 1,360 ± 492 |

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

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Results of Analyses of Gamma Emitters in Vegetable Samples**

**Private Farm – NW (OCVE02)**

| <u>Sample</u> | <u>Collection<br/>Date</u> | <u>Co-58</u> | <u>Co-60</u> | <u>Cs-134</u> | <u>Cs-137</u> | <u>K-40</u> |
|---------------|----------------------------|--------------|--------------|---------------|---------------|-------------|
| Cabbage       | 06/26/19                   | < 8          | < 9          | < 9           | < 8           | 2,280 ± 309 |
| Collards      | 06/26/19                   | < 8          | < 9          | < 9           | < 9           | 3,670 ± 451 |
| Kale          | 06/26/19                   | < 13         | < 13         | < 16          | < 16          | 3,010 ± 421 |
| Cabbage       | 07/31/19                   | < 11         | < 14         | < 12          | < 13          | 3,220 ± 431 |
| Collards      | 07/31/19                   | < 11         | < 14         | < 12          | < 11          | 3,980 ± 449 |
| Kale          | 07/31/19                   | < 14         | < 16         | < 15          | < 14          | 3,560 ± 522 |
| Cabbage       | 08/28/19                   | < 14         | < 18         | < 17          | < 16          | 2,310 ± 414 |
| Collards      | 08/28/19                   | < 16         | < 15         | < 14          | < 12          | 4,260 ± 537 |
| Rape          | 08/28/19                   | < 17         | < 21         | < 17          | < 15          | 3,610 ± 623 |
| Cabbage       | 09/25/19                   | < 16         | < 18         | < 17          | < 15          | 3,060 ± 470 |
| Collards      | 09/25/19                   | < 13         | < 15         | < 15          | < 12          | 4,780 ± 650 |
| Kale          | 09/25/19                   | < 24         | < 25         | < 26          | < 24          | 4,610 ± 693 |
| Cabbage       | 10/24/19                   | < 21         | < 22         | < 24          | < 18          | 2,510 ± 532 |
| Collards      | 10/24/19                   | < 10         | < 13         | < 14          | < 10          | 2,460 ± 424 |
| Kale          | 10/24/19                   | < 38         | < 43         | < 41          | < 33          | 2,650 ± 869 |

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

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



**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Results of Analyses of Gamma Emitters in Vegetable Samples**

**Oyster Creek Onsite Garden - E (OCVE07)**

| <u>Sample</u> | <u>Collection<br/>Date</u> | <u>Co-58</u> | <u>Co-60</u> | <u>Cs-134</u> | <u>Cs-137</u> | <u>K-40</u> |
|---------------|----------------------------|--------------|--------------|---------------|---------------|-------------|
| Cabbage       | 06/26/19                   | < 9          | < 10         | < 9           | 37 ± 11       | 1,680 ± 247 |
| Collards      | 06/26/19                   | < 8          | < 9          | < 9           | 51 ± 12       | 2,100 ± 325 |
| Kale          | 06/26/19                   | < 9          | < 11         | < 10          | 53 ± 13       | 2,520 ± 332 |
| Cabbage       | 07/31/19                   | < 10         | < 12         | < 11          | 55 ± 14       | 1,010 ± 214 |
| Collards      | 07/31/19                   | < 13         | < 13         | < 14          | 30 ± 16       | 1,820 ± 336 |
| Kale          | 07/31/19                   | < 13         | < 15         | < 13          | 77 ± 16       | 1,870 ± 362 |
| Cabbage       | 08/28/19                   | < 15         | < 13         | < 14          | 29 ± 17       | 1,210 ± 250 |
| Collards      | 08/28/19                   | < 18         | < 17         | < 16          | < 17          | 1,760 ± 356 |
| Kale          | 08/28/19                   | < 25         | < 25         | < 23          | 24 ± 21       | 2,390 ± 532 |
| Cabbage       | 09/25/19                   | < 15         | < 18         | < 18          | 27 ± 16       | 1,390 ± 299 |
| Collards      | 09/25/19                   | < 20         | < 28         | < 22          | 38 ± 30       | 2,640 ± 465 |
| Collards      | 10/24/19                   | < 26         | < 29         | < 22          | < 22          | 3,150 ± 652 |

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

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Salem/Hope Creek  
Results of Analyses of Gamma Emitters in Vegetable Samples**

**Local 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     | 05/16/19               | < 10         | < 13         | < 12          | < 12          | 1,900 ± 330 |
| Tomato        | 05/16/19               | < 9          | < 12         | < 12          | < 9           | 1,870 ± 320 |
| Peppers       | 07/24/19               | < 17         | < 18         | < 16          | < 18          | 1,860 ± 406 |
| Corn          | 07/24/19               | < 14         | < 13         | < 13          | < 9           | 2,510 ± 416 |

**Local 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     | 05/16/19               | < 14         | < 14         | < 17          | < 16          | 1,750 ± 448 |
| Peppers       | 07/24/19               | < 11         | < 12         | < 11          | < 11          | 1,640 ± 316 |
| Tomato        | 07/24/19               | < 9          | < 8          | < 8           | < 8           | 1,880 ± 266 |
| Corn          | 07/24/19               | < 8          | < 14         | < 12          | < 9           | 2,420 ± 372 |

**Farm Market – 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     | 05/16/19               | < 16         | < 18         | < 14          | < 18          | 1,970 ± 418 |
| Cabbage       | 07/24/19               | < 14         | < 15         | < 16          | < 15          | 2,040 ± 360 |
| Corn          | 07/24/19               | < 14         | < 16         | < 17          | < 12          | 3,000 ± 463 |
| Peach         | 07/24/19               | < 7          | < 9          | < 7           | < 7           | 2,160 ± 328 |
| Peppers       | 07/24/19               | < 11         | < 13         | < 16          | < 15          | 1,570 ± 309 |
| Tomato        | 07/24/19               | < 10         | < 9          | < 9           | < 9           | 2,230 ± 348 |

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

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Salem/Hope Creek  
Results of Analyses of Gamma Emitters in Vegetable Samples**

**Private Farm – S (AIVE16)**

| <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        | 07/24/19               | < 10         | < 10         | < 11          | < 9           | 1,840 ± 309 |

**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> |
|---------------|------------------------|--------------|--------------|---------------|---------------|-------------|
| Asparagus     | 05/16/19               | < 15         | < 19         | < 17          | < 17          | 2,310 ± 467 |
| Peppers       | 07/24/19               | < 7          | < 13         | < 9           | < 9           | 1,540 ± 306 |
| Tomato        | 07/24/19               | < 11         | < 12         | < 13          | < 11          | 2,890 ± 471 |
| Corn          | 07/24/19               | < 10         | < 8          | < 10          | < 10          | 1,780 ± 279 |
| Peach         | 07/24/19               | < 13         | < 10         | < 11          | < 12          | 1,970 ± 334 |

**Private Farm – NW (AIVE22)**

| <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          | 07/24/19               | < 9          | < 15         | < 11          | < 10          | 2,490 ± 429 |

**Onsite - SE (AIVE25)**

| <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> |
|---------------|------------------------|--------------|--------------|---------------|---------------|-------------|
| Collards      | 07/16/19               | < 23         | < 23         | < 19          | < 20          | 7,000 ± 922 |
| Cabbage       | 07/16/19               | < 20         | < 25         | < 19          | < 25          | 7,070 ± 906 |
| Cabbage       | 08/28/19               | < 23         | < 24         | < 20          | < 20          | 6,610 ± 926 |

**Onsite - NW (AIVE26)**

| <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       | 07/16/19               | < 11         | < 17         | < 17          | < 17          | 5,130 ± 625   |
| Kale          | 07/16/19               | < 25         | < 25         | < 32          | < 31          | 5,850 ± 856   |
| Collards      | 07/16/19               | < 19         | < 23         | < 17          | < 19          | 8,680 ± 1,070 |
| Cabbage       | 08/28/19               | < 15         | < 17         | < 22          | < 18          | 5,530 ± 743   |

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

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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

**State of New Jersey Dairy Farm (COMI01)**

| <b><u>Collection Date</u></b> | <b><u>Cs-137</u></b> | <b><u>I-131</u></b> | <b><u>K-40</u></b> | <b><u>Sr-89</u></b> | <b><u>Sr-90</u></b> |
|-------------------------------|----------------------|---------------------|--------------------|---------------------|---------------------|
| 03/11/19                      | < 1.56               | < 0.72              | 1,330 ± 139        | < 0.75              | < 0.90              |
| 06/17/19                      | < 1.76               | < 0.59              | 1,560 ± 151        | < 0.37              | < 0.75              |
| 09/16/19                      | < 1.96               | < 0.56              | 1,370 ± 140        | < 0.76              | < 0.83              |
| 12/09/19                      | < 1.89               | < 0.57              | 1,120 ± 128        | < 0.92              | < 0.77              |

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

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Salem/Hope Creek  
Results of Analyses 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> |
|------------------------|---------------|--------------|-------------|--------------|--------------|
| 01/08/19               | < 1.56        | < 0.53       | 1,520 ± 148 | < 0.66       | < 0.69       |
| 02/05/09               | < 2.12        | < 0.95       | 1,260 ± 146 | < 0.72       | < 0.71       |
| 03/05/19               | < 1.65        | < 0.57       | 1,410 ± 141 | < 0.83       | < 0.94       |
| 04/08/19               | < 1.70        | < 0.60       | 1,340 ± 127 | < 0.59       | < 0.86       |
| 05/06/19               | < 1.97        | < 0.79       | 1,190 ± 134 | < 0.93       | < 1.14       |
| 06/03/19               | < 1.72        | < 0.80       | 1,160 ± 130 | < 0.91       | < 0.96       |
| 07/08/19               | < 2.09        | < 0.42       | 1,630 ± 209 | < 0.84       | < 0.89       |
| 08/05/19               | < 2.08        | < 0.62       | 1,440 ± 186 | < 0.88       | < 0.85       |
| 09/03/19               | < 1.65        | < 0.84       | 1,420 ± 151 | < 0.90       | < 0.84       |
| 10/07/19               | < 1.60        | < 0.61       | 1,320 ± 142 | < 0.65       | < 0.63       |
| 11/04/19               | < 1.93        | < 0.63       | 2,120 ± 196 | < 0.93       | < 0.23       |
| 12/02/19               | < 1.40        | < 0.73       | 1,390 ± 136 | < 0.95       | < 0.87       |

**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> |
|------------------------|---------------|--------------|-------------|--------------|--------------|
| 01/08/19               | < 2.10        | < 0.51       | 1,760 ± 187 | < 0.71       | < 0.81       |
| 02/05/09               | < 1.91        | < 0.97       | 1,360 ± 137 | < 0.97       | < 0.75       |
| 03/05/19               | < 1.76        | < 0.45       | 1,420 ± 154 | < 0.87       | < 0.62       |
| 04/08/19               | < 1.47        | < 0.57       | 1,380 ± 138 | < 0.50       | < 0.86       |
| 05/06/19               | < 1.94        | < 0.67       | 1,210 ± 118 | < 1.74       | < 1.18       |
| 06/03/19               | < 1.69        | < 0.73       | 1,190 ± 122 | < 0.82       | < 0.67       |
| 07/08/19               | < 2.05        | < 0.42       | 1,700 ± 157 | < 0.86       | < 0.86       |
| 08/05/19               | < 1.71        | < 0.54       | 1,410 ± 150 | < 0.88       | < 0.91       |
| 09/03/19               | < 1.54        | < 0.63       | 1,410 ± 137 | < 0.93       | < 0.92       |
| 10/07/19               | < 1.78        | < 0.59       | 1,490 ± 162 | < 0.88       | < 0.42       |
| 11/04/19               | < 2.87        | < 0.67       | 2,090 ± 235 | < 1.25       | < 0.86       |
| 12/02/19               | < 2.11        | < 0.63       | 1,400 ± 154 | < 0.61       | < 0.81       |

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

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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

**Private Farm – W (AIMI04)**

| <b><u>Collection Date</u></b> | <b><u>Cs-137</u></b> | <b><u>I-131</u></b> | <b><u>K-40</u></b> | <b><u>Sr-89</u></b> | <b><u>Sr-90</u></b> |
|-------------------------------|----------------------|---------------------|--------------------|---------------------|---------------------|
| 01/08/19                      | < 1.82               | < 0.54              | 1,620 ± 182        | < 0.88              | < 0.71              |
| 02/05/09                      | < 2.06               | < 0.96              | 1,360 ± 151        | < 0.76              | < 0.50              |
| 03/05/19                      | < 2.21               | < 0.53              | 1,360 ± 139        | < 0.89              | < 0.55              |
| 04/08/19                      | < 1.71               | < 0.58              | 1,130 ± 122        | < 0.64              | < 0.89              |
| 05/06/19                      | < 1.50               | < 0.69              | 1,190 ± 122        | < 1.03              | < 1.10              |
| 06/03/19                      | < 1.75               | < 0.72              | 1,050 ± 110        | < 0.81              | < 0.56              |
| 07/08/19                      | < 2.10               | < 0.44              | 1,740 ± 172        | < 0.86              | < 0.87              |
| 08/05/19                      | < 1.96               | < 0.53              | 1,270 ± 131        | < 0.92              | < 0.94              |
| 09/03/19                      | < 1.48               | < 0.73              | 1,140 ± 116        | < 0.89              | < 0.84              |
| 10/07/19                      | < 1.63               | < 0.61              | 1,260 ± 126        | < 0.68              | < 0.47              |
| 11/04/19                      | < 2.36               | < 0.55              | 2,050 ± 198        | < 0.92              | < 0.61              |
| 12/02/19                      | < 2.83               | < 0.65              | 1,300 ± 157        | < 0.84              | < 0.92              |

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

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

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek**

**Results of Analyses 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> |
|------------------------|--------------|--------------|---------------|---------------|------------|--------------|
| 06/03/19               | < 1.34       | < 1.37       | < 1.52        | < 1.43        | < 277      | < 0.83       |
| 09/30/19               | < 2.56       | < 2.63       | < 2.43        | < 2.35        | < 240      | < 0.78       |

**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> |
|------------------------|--------------|--------------|---------------|---------------|------------|--------------|
| 01/07/19 – 01/28/19    | < 1.25       | < 1.23       | < 1.23        | < 1.13        | < 188      | < 1.66       |
| 02/05/19 – 02/28/19    | < 1.16       | < 1.15       | < 1.23        | < 1.07        | < 236      | < 0.76       |
| 03/07/19 – 03/26/19    | < 1.55       | < 1.42       | < 1.60        | < 1.56        | < 183      | < 0.79       |
| 04/01/19 – 05/01/19    | < 1.69       | < 1.42       | < 1.57        | < 1.52        | < 208      | < 4.52       |
| 05/09/19 – 05/31/19    | < 1.43       | < 1.65       | < 1.61        | < 1.42        | < 285      | < 0.95       |
| 06/04/19 – 06/25/19    | < 1.34       | < 1.40       | < 1.43        | < 1.34        | < 239      | < 0.79       |
| 07/01/19 – 07/30/19    | < 1.72       | < 1.72       | < 1.66        | < 1.57        | < 253      | < 0.86       |
| 08/06/19 – 08/27/19    | < 1.56       | < 1.51       | < 1.56        | < 1.61        | < 216      | < 5.99       |
| 09/05/19 – 09/24/19    | < 1.64       | < 1.70       | < 1.77        | < 1.55        | < 238      | < 2.34       |
| 10/01/19 – 10/28/19    | < 1.37       | < 1.25       | < 1.31        | < 1.19        | < 231      | < 0.94       |
| 11/05/19 – 11/25/19    | < 1.21       | < 1.19       | < 1.17        | < 1.10        | < 182      | < 0.85       |
| 12/06/19 – 01/02/20    | < 1.69       | < 1.64       | < 1.63        | < 1.47        | < 245      | < 1.89       |

Results in picoCuries per Liter (pCi/L)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek**

**Results of Analyses of Gamma Emitters and Tritium (H-3) in Surface Water (continued)**

**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>        |
|------------------------|--------------|--------------|---------------|---------------|------------|---------------------|
| 06/03/19               | < 1.39       | < 1.49       | < 1.55        | < 1.42        | < 271      | < 0.69              |
| 10/01/19               | < 1.69       | < 1.84       | < 1.81        | < 1.86        | < 239      | < 4.30 <sup>4</sup> |

**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> |
|------------------------|--------------|--------------|---------------|---------------|------------|--------------|
| 01/09/19 – 01/31/19    | < 1.38       | < 1.29       | < 1.30        | < 1.24        | < 192      | < 0.93       |
| 02/06/19 – 02/27/19    | < 1.16       | < 1.14       | < 1.05        | < 1.06        | < 234      | < 0.86       |
| 03/07/19 – 03/26/19    | < 1.52       | < 1.50       | < 1.48        | < 1.48        | < 182      | < 0.83       |
| 04/03/19 – 05/01/19    | < 1.38       | < 1.20       | < 1.33        | < 1.19        | < 201      | < 2.98       |
| 05/09/19 – 05/31/19    | < 1.26       | < 1.44       | < 1.41        | < 1.28        | < 260      | < 0.93       |
| 06/04/19 – 06/26/19    | < 1.56       | < 1.54       | < 1.65        | < 1.47        | < 242      | < 0.60       |
| 07/01/19 – 07/31/19    | < 1.65       | < 1.72       | < 1.53        | < 1.63        | < 226      | < 0.84       |
| 08/06/19 – 08/28/19    | < 1.47       | < 1.42       | < 1.53        | < 1.40        | < 216      | < 2.72       |
| 09/05/19 – 09/25/19    | < 1.89       | < 1.74       | < 1.71        | < 1.54        | < 233      | < 1.45       |
| 10/01/19 – 10/29/19    | < 1.30       | < 1.23       | < 1.30        | < 1.67        | < 235      | < 0.91       |
| 11/05/19 – 11/25/19    | < 1.48       | < 1.55       | < 1.53        | < 1.54        | < 181      | < 0.89       |
| 12/06/19 – 01/02/20    | < 1.47       | < 1.60       | < 1.38        | < 1.25        | < 245      | < 1.64       |

Results in picoCuries per Liter (pCi/L)



**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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

**Delaware River – Near Plant Discharge Outfall Area – Salem NGS (AISW01)**

| <b><u>Collection Date</u></b> | <b><u>Co-58</u></b> | <b><u>Co-60</u></b> | <b><u>Cs-134</u></b> | <b><u>Cs-137</u></b> | <b><u>H-3</u></b>      | <b><u>I-131</u></b> |
|-------------------------------|---------------------|---------------------|----------------------|----------------------|------------------------|---------------------|
| 01/07/19                      | < 1.34              | < 1.40              | < 1.54               | < 2.05               | 343 ± 154 <sup>1</sup> | < 0.59              |
| 01/25/19                      | < 1.63              | < 1.54              | < 1.56               | < 1.65               | < 194                  | < 0.90              |
| 02/04/19                      | < 1.38              | < 1.51              | < 1.41               | < 1.45               | < 190                  | < 0.82              |
| 02/19/19                      | < 1.56              | < 1.85              | < 1.79               | < 1.80               | < 236                  | < 0.64              |
| 03/05/19                      | < 1.43              | < 1.49              | < 1.58               | < 1.50               | < 207                  | < 0.89              |
| 03/19/19                      | < 1.55              | < 1.48              | < 1.58               | < 1.41               | 277 ± 160 <sup>1</sup> | < 0.98              |
| 04/04/19                      | < 1.65              | < 1.88              | < 1.76               | < 1.77               | < 214                  | < 0.73              |
| 04/17/19                      | < 1.91              | < 1.99              | < 1.81               | < 1.55               | < 192                  | < 0.86              |
| 05/08/19                      | < 1.31              | < 1.50              | < 1.44               | < 1.42               | < 210                  | < 0.80              |
| 05/22/19                      | < 1.49              | < 1.41              | < 1.62               | < 1.52               | < 228                  | < 0.64              |
| 06/03/19                      | < 1.96              | < 2.02              | < 1.92               | < 1.88               | < 275                  | < 0.62              |
| 06/17/19                      | < 1.72              | < 1.72              | < 1.93               | < 1.78               | < 232                  | < 0.67              |
| 07/09/19                      | < 1.20              | < 1.28              | < 1.54               | < 1.97               | < 241                  | < 0.54              |
| 07/24/19                      | < 1.32              | < 1.29              | < 1.61               | < 1.56               | < 232                  | < 0.85              |
| 08/07/19                      | < 1.45              | < 1.40              | < 1.74               | < 1.70               | < 242                  | < 0.95              |
| 08/23/19                      | < 1.44              | < 1.51              | < 1.64               | < 1.48               | < 280                  | < 0.76              |
| 09/02/19                      | < 1.39              | < 1.39              | < 1.53               | < 1.44               | < 211                  | < 0.85              |
| 09/17/19                      | < 1.42              | < 1.44              | < 1.46               | < 1.27               | < 238                  | < 1.25              |
| 10/09/19                      | < 1.66              | < 1.77              | < 1.89               | < 1.77               | < 243                  | < 0.70              |
| 10/24/19                      | < 1.31              | < 1.37              | < 1.33               | < 1.37               | < 232                  | < 0.70              |
| 11/06/19                      | < 1.60              | < 1.65              | < 1.50               | < 1.51               | < 182                  | < 0.92              |
| 11/20/19                      | < 1.52              | < 1.62              | < 1.55               | < 1.56               | < 176                  | < 0.64              |
| 12/04/19                      | < 1.35              | < 1.52              | < 1.54               | < 1.26               | < 182                  | < 0.92              |
| 12/17/19                      | < 1.44              | < 1.44              | < 1.60               | < 1.40               | < 237                  | < 0.81              |

Results in picoCuries per Liter (pCi/L)

<sup>1</sup> The Plant Discharge Outfall Area (AISW01) is in the vicinity of where liquid radioactive effluents from the Salem Station are discharged into the Delaware River. The Salem station releases liquid effluent on a routine basis below limits set forth in Federal Guidance 10CFR20, Appendix B. The New Jersey Surface Water Quality Standard for tritium is 20,000 pCi/L. The readings of 343 pCi/L and 277 pCi/L are approximately 2 percent of the applicable limit.

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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

**West Bank – Delaware River (AISW02)**

| <b><u>Collection Date</u></b> | <b><u>Co-58</u></b> | <b><u>Co-60</u></b> | <b><u>Cs-134</u></b> | <b><u>Cs-137</u></b> | <b><u>H-3</u></b> | <b><u>I-131</u></b> |
|-------------------------------|---------------------|---------------------|----------------------|----------------------|-------------------|---------------------|
| 01/07/19                      | < 1.64              | < 1.95              | < 2.01               | < 1.63               | < 189             | < 0.78              |
| 01/25/19                      | < 1.58              | < 1.74              | < 1.86               | < 1.73               | < 192             | < 0.91              |
| 02/04/19                      | < 1.43              | < 1.62              | < 1.67               | < 1.47               | < 192             | < 0.96              |
| 02/19/19                      | < 1.51              | < 1.67              | < 1.77               | < 1.46               | < 236             | < 0.56              |
| 03/05/19                      | < 1.59              | < 1.51              | < 1.56               | < 1.61               | < 208             | < 0.86              |
| 03/19/19                      | < 1.50              | < 1.28              | < 1.49               | < 1.38               | < 232             | < 0.79              |
| 04/04/19                      | < 1.32              | < 1.44              | < 1.59               | < 1.29               | < 215             | < 0.91              |
| 04/17/19                      | < 1.30              | < 1.59              | < 1.53               | < 1.39               | < 193             | < 0.63              |
| 05/08/19                      | < 1.27              | < 1.46              | < 1.38               | < 1.29               | < 207             | < 0.96              |
| 05/22/19                      | < 1.49              | < 1.69              | < 1.49               | < 1.44               | < 221             | < 0.72              |
| 06/03/19                      | < 1.65              | < 1.65              | < 1.62               | < 1.82               | < 273             | < 0.83              |
| 06/17/19                      | < 1.27              | < 1.47              | < 1.45               | < 1.44               | < 233             | < 0.75              |
| 07/09/19                      | < 1.62              | < 1.78              | < 1.76               | < 1.86               | < 248             | < 0.61              |
| 07/24/19                      | < 1.20              | < 1.42              | < 1.39               | < 1.28               | < 230             | < 0.84              |
| 08/07/19                      | < 1.43              | < 1.48              | < 1.52               | < 1.49               | < 248             | < 0.95              |
| 08/23/19                      | < 1.26              | < 1.62              | < 1.47               | < 1.55               | < 277             | < 0.72              |
| 09/02/19                      | < 1.44              | < 1.67              | < 1.53               | < 1.63               | < 218             | < 0.89              |
| 09/17/19                      | < 1.21              | < 1.25              | < 1.36               | < 1.65               | < 233             | < 1.64              |
| 10/09/19                      | < 1.76              | < 1.66              | < 1.53               | < 1.79               | < 254             | < 0.77              |
| 10/24/19                      | < 1.39              | < 1.57              | < 1.62               | < 1.50               | < 231             | < 0.63              |
| 11/06/19                      | < 1.92              | < 2.11              | < 2.10               | < 2.08               | < 199             | < 0.87              |
| 11/20/19                      | < 1.30              | < 1.28              | < 1.33               | < 1.30               | < 182             | < 0.73              |
| 12/04/19                      | < 1.27              | < 1.44              | < 1.19               | < 1.34               | < 175             | < 0.83              |
| 12/17/19                      | < 1.33              | < 1.46              | < 1.40               | < 1.41               | < 236             | < 0.80              |

Results in picoCuries per Liter (pCi/L)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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

**Delaware River - One Mile West of Mad Horse Creek (AISW03)**

| <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> |
|------------------------|--------------|--------------|---------------|---------------|------------|--------------|
| 01/07/19               | < 1.65       | < 2.22       | < 1.87        | < 1.77        | < 203      | < 0.72       |
| 01/25/19               | < 1.60       | < 1.65       | < 1.69        | < 1.36        | < 201      | < 0.80       |
| 02/04/19               | < 1.64       | < 1.85       | < 1.81        | < 1.63        | < 192      | < 0.72       |
| 02/19/19               | < 1.80       | < 1.79       | < 1.99        | < 1.67        | < 229      | < 0.65       |
| 03/05/19               | < 1.59       | < 1.62       | < 1.61        | < 1.51        | < 220      | < 0.73       |
| 03/19/19               | < 1.37       | < 1.53       | < 1.58        | < 1.37        | < 229      | < 0.82       |
| 04/04/19               | < 1.80       | < 1.87       | < 1.69        | < 1.81        | < 215      | < 0.62       |
| 04/17/19               | < 1.63       | < 1.89       | < 1.94        | < 1.72        | < 196      | < 0.84       |
| 05/08/19               | < 1.40       | < 1.72       | < 1.53        | < 1.46        | < 209      | < 0.65       |
| 05/22/19               | < 1.70       | < 1.63       | < 1.78        | < 1.80        | < 218      | < 0.55       |
| 06/03/19               | < 1.30       | < 1.51       | < 1.62        | < 1.88        | < 272      | < 0.68       |
| 06/17/19               | < 1.20       | < 1.64       | < 1.44        | < 1.44        | < 234      | < 0.72       |
| 07/09/19               | < 1.67       | < 2.07       | < 1.90        | < 1.84        | < 247      | < 0.85       |
| 07/24/19               | < 1.58       | < 1.74       | < 1.71        | < 1.55        | < 214      | < 0.86       |
| 08/07/19               | < 1.17       | < 1.41       | < 1.34        | < 1.35        | < 245      | < 0.92       |
| 08/23/19               | < 1.44       | < 1.67       | < 1.75        | < 1.67        | < 277      | < 0.72       |
| 09/02/19               | < 1.54       | < 1.55       | < 1.74        | < 1.61        | < 217      | < 0.89       |
| 09/17/19               | < 1.76       | < 1.81       | < 1.92        | < 1.64        | < 239      | < 1.42       |
| 10/09/19               | < 1.78       | < 1.91       | < 2.07        | < 1.89        | < 235      | < 0.86       |
| 10/24/19               | < 1.54       | < 1.27       | < 1.51        | < 2.09        | < 234      | < 0.62       |
| 11/06/19               | < 1.71       | < 2.18       | < 1.71        | < 1.87        | < 199      | < 0.92       |
| 11/20/19               | < 1.58       | < 1.58       | < 1.51        | < 1.54        | < 186      | < 0.56       |
| 12/04/19               | < 1.42       | < 1.53       | < 1.41        | < 1.33        | < 177      | < 0.93       |
| 12/17/19               | < 1.56       | < 1.50       | < 1.52        | < 1.59        | < 238      | < 0.77       |

Results in picoCuries per Liter (pCi/L)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Results of Analyses 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> |
|------------------------|--------------|--------------|---------------|---------------|------------|--------------|
| 01/24/19               | < 1.47       | < 2.09       | < 2.05        | < 1.78        | < 209      | < 0.80       |
| 04/25/19               | < 1.30       | < 1.39       | < 1.47        | < 1.18        | < 237      | < 0.81       |
| 07/30/19               | < 1.16       | < 1.50       | < 1.56        | < 1.49        | < 235      | < 0.68       |
| 10/24/19               | < 2.10       | < 2.27       | < 2.22        | < 2.52        | < 243      | < 0.89       |

**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> |
|------------------------|--------------|--------------|---------------|---------------|------------|--------------|
| 01/24/19               | < 1.47       | < 1.81       | < 1.71        | < 1.54        | < 203      | < 0.80       |
| 04/25/19               | < 1.33       | < 1.51       | < 1.38        | < 1.38        | < 238      | < 0.82       |
| 07/30/19               | < 1.29       | < 1.48       | < 1.63        | < 1.36        | < 216      | < 0.55       |
| 10/24/19               | < 1.68       | < 1.87       | < 1.86        | < 1.78        | < 236      | < 0.92       |

**Lacey MUA Pumping Station (OCWW03)**

| <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> |
|------------------------|--------------|--------------|---------------|---------------|------------|--------------|
| 01/24/19               | < 1.54       | < 1.49       | < 1.69        | < 1.71        | < 208      | < 0.90       |
| 04/25/19               | < 1.85       | < 1.82       | < 1.91        | < 2.00        | < 231      | < 0.88       |
| 07/30/19               | < 1.34       | < 1.48       | < 1.42        | < 1.36        | < 226      | < 0.89       |
| 10/24/19               | < 1.50       | < 1.58       | < 2.03        | < 1.76        | < 244      | < 0.87       |

**Ocean Township MUA Pumping Station (OCWW04)**

| <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> |
|------------------------|--------------|--------------|---------------|---------------|------------|--------------|
| 01/24/19               | < 1.26       | < 1.38       | < 1.54        | < 2.07        | < 206      | < 0.78       |
| 04/25/19               | < 1.60       | < 1.66       | < 1.80        | < 1.58        | < 230      | < 0.75       |
| 07/30/19               | < 1.21       | < 1.48       | < 1.60        | < 1.53        | < 236      | < 0.64       |
| 10/25/19               | < 1.64       | < 1.77       | < 1.67        | < 1.75        | < 248      | < 0.64       |

Results in picoCuries per Liter (pCi/L)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Salem/Hope Creek  
Results of Analyses 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> |
|------------------------|--------------|--------------|---------------|---------------|------------|--------------|
| 01/24/19               | < 1.64       | < 1.80       | < 1.87        | < 1.64        | < 202      | < 0.79       |
| 04/25/19               | < 1.60       | < 2.06       | < 1.68        | < 1.80        | < 230      | < 0.77       |
| 07/30/19               | < 1.65       | < 1.62       | < 1.96        | < 1.73        | < 213      | < 0.83       |
| 10/24/19               | < 1.39       | < 1.34       | < 1.45        | < 2.02        | < 248      | < 0.72       |

**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> |
|------------------------|--------------|--------------|---------------|---------------|------------|--------------|
| 01/24/19               | < 1.45       | < 1.40       | < 1.42        | < 1.41        | < 202      | < 0.78       |
| 04/25/19               | < 1.59       | < 1.75       | < 1.87        | < 1.93        | < 238      | < 0.75       |
| 07/30/19               | < 1.51       | < 1.62       | < 1.67        | < 1.53        | < 231      | < 0.73       |
| 10/24/19               | < 1.38       | < 1.55       | < 1.54        | < 1.55        | < 247      | < 0.85       |

**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> |
|------------------------|--------------|--------------|---------------|---------------|------------|--------------|
| 01/24/19               | < 1.61       | < 1.72       | < 1.97        | < 1.75        | < 209      | < 0.77       |
| 04/25/19               | < 1.31       | < 1.29       | < 1.73        | < 1.38        | < 225      | < 0.88       |
| 07/30/19               | < 1.50       | < 1.67       | < 1.83        | < 1.63        | < 232      | < 0.74       |
| 10/24/19               | < 1.61       | < 1.67       | < 1.73        | < 1.53        | < 234      | < 0.79       |

**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> |
|------------------------|--------------|--------------|---------------|---------------|------------|--------------|
| 01/24/19               | < 1.23       | < 1.36       | < 1.35        | < 1.37        | < 201      | < 0.74       |
| 04/25/19               | < 1.47       | < 1.53       | < 1.73        | < 1.73        | < 228      | < 0.78       |
| 07/30/19               | < 1.70       | < 1.89       | < 2.02        | < 1.76        | < 195      | < 0.93       |
| 10/24/19               | < 1.36       | < 1.51       | < 1.49        | < 1.55        | < 252      | < 0.70       |

**City of Salem Water & Sewage Department (AIWW05)**

| <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> |
|------------------------|--------------|--------------|---------------|---------------|------------|--------------|
| 01/24/19               | < 1.14       | < 1.25       | < 1.23        | < 1.22        | < 206      | < 0.73       |
| 04/25/19               | < 1.40       | < 1.36       | < 1.55        | < 1.50        | < 231      | < 0.75       |
| 07/30/19               | < 1.70       | < 1.97       | < 1.86        | < 1.65        | < 230      | < 0.76       |
| 10/24/19               | < 1.42       | < 1.64       | < 1.60        | < 1.46        | < 253      | < 0.84       |

Results in picoCuries per Liter (pCi/L)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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

| <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         | 17.7                          | 5.4        | 15.6                          | 3.5        | 16.1                          | 3.7        | 16.5                          | 2.0        |
| CO02           | Brendan T. Byrne State Forest, New Lisbon, NJ | 13.5                          | 4.1        | 11.4                          | 4.8        | 12.9                          | 5.0        | 13.0                          | 2.8        |

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  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Thermoluminescent Dosimetry Data  
Quarterly Results**

| <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         | 12.5                          | 3.7        | 11.5                          | 8.8        | 11.4                          | 4.4        | 11.7                          | 3.5        |
| 2              | Ocean Twp. Municipal Building          | 14.1                          | 5.7        | 12.5                          | 6.4        | 12.3                          | 0.9        | 13.7                          | 4.5        |
| 3              | Sewage Pumping Station, Forked River   | 14.8                          | 3.8        | 13.5                          | 1.7        | 12.9                          | 3.2        | 14.2                          | 1.7        |
| 4              | Twin River Station, Forked River       | 12.3                          | 3.5        | 10.8                          | 4.0        | 11.9                          | 6.1        | 12.2                          | 3.3        |
| 5              | Sewage Pumping Station, Ocean Twp.     | 13.7                          | 2.4        | 11.1                          | 5.0        | 12.6                          | 2.4        | 13.0                          | 3.3        |
| 6              | Oyster Creek, Gate #2, Forked River    | 13.7                          | 3.9        | 11.9                          | 1.4        | 12.5                          | 3.0        | 13.7                          | 4.0        |
| 7              | Finninger Farm, Forked River           | 12.1                          | 4.5        | 10.1                          | 3.8        | 10.7                          | 6.0        | 11.5                          | 2.2        |
| 8              | Ocean Co. Memorial Cemetery, Waretown  | 12.6                          | 2.5        | 11.0                          | 5.2        | 10.9                          | 1.9        | 12.0                          | 2.5        |
| 9              | Oyster Creek Building 17, Forked River | 13.0                          | 7.5        | 12.1                          | 1.6        | 12.5                          | 3.9        | 13.2                          | 2.7        |
| 10             | Sheffield & Derby Rd, Forked River     | 12.8                          | 0.8        | 11.0                          | 2.7        | 11.5                          | 7.3        | 12.4                          | 5.5        |
| 11             | Lakeside Drive, Forked River           | 13.1                          | 1.0        | 11.3                          | 4.3        | 12.1                          | 2.0        | 12.6                          | 2.6        |
| 12             | Forked River Game Farm, Forked River   | 13.0                          | 3.7        | 12.5                          | 7.6        | 11.9                          | 1.6        | 13.3                          | 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 90 days (a standard quarter)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Thermoluminescent Dosimetry Data  
Quarterly Results**

| <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   | 13.3                          | 4.9        | 11.3                          | 4.0        | 11.7                          | 3.0        | 12.7                          | 2.2        |
| 14             | Sands Pt. Park, Dock Ave., Waretown     | 13.4                          | 2.7        | 12.0                          | 1.9        | 13.2                          | 4.7        | 12.9                          | 5.6        |
| 15             | Recreation Center, Waretown             | 12.6                          | 2.6        | 11.4                          | 2.5        | 11.7                          | 1.6        | 12.8                          | 6.4        |
| 16             | North Access Rd., Forked River          | 12.8                          | 2.4        | 11.5                          | 3.0        | 12.7                          | 4.2        | 11.9                          | 1.3        |
| 20             | Third Avenue, Barnegat Light            | 11.6                          | 2.1        | 10.0                          | 1.1        | 10.5                          | 2.2        | *                             | *          |
| 21             | Rose Hill Road & Barnegat Blvd          | 13.8                          | 3.7        | 12.1                          | 3.9        | 13.2                          | 3.6        | 12.8                          | 3.0        |
| 22             | Bay Way & Clairmore Avenue              | 13.5                          | 2.9        | 11.5                          | 0.9        | 11.6                          | 1.9        | *                             | *          |
| 23             | Island Beach State Park, Parking Lot A5 | 12.5                          | 5.2        | 10.6                          | 3.0        | 10.9                          | 2.6        | *                             | *          |
| 24             | Forked River Site Access Rd. (N)        | 16.3                          | 3.1        | 14.1                          | 2.2        | 14.7                          | 3.1        | 14.8                          | 3.6        |
| 25             | Forked River Site Access Rd. NNW)       | 17.8                          | 3.4        | 15.2                          | 2.8        | 15.7                          | 3.6        | 16.8                          | 2.7        |
| 26             | Forked River Site Access Rd. (NW)       | 15.0                          | 1.8        | 13.2                          | 0.6        | 14.2                          | 0.5        | 15.0                          | 3.0        |
| 27             | Southern Area Stores Fence, FR Site     | 19.3                          | 5.9        | 16.6                          | 0.6        | 18.3                          | 3.5        | 18.6                          | 2.1        |

\* TLD 4<sup>th</sup> quarter results unavailable for Stations 20, 22, and 23

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  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Thermoluminescent Dosimetry Data  
Quarterly Results**

| <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> |
| 28             | Southern Area Stores,<br>FR Site (WSW)         | 17.3                          | 4.6        | 14.8                          | 4.2        | 16.5                          | 2.4        | 16.4                          | 4.0        |
| 29             | Southern Area Stores<br>Access Rd (SSW)        | 13.1                          | 4.8        | 11.4                          | 5.2        | 12.2                          | 2.8        | 14.7                          | 3.5        |
| 30             | Southern Area Stores<br>Access Road (S)        | 14.8                          | 2.2        | 13.3                          | 3.6        | 14.3                          | 2.8        | 13.2                          | 0.8        |
| 31             | Southern Area Stores<br>Access Road (SSE)      | 14.3                          | 4.7        | 12.5                          | 4.2        | 13.8                          | 2.2        | 14.2                          | 3.0        |
| 32             | U.S. Route 9 (ESE)<br>Forked River., NJ        | 13.3                          | 3.4        | 11.5                          | 2.6        | 12.2                          | 5.2        | 13.4                          | 3.6        |
| 33             | U.S. Route 9 (NE)<br>Forked River, NJ          | 12.9                          | 3.6        | 12.0                          | 4.4        | 12.6                          | 1.9        | 13.0                          | 3.0        |
| 34             | Garden St Pkwy Svc.<br>Forked River, NJ        | 14.1                          | 1.6        | 12.8                          | 4.8        | 13.1                          | 2.5        | *                             | *          |
| 35             | U.S. Route 9 & Harbor<br>Inn Rd, Bayville, NJ  | 14.0                          | 1.4        | 12.4                          | 2.9        | 12.9                          | 2.0        | *                             | *          |
| 36             | Orlando Dr. & Penguin<br>Ct., Forked River, NJ | 13.1                          | 3.3        | *                             | *          | 12.5                          | 1.9        | 12.9                          | 1.3        |
| 37             | Bay Pkwy, Sands Point,<br>Waretown, NJ         | 12.5                          | 5.8        | 11.3                          | 1.2        | 11.3                          | 2.2        | 12.2                          | 4.3        |
| 38             | Hightide & Bonita Dr.,<br>Waretown, NJ         | 14.4                          | 3.9        | 13.1                          | 5.9        | 13.0                          | 4.4        | 14.1                          | 1.0        |
| 39             | Brook & School St.<br>Barnegat, NJ             | 13.5                          | 4.1        | 12.1                          | 3.9        | 12.0                          | 3.5        | *                             | *          |

\* TLD 2<sup>nd</sup> quarter results for Station 36 unavailable.

\* TLD 4<sup>th</sup> quarter results for Stations 34, 35 and 39 unavailable

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  
2019 Radiological Environmental Monitoring Program**

**Oyster Creek  
Thermoluminescent Dosimetry Data  
Quarterly Results**

| <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> |
| 40             | County Rt. 554,<br>Barnegat, NJ      | 14.1                          | 4.1        | 12.6                          | 3.0        | 12.8                          | 6.5        | *                             | *          |
| 41             | County Rt. 532,<br>Waretown, NJ      | 12.7                          | 0.7        | 10.9                          | 3.9        | 11.6                          | 2.8        | *                             | *          |
| 42             | Lacey Rd. WEST,<br>Forked River, NJ  | 15.7                          | 4.9        | 13.7                          | 2.3        | 14.5                          | 1.6        | *                             | *          |
| 43             | U.S. Route 9 (E)<br>Forked River, NJ | 13.9                          | 3.6        | 12.3                          | 3.2        | 12.7                          | 0.6        | 13.4                          | 3.1        |

\* TLD 4<sup>th</sup> quarter results for Stations 40, 41 and 42 unavailable

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  
2019 Radiological Environmental Monitoring Program**

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

| <b>Station</b> | <b>Location</b>                   | <b><u>1<sup>st</sup> Quarter</u></b> |                   | <b><u>2<sup>nd</sup> Quarter</u></b> |                   | <b><u>3<sup>rd</sup> Quarter</u></b> |                   | <b><u>4<sup>th</sup> Quarter</u></b> |                   |
|----------------|-----------------------------------|--------------------------------------|-------------------|--------------------------------------|-------------------|--------------------------------------|-------------------|--------------------------------------|-------------------|
|                |                                   | <b><u>Result</u></b>                 | <b><u>%CV</u></b> | <b><u>Result</u></b>                 | <b><u>%CV</u></b> | <b><u>Result</u></b>                 | <b><u>%CV</u></b> | <b><u>Result</u></b>                 | <b><u>%CV</u></b> |
| 1              | Access Road – Security Checkpoint | 14.4                                 | 2.4               | 12.1                                 | 5.5               | 14.1                                 | 3.3               | 14.1                                 | 2.3               |
| 2              | Poplar Road, Lower Alloways       | 13.9                                 | 5.3               | 13.0                                 | 4.1               | 13.9                                 | 5.0               | 14.9                                 | 6.5               |
| 3              | Money and Eagle Island Road       | 15.3                                 | 4.9               | 14.9                                 | 4.0               | 15.6                                 | 3.5               | 16.4                                 | 2.3               |
| 4              | Ft. Elfsborg / Hancocks – East    | 16.0                                 | 1.2               | 15.6                                 | 4.4               | 16.4                                 | 2.5               | 16.9                                 | 2.9               |
| 5              | Ft. Elfsborg / Hancocks – West    | 20.1                                 | 3.8               | 19.2                                 | 4.9               | 20.4                                 | 4.5               | 20.4                                 | 0.8               |
| 6              | Stathems Neck Road                | 14.3                                 | 2.4               | 13.6                                 | 2.5               | 14.4                                 | 3.1               | 14.9                                 | 5.6               |
| 7              | Stow Neck Road Lower Alloways     | 13.1                                 | 4.1               | 11.5                                 | 3.6               | 12.0                                 | 3.6               | 13.1                                 | 0.4               |
| 8              | Alloways Creek Neck Road - Middle | 12.2                                 | 2.6               | 11.8                                 | 3.5               | 12.3                                 | 0.8               | 13.1                                 | 1.2               |
| 9              | Alloways Creek Neck Road - North  | 16.5                                 | 4.1               | 15.2                                 | 3.8               | 16.7                                 | 1.9               | 17.9                                 | 6.3               |
| 10             | Abbotts Farm Road                 | 12.0                                 | 3.1               | 11.4                                 | 4.0               | 12.3                                 | 4.0               | 13.7                                 | 5.2               |

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  
2019 Radiological Environmental Monitoring Program**

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

| <b><u>Station</u></b> | <b><u>Location</u></b>              | <b><u>1<sup>st</sup> Quarter</u></b> |                   | <b><u>2<sup>nd</sup> Quarter</u></b> |                   | <b><u>3<sup>rd</sup> Quarter</u></b> |                   | <b><u>4<sup>th</sup> Quarter</u></b> |                   |
|-----------------------|-------------------------------------|--------------------------------------|-------------------|--------------------------------------|-------------------|--------------------------------------|-------------------|--------------------------------------|-------------------|
|                       |                                     | <b><u>Result</u></b>                 | <b><u>%CV</u></b> | <b><u>Result</u></b>                 | <b><u>%CV</u></b> | <b><u>Result</u></b>                 | <b><u>%CV</u></b> | <b><u>Result</u></b>                 | <b><u>%CV</u></b> |
| 11                    | PSEG Education Center/EOF           | 15.2                                 | 3.8               | 13.9                                 | 3.1               | 15.2                                 | 3.0               | 16.3                                 | 6.4               |
| 12                    | Onsite Access Rd N Sector           | 17.1                                 | 5.3               | 15.2                                 | 3.2               | 17.1                                 | 1.9               | 17.5                                 | 6.3               |
| 13                    | Onsite Laydown Area - NNE Sector    | 14.8                                 | 2.7               | 15.1                                 | 5.6               | 15.4                                 | 4.6               | 15.6                                 | 5.6               |
| 14                    | Onsite Utility Pole NE Sector       | 13.1                                 | 0.8               | 13.8                                 | 3.5               | 14.3                                 | 3.9               | 14.5                                 | 2.0               |
| 15                    | Onsite Hope Creek Road – ENE Sector | 14.3                                 | 5.2               | 11.6                                 | 7.6               | 14.1                                 | 3.4               | 15.0                                 | 1.0               |
| 16                    | Onsite Parking Lot ESE Sector       | 17.4                                 | 4.8               | 16.5                                 | 3.9               | 17.2                                 | 3.1               | 17.6                                 | 0.8               |
| 17                    | Onsite Salem NGS SE Sector          | 16.7                                 | 3.4               | 16.1                                 | 3.2               | 16.5                                 | 3.4               | 16.9                                 | 2.0               |
| 18                    | Bayside Road Bayside, NJ            | 14.4                                 | 2.3               | 14.2                                 | 6.8               | 14.0                                 | 3.7               | 15.3                                 | 2.2               |

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  
2019 Radiological Environmental Monitoring Program**

**Comparison of NJDEP and Mirion Technologies Thermoluminescent Dosimetry Data for Oyster Creek**

**Quarterly Results for Co-located Dosimeters**

| <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>Mirion</u> |            | <u>NJDEP</u>                  |            | <u>Mirion</u> |            | <u>NJDEP</u>                  |            | <u>Mirion</u> |            | <u>NJDEP</u>                  |            | <u>Mirion</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.<br>Station, Ocean<br>Township    | 13.7                          | 2.4        | 9.0           | 5.7        | 11.1                          | 5.0        | 11.0          | 5.2        | 12.6                          | 2.4        | 9.7           | 3.0        | 13.0                          | 3.3        | 12.7          | 4.7        |
| 7              | Finninger<br>Farm,OCNGS<br>Forked River       | 12.1                          | 4.5        | 7.3           | 4.8        | 10.1                          | 3.8        | 10.0          | 3.5        | 10.7                          | 6.0        | 9.2           | 5.8        | 11.5                          | 2.2        | 11.2          | 3.5        |
| 13             | Restrooms,<br>Lakeside Dr.<br>Forked River    | 13.3                          | 4.9        | 9.1           | 3.9        | 11.3                          | 4.0        | 11.0          | 5.2        | 11.7                          | 3.0        | 8.9           | 6.4        | 12.7                          | 2.2        | 12.0          | 3.5        |
| 21             | Rose Hill and<br>Barnegat Rd<br>Barnegat Twp. | 13.8                          | 3.7        | 9.8           | 4.5        | 12.1                          | 3.9        | 10.9          | 6.8        | 13.2                          | 3.6        | 10.2          | 2.5        | 12.8                          | 3.0        | 12.5          | 6.9        |

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 90 days (a standard quarter)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Comparison of NJDEP and Mirion Technologies Thermoluminescent Dosimetry Data for Salem/Hope Creek**

**Quarterly Results for Co-located Dosimeters**

| <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>Mirion</u> |            | <u>NJDEP</u>                  |            | <u>Mirion</u> |            | <u>NJDEP</u>                  |            | <u>Mirion</u> |            | <u>NJDEP</u>                  |            | <u>Mirion</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> |
| 1              | Access Road<br>– Security<br>Checkpoint | 14.4                          | 2.4        | 10.1          | 3.6        | 12.1                          | 5.5        | 11.0          | 3.3        | 14.1                          | 3.3        | 12.0          | 2.6        | 14.1                          | 2.3        | 13.5          | 3.7        |
| 2              | Poplar Road,<br>Lower<br>Alloways       | 13.9                          | 5.3        | 10.7          | 5.1        | 13.0                          | 4.1        | 10.4          | 12.7       | 13.9                          | 5.0        | 11.9          | 5.4        | 14.9                          | 6.5        | 13.8          | 8.7        |
| 3              | Money and<br>Eagle Island<br>Roads      | 15.3                          | 4.9        | 11.3          | 5.4        | 14.9                          | 4.0        | 14.7          | 2.7        | 15.6                          | 3.5        | 12.0          | 7.7        | 16.4                          | 2.3        | 14.1          | 7.7        |
| 5              | Ft. Elfsborg/<br>Hancocks -<br>West     | 20.1                          | 3.8        | 15.7          | 2.1        | 19.2                          | 4.9        | 17.2          | 4.5        | 20.4                          | 4.5        | 19.0          | 5.1        | 20.4                          | 0.8        | 18.4          | 5.0        |

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 90 days (a standard quarter)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

**Comparison of NJDEP and Mirion Technologies Thermoluminescent Dosimetry for Salem/Hope Creek  
Quarterly Results for Co-located Dosimeters**

| <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>Mirion</u> |            | <u>NJDEP</u>                  |            | <u>Mirion</u> |            | <u>NJDEP</u>                  |            | <u>Mirion</u> |            | <u>NJDEP</u>                  |            | <u>Mirion</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<br>Road-Lower<br>Alloways       | 13.1                          | 4.1        | 9.3           | 4.1        | 11.5                          | 3.6        | 11.2          | 4.8        | 12.0                          | 3.6        | 10.9          | 7.5        | 13.1                          | 0.4        | 12.2          | 3.3        |
| 9              | Alloways<br>Creek Neck<br>Road -<br>North | 16.5                          | 4.1        | 11.8          | 4.0        | 15.2                          | 3.8        | 14.4          | 4.7        | 16.7                          | 1.9        | 15.3          | 4.8        | 17.9                          | 6.3        | 14.8          | 2.8        |
| 11             | PSEG Ed.<br>Center/EOF<br>Salem City      | 15.2                          | 3.8        | 11.2          | 3.4        | 13.9                          | 3.1        | 13.0          | 2.9        | 15.2                          | 3.0        | 12.2          | 3.8        | 16.3                          | 6.4        | 13.0          | 5.1        |

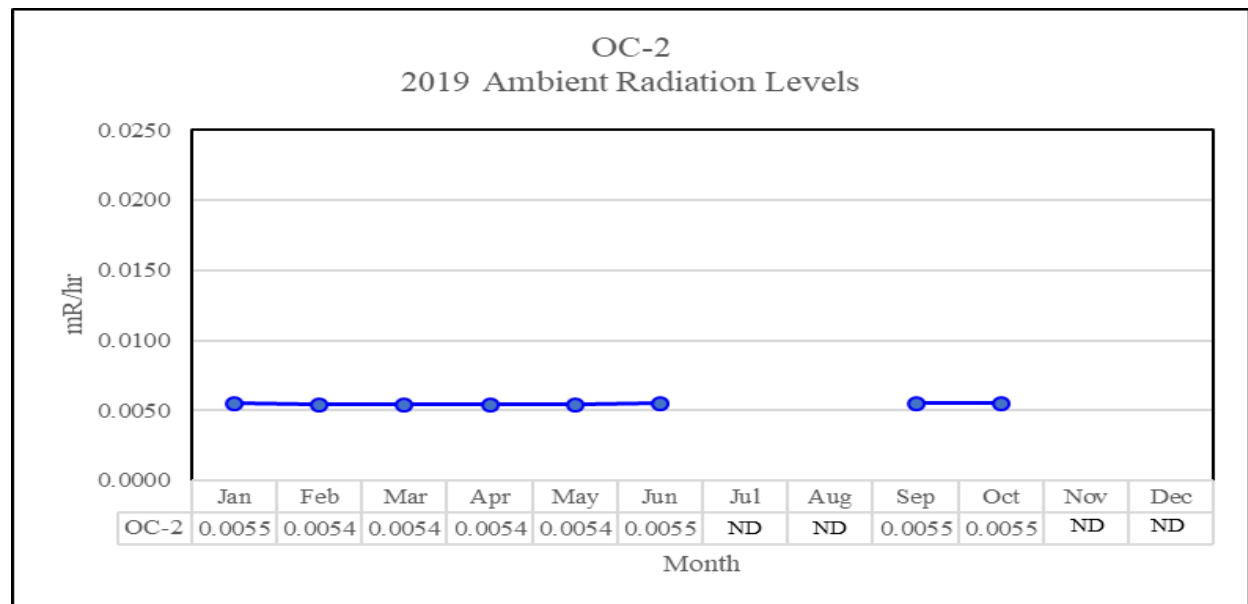
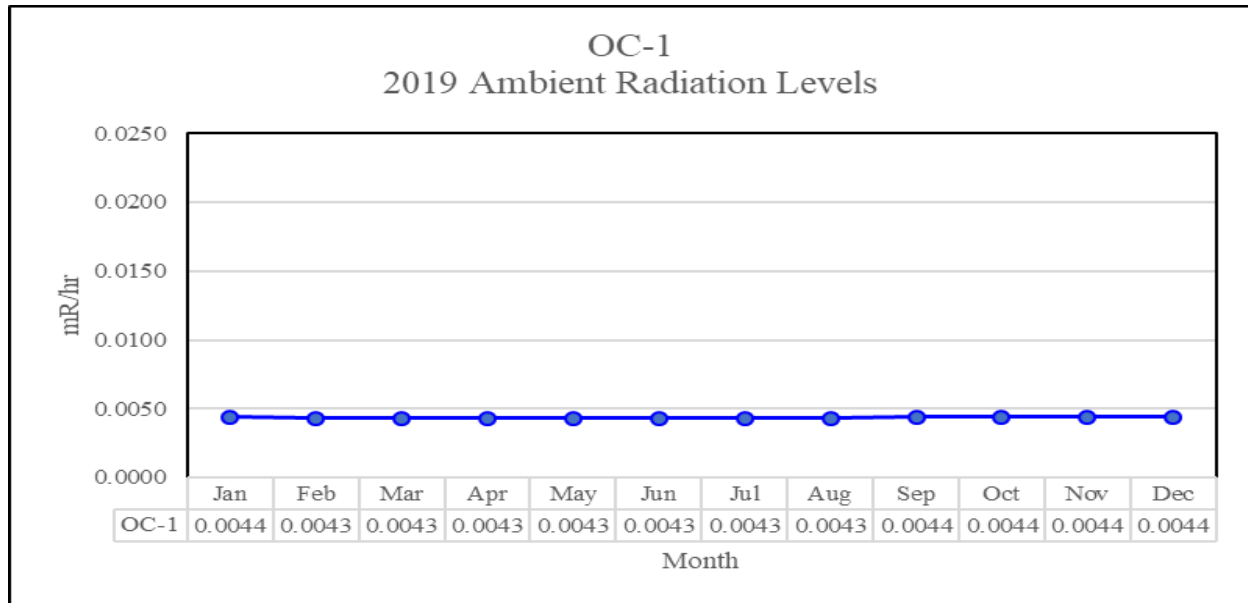
Results are reported in units of milliroentgens (mR)

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 90 days (a standard quarter)

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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

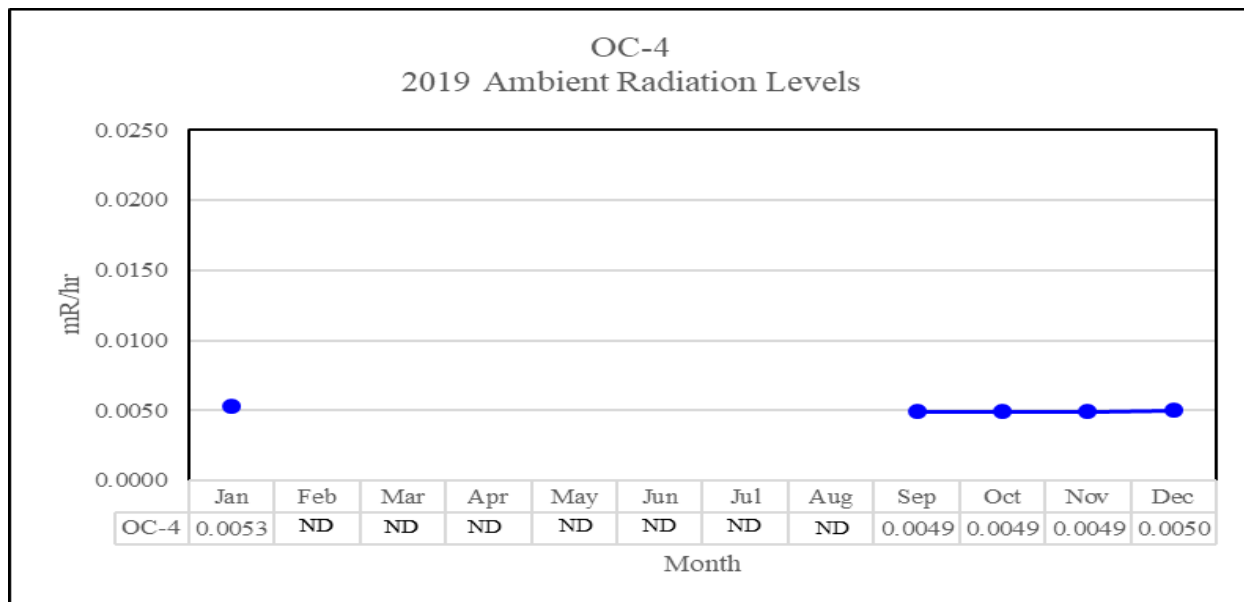
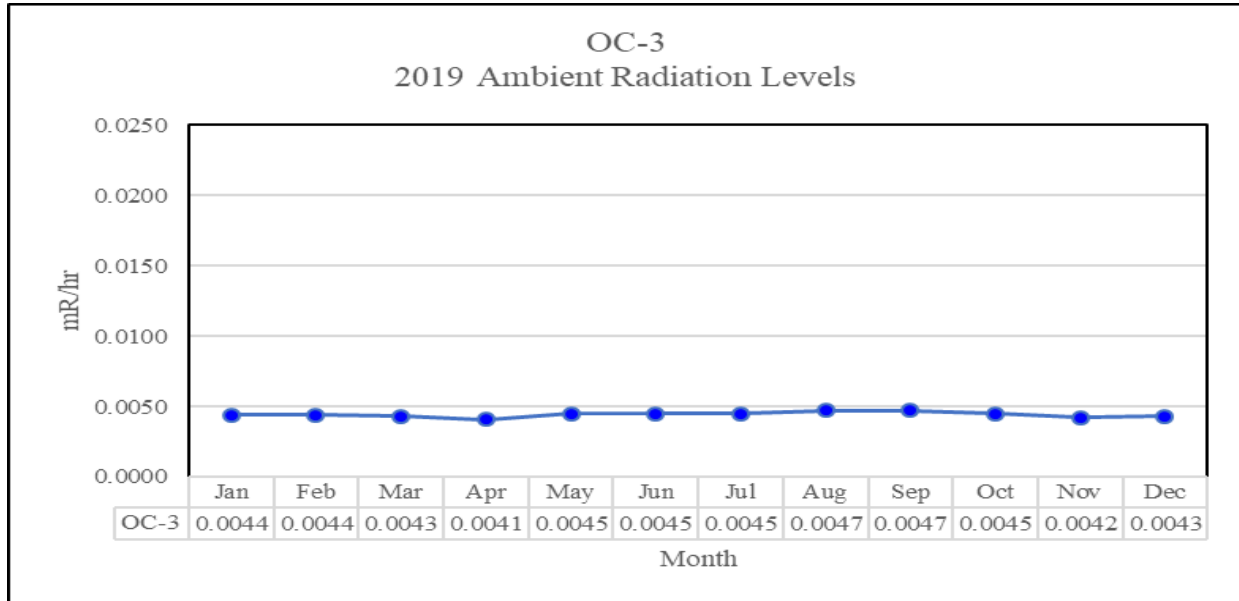


Note: 'ND' indicates that no data were available



**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

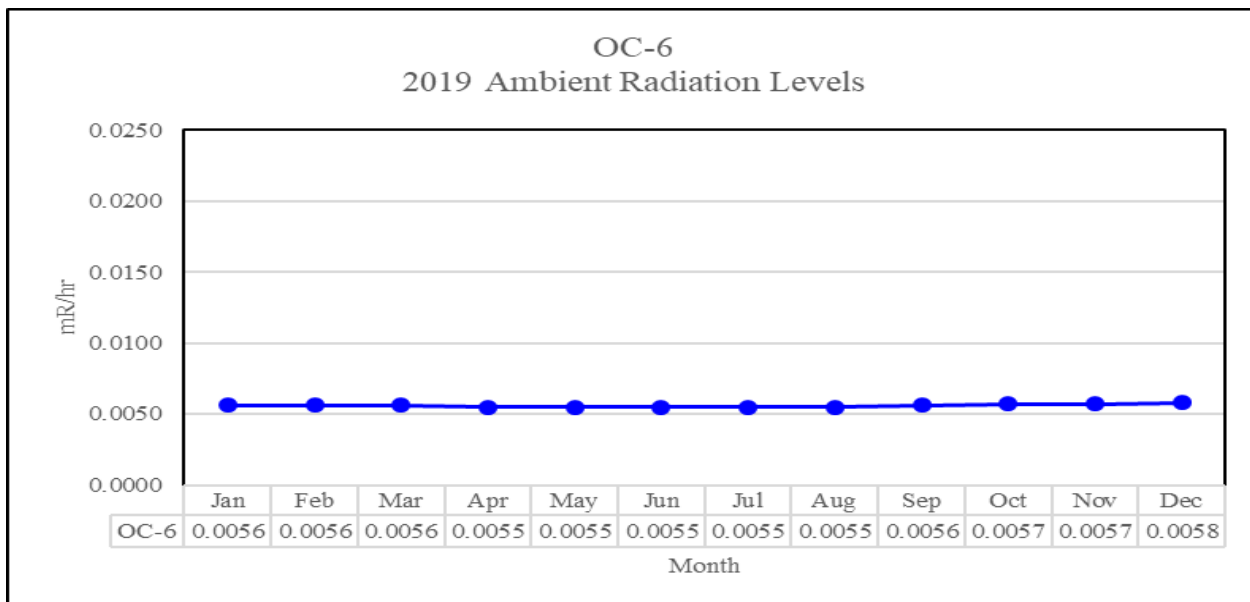
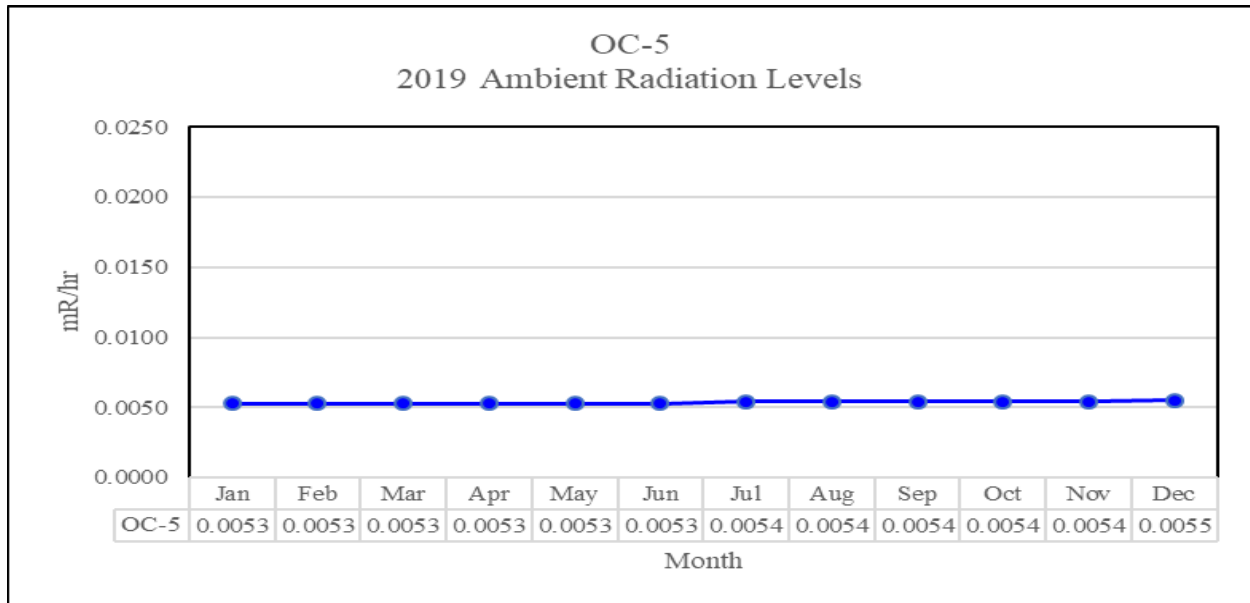
**Oyster Creek  
Continuous Radiological Environmental Surveillance Telemetry (CREST) Data**



Note: 'ND' indicates that no data were available

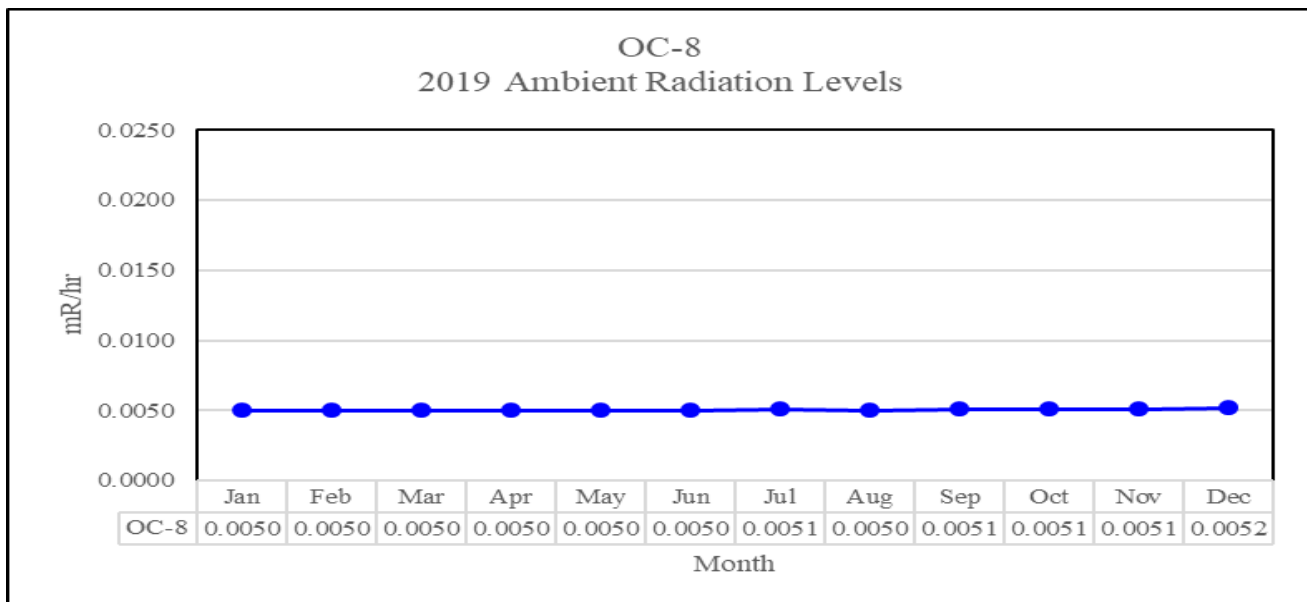
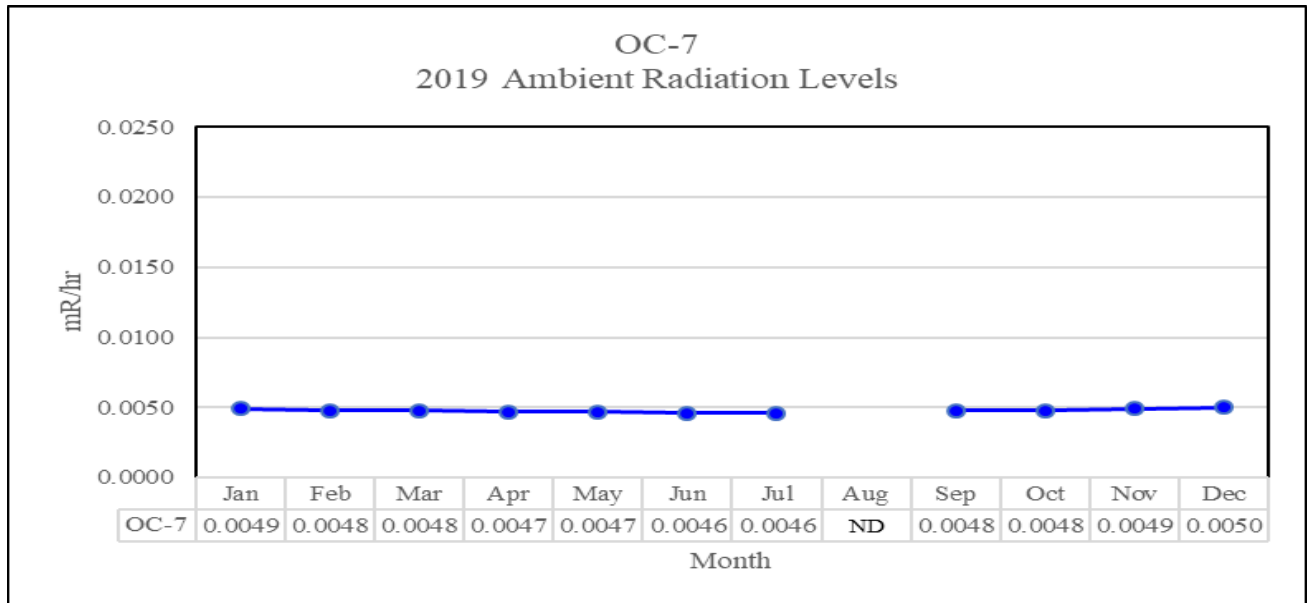
**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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



**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

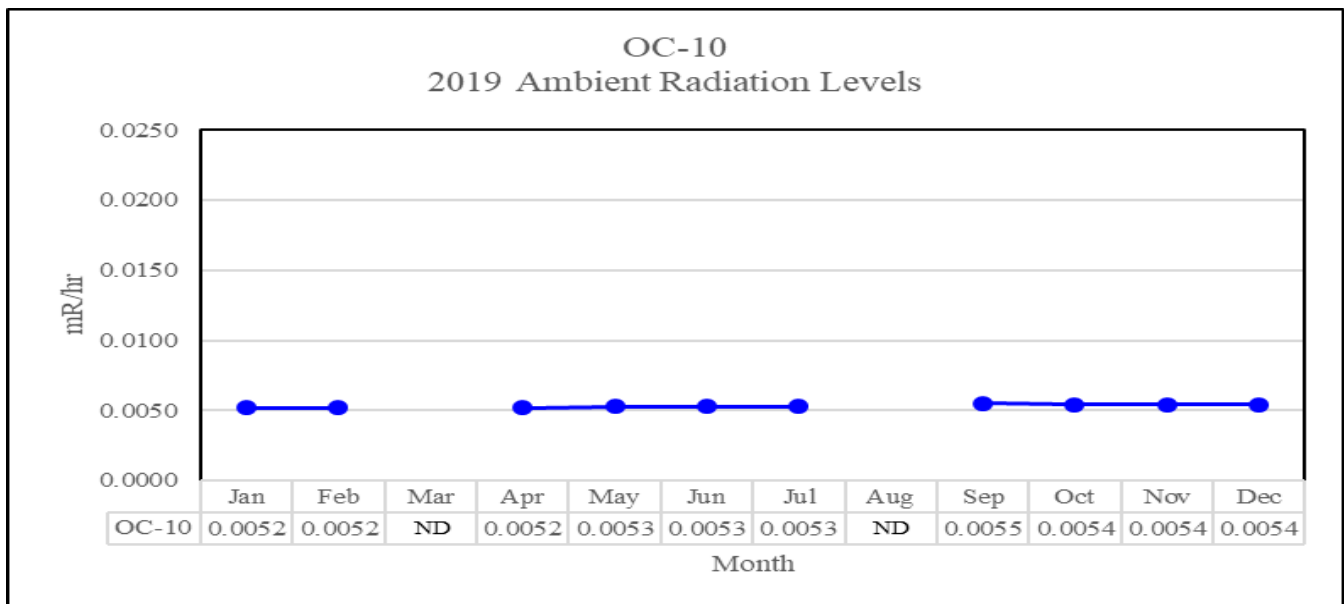
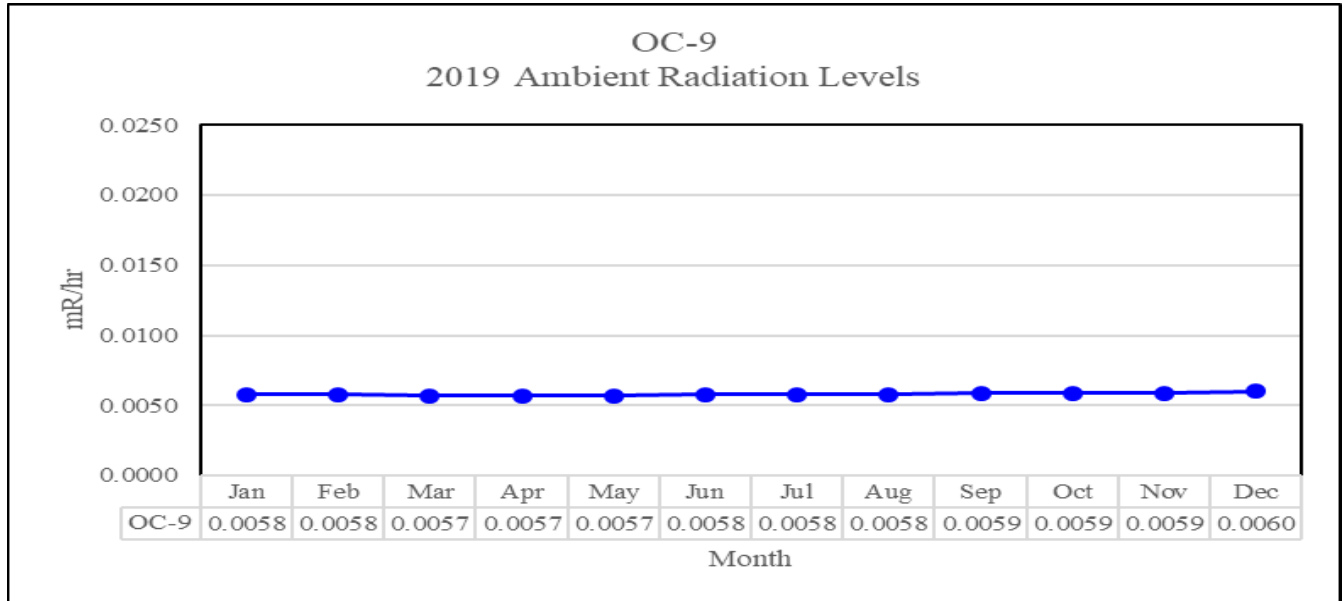
**Oyster Creek  
Continuous Radiological Environmental Surveillance Telemetry (CREST) Data**



Note: 'ND' indicates that no data were available

**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

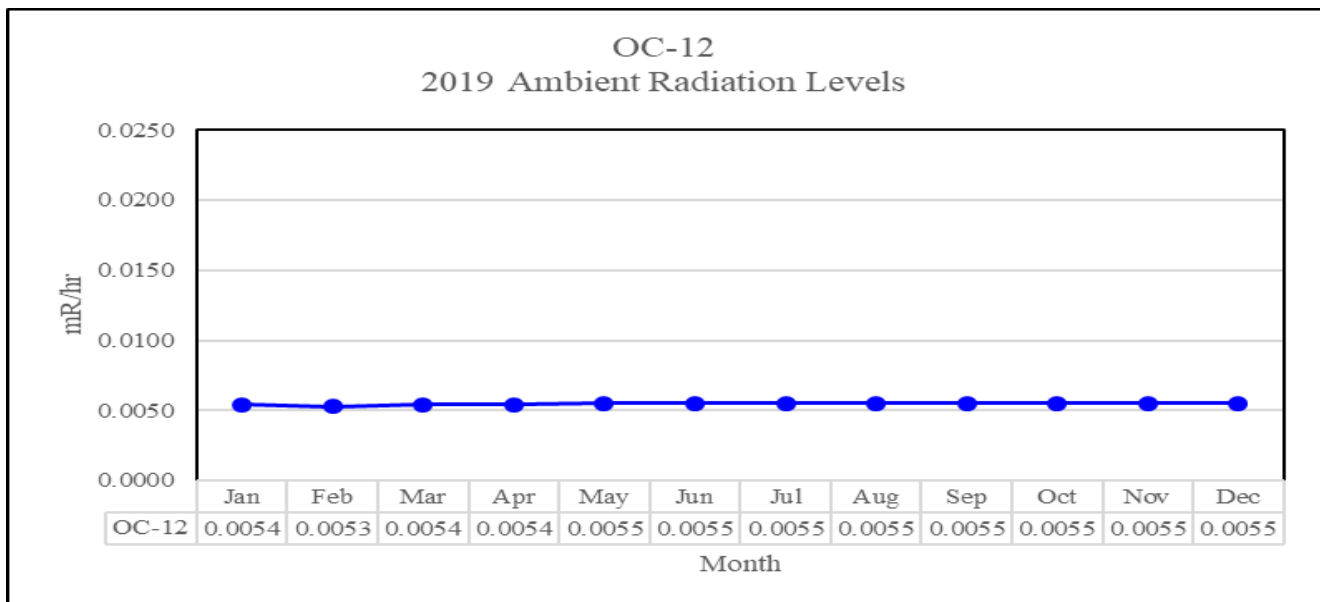
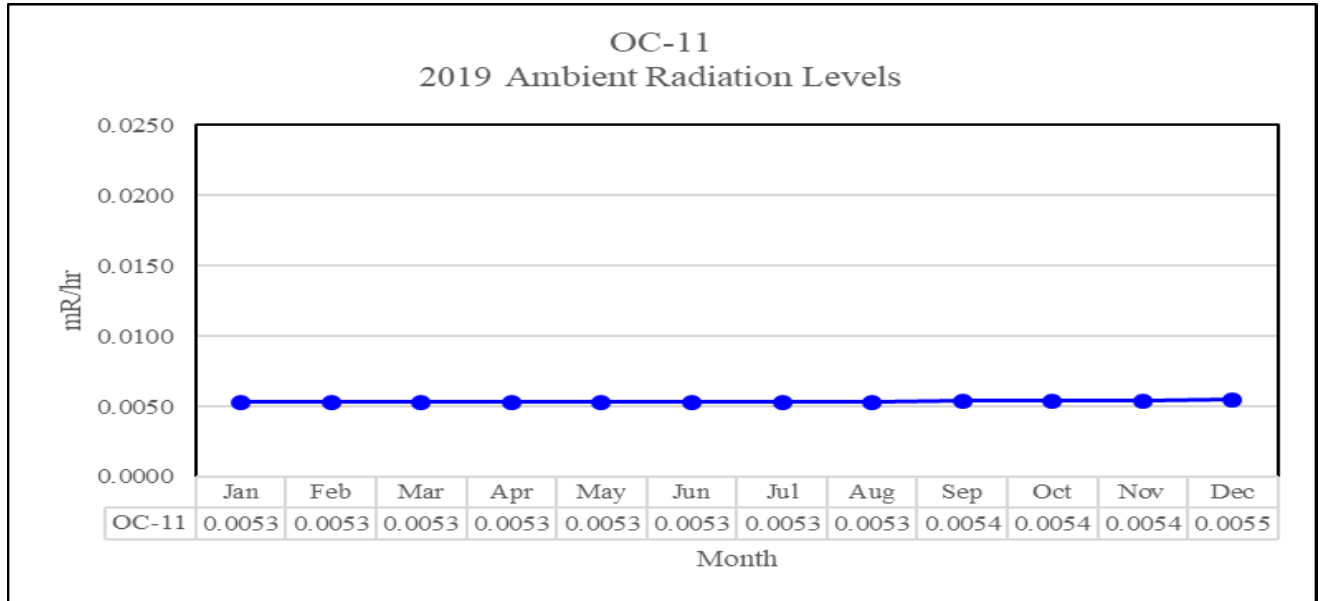
**Oyster Creek  
Continuous Radiological Environmental Surveillance Telemetry (CREST) Data**



Note: 'ND' indicates that no data were available

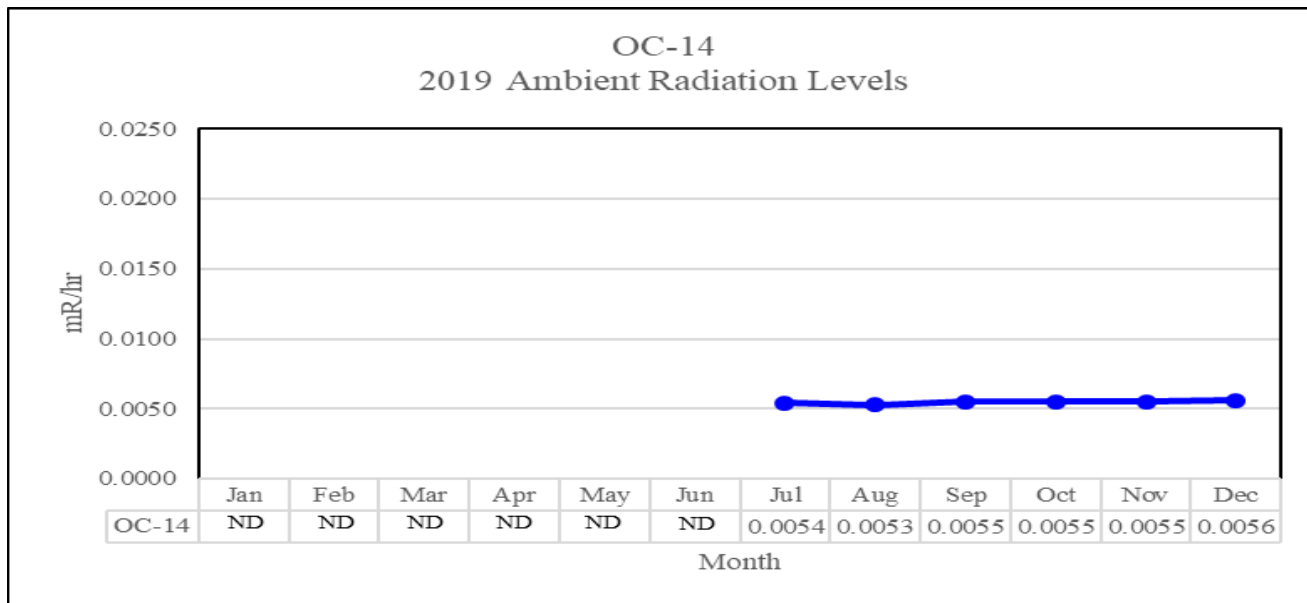
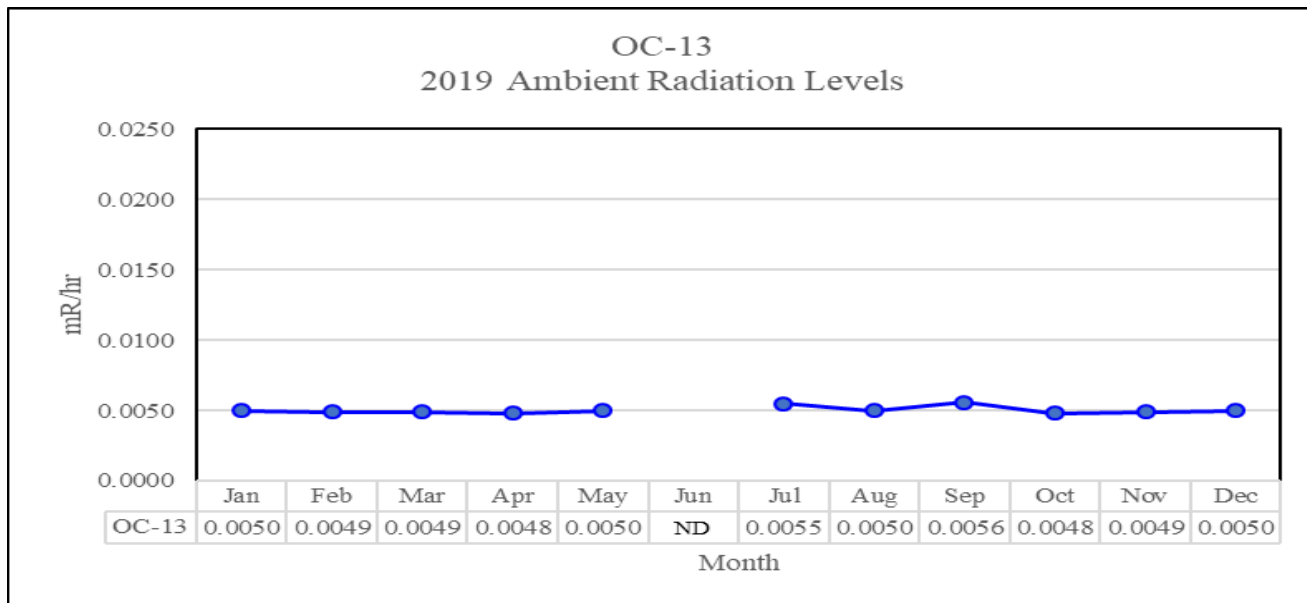
**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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



**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

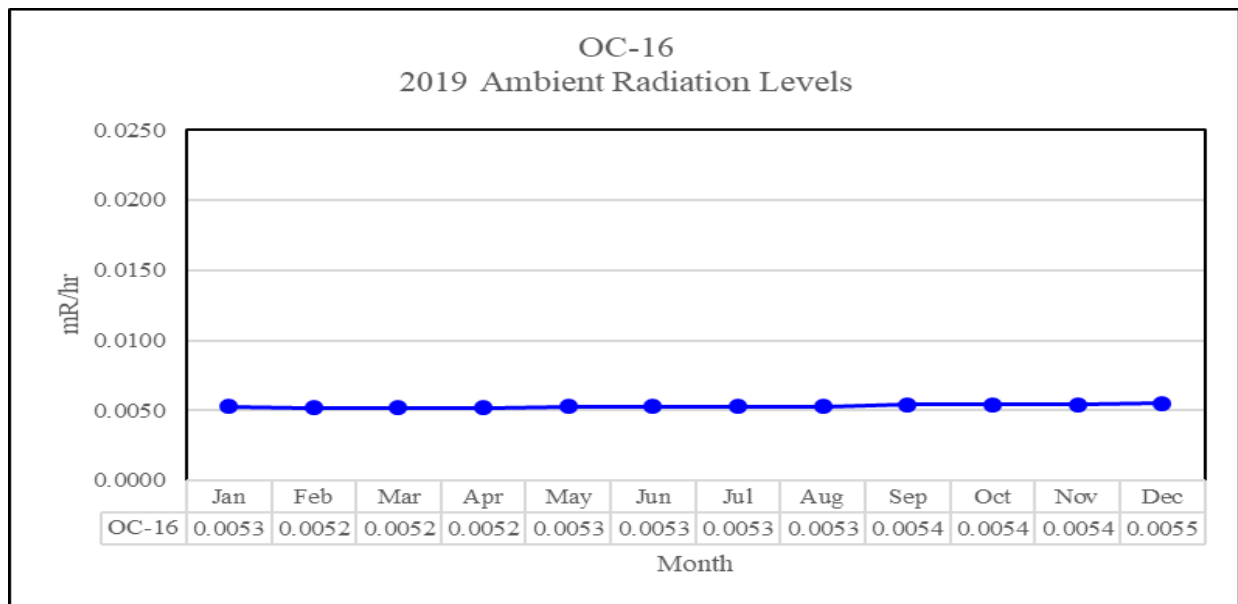
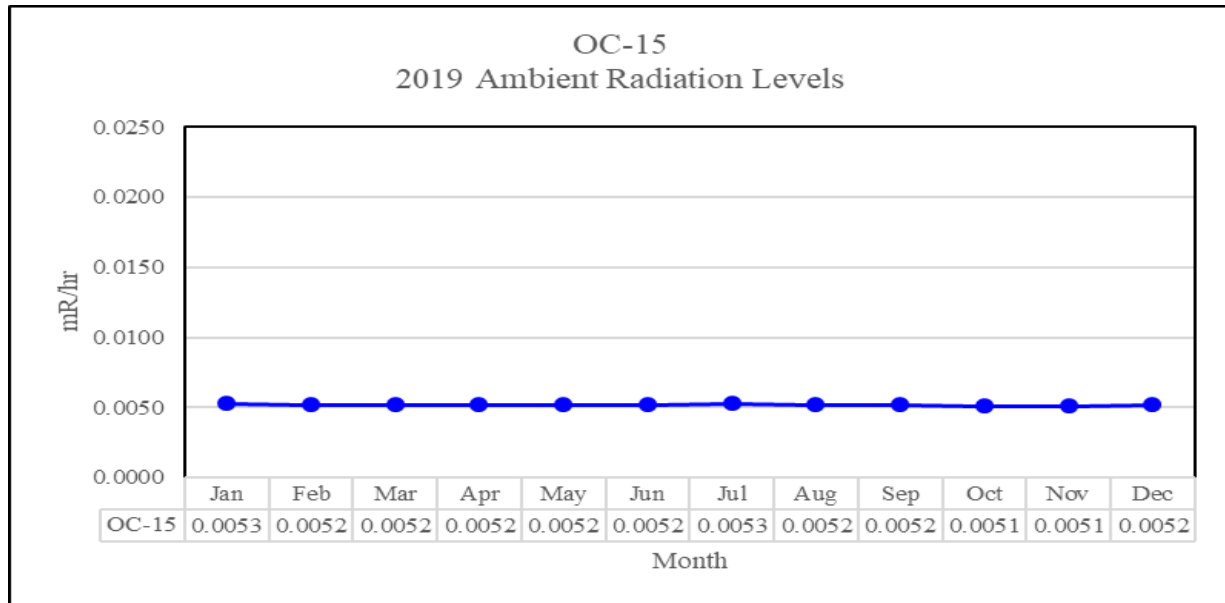
**Oyster Creek  
Continuous Radiological Environmental Surveillance Telemetry (CREST) Data**



Note: ND indicates that no data were available

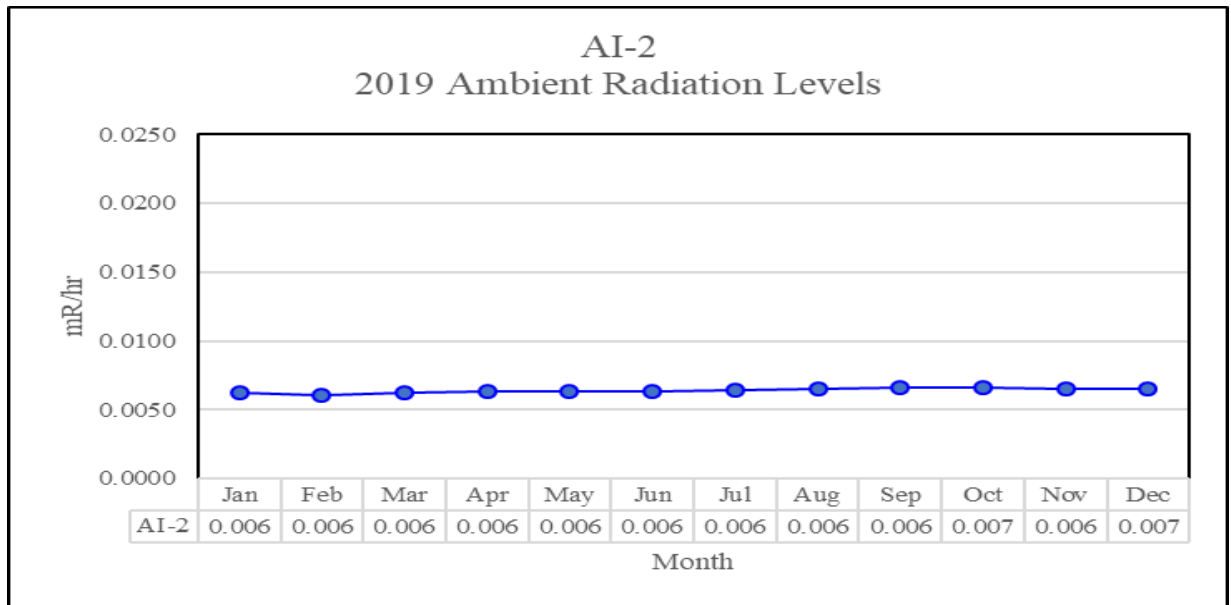
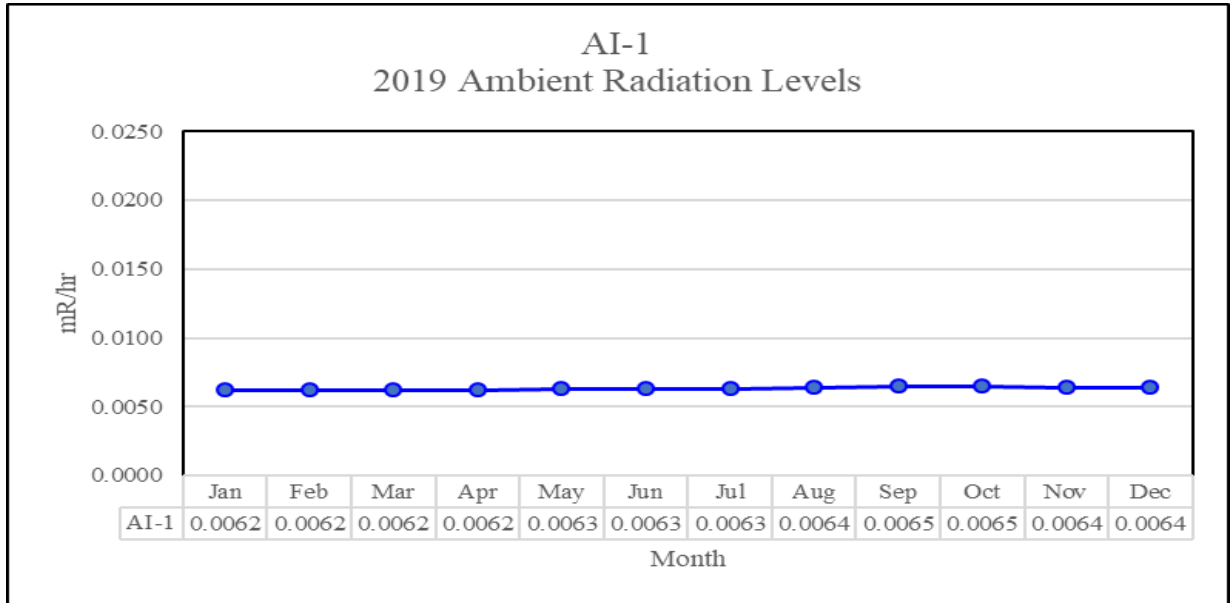
**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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



**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

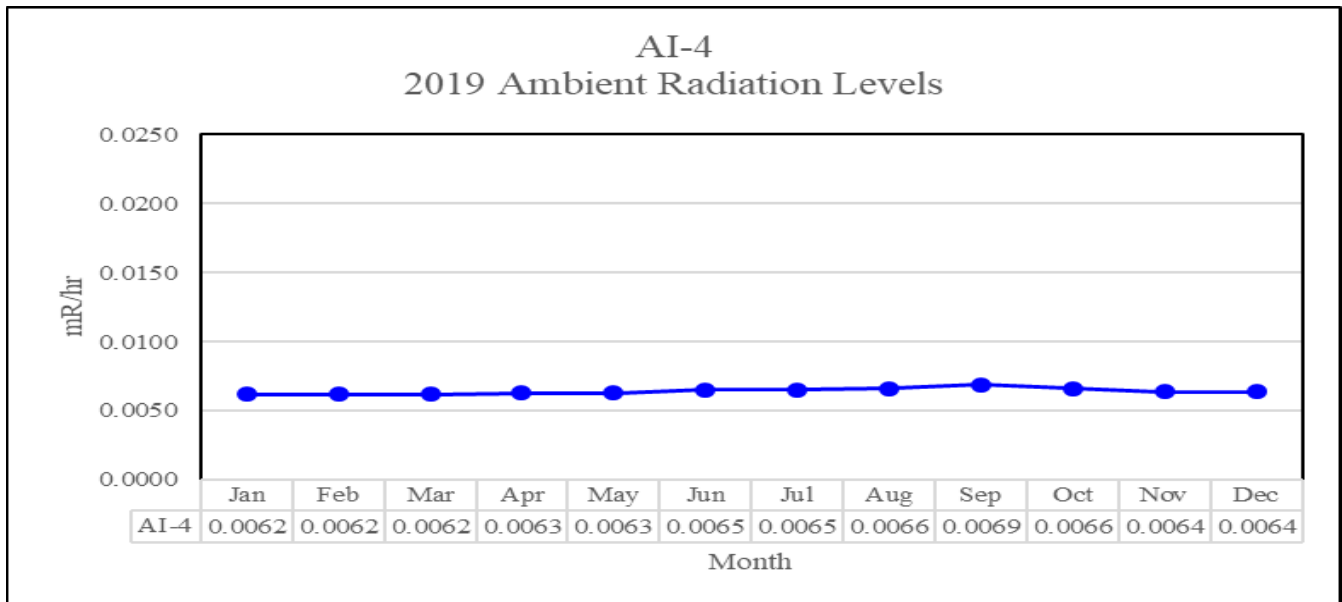
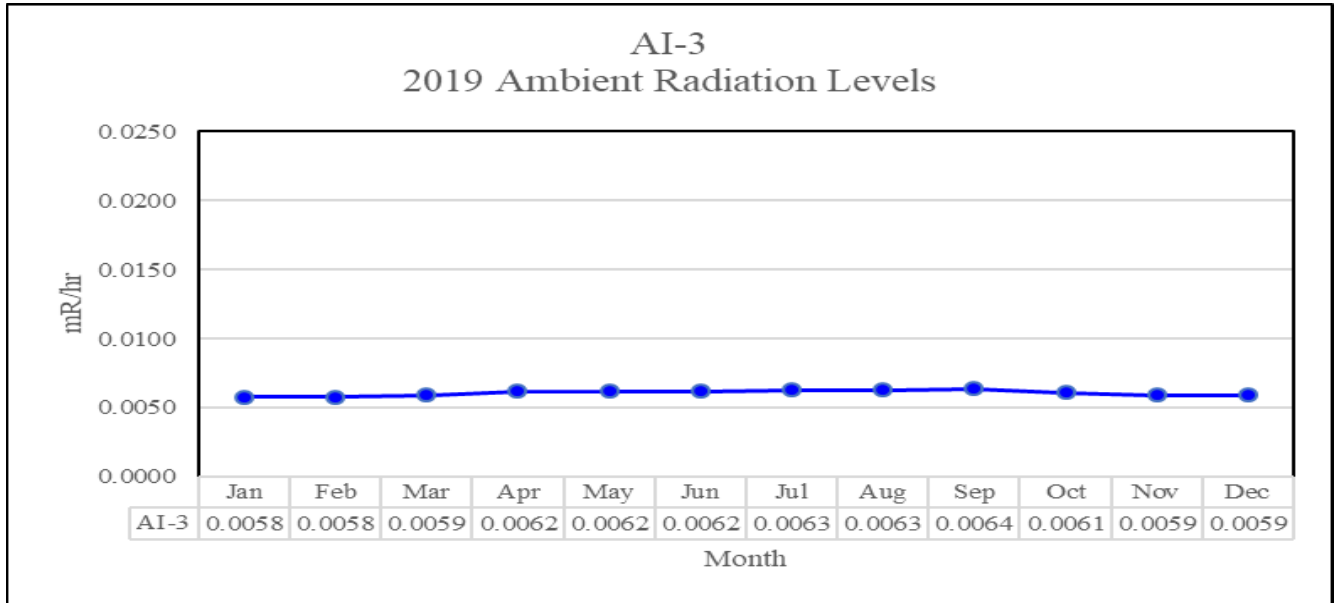
**Salem/Hope Creek  
Continuous Radiological Environmental Surveillance Telemetry (CREST) Data**





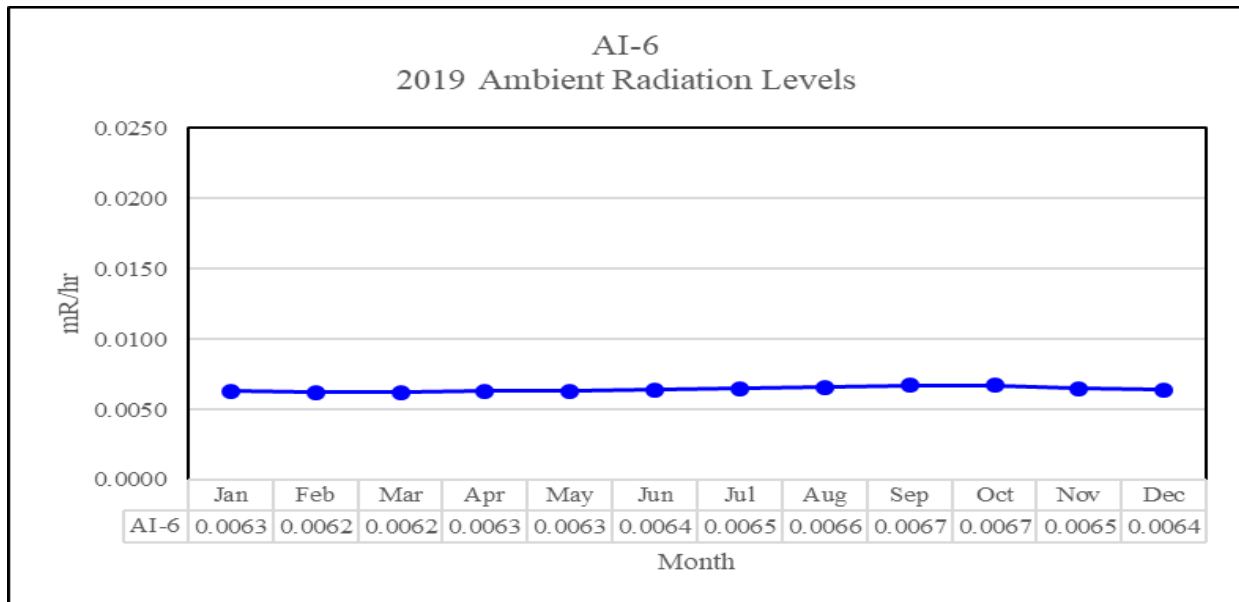
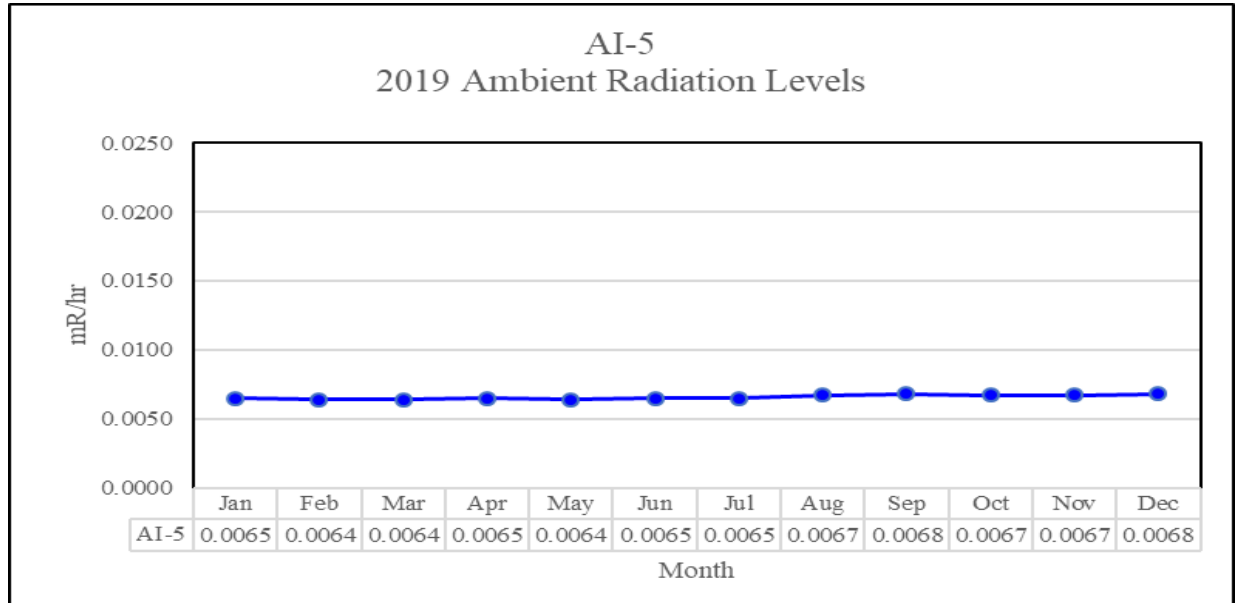
**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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



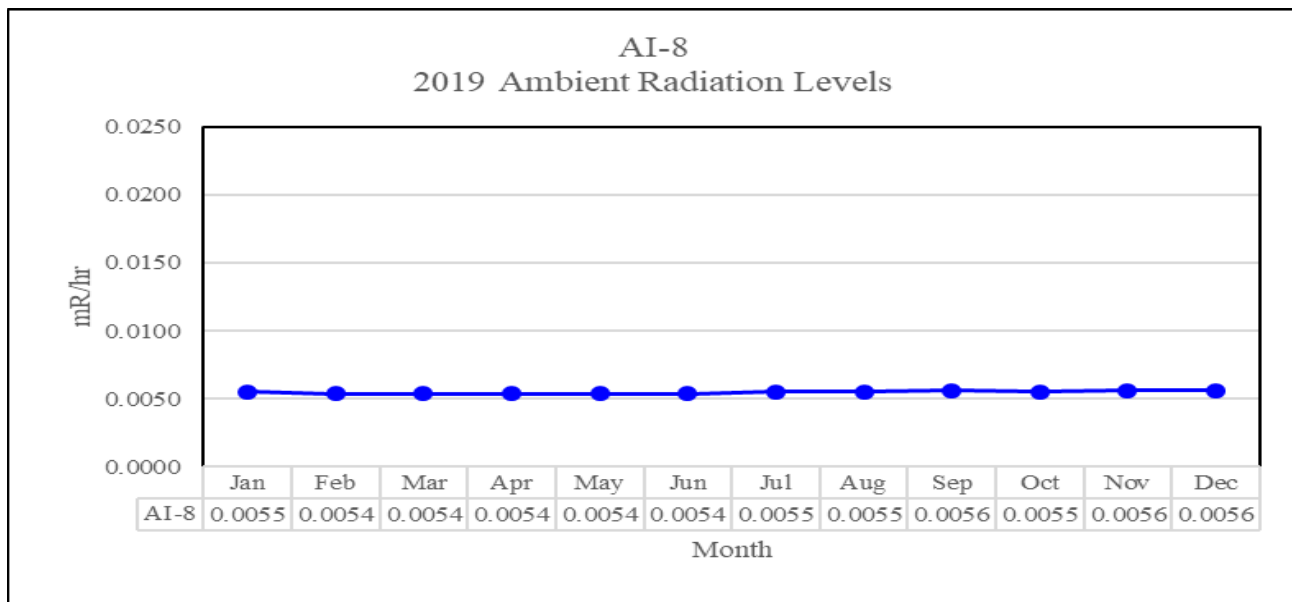
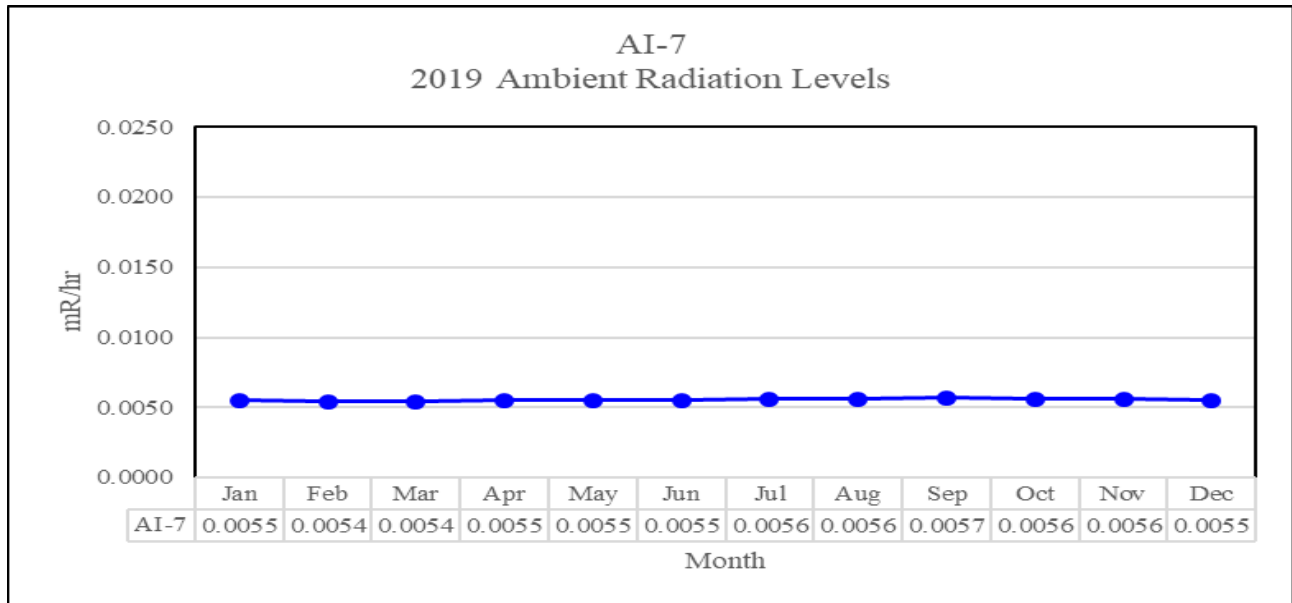
**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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



**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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



**New Jersey Department of Environmental Protection  
Bureau of Nuclear Engineering  
2019 Radiological Environmental Monitoring Program**

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

