

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2023 Radiological Environmental Monitoring Program**

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

BNE Office (COAI01)

<u>Collection Period</u>			<u>I-131</u> <u>(pCi/m³)</u>
12/28/22	-	01/11/23	< 0.007
01/11/23	-	01/25/23	< 0.009
01/25/23	-	02/08/23	< 0.006
02/08/23	-	02/22/23	< 0.006
02/22/23	-	03/08/23	< 0.011
03/08/23	-	03/22/23	< 0.005
03/22/23	-	04/05/23	< 0.005
04/05/23	-	04/19/23	< 0.011
04/19/23	-	05/03/23	< 0.008
05/03/23	-	05/17/23	< 0.006
05/17/23	-	05/31/23	< 0.013
05/31/23	-	06/14/23	< 0.009
06/14/23	-	06/28/23	< 0.008
06/28/23	-	07/12/23	< 0.006
07/12/23	-	07/26/23	< 0.007
07/26/23	-	08/09/23	< 0.008
09/09/23	-	08/23/23	< 0.008
08/23/23	-	09/06/23	< 0.005
09/06/23	-	09/20/23	< 0.006
09/20/23	-	10/04/23	< 0.014
10/04/23	-	10/18/23	< 0.009
10/18/23	-	11/01/23	< 0.015
11/01/23	-	11/15/23	< 0.014
11/15/23	-	11/29/23	< 0.007
11/29/23	-	12/13/23	< 0.007
12/13/23	-	12/27/23	< 0.015
12/27/23	-	01/10/24	< 0.007

Results in picoCuries per cubic meter (pCi/m³)

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

Brendan T. Byrne State Forest (COAI02)

<u>Collection Period</u>			<u>I-131</u> <u>(pCi/m³)</u>
12/28/22	-	01/11/23	< 0.006
01/11/23	-	01/25/23	< 0.008
01/25/23	-	02/08/23	< 0.006
02/08/23	-	02/22/23	< 0.004
02/22/23	-	03/08/23	< 0.008
03/08/23	-	03/22/23	< 0.008
03/22/23	-	04/05/23	< 0.009
04/05/23	-	04/19/23	< 0.007
04/19/23	-	05/03/23	< 0.009
05/03/23	-	05/17/23	< 0.010
05/17/23	-	05/31/23	< 0.007
05/31/23	-	06/14/23	< 0.010
06/14/23	-	06/28/23	< 0.007
06/28/23	-	07/12/23	< 0.006
07/12/23	-	07/26/23	< 0.009
07/26/23	-	08/09/23	< 0.006
09/09/23	-	08/23/23	< 0.007
08/23/23	-	09/06/23	< 0.019
09/06/23	-	09/20/23	< 0.008
09/20/23	-	10/04/23	< 0.015
10/04/23	-	10/18/23	< 0.009
10/18/23	-	11/01/23	< 0.007
11/01/23	-	11/15/23	< 0.014
11/15/23	-	11/29/23	< 0.006
11/29/23	-	12/13/23	< 0.006
12/13/23	-	12/27/23	< 0.016
12/27/23	-	01/10/24	< 0.005

Results in picoCuries per cubic meter (pCi/m³)

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

Fort Elfsborg Road (AIAI01)

<u>Collection Period</u>			<u>I-131</u> <u>(pCi/m³)</u>
12/28/22	-	01/11/23	< 0.005
01/11/23	-	01/25/23	< 0.007
01/25/23	-	02/08/23	< 0.007
02/08/23	-	02/22/23	< 0.008
02/22/23	-	03/08/23	< 0.009
03/08/23	-	03/22/23	< 0.005
03/22/23	-	04/05/23	< 0.007
04/05/23	-	04/19/23	< 0.007
04/19/23	-	05/03/23	< 0.013
05/03/23	-	05/17/23	< 0.012
05/17/23	-	05/31/23	< 0.015
05/31/23	-	06/14/23	< 0.007
06/14/23	-	06/28/23	< 0.007
06/28/23	-	07/12/23	< 0.007
07/12/23	-	07/26/23	< 0.008
07/26/23	-	08/09/23	< 0.008
08/09/23	-	08/23/23	< 0.007
08/23/23	-	09/06/23	< 0.018
09/06/23	-	09/20/23	< 0.006
09/20/23	-	10/04/23	< 0.005
10/04/23	-	10/18/23	< 0.008
10/18/23	-	11/01/23	< 0.019
11/01/23	-	11/15/23	< 0.010
11/15/23	-	11/29/23	< 0.008
11/29/23	-	12/13/23	< 0.006
12/13/23	-	12/27/23	< 0.017
12/27/23	-	01/10/24	< 0.004

Results in picoCuries per cubic meter (pCi/m³)

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

Plant Access Road (AIAI02)

<u>Collection Period</u>			<u>I-131</u> <u>(pCi/m³)</u>
12/28/22	-	01/11/23	< 0.007
01/11/23	-	01/25/23	< 0.009
01/25/23	-	02/08/23	< 0.007
02/08/23	-	02/22/23	< 0.005
02/22/23	-	03/08/23	< 0.008
03/08/23	-	03/22/23	< 0.007
03/22/23	-	04/05/23	< 0.008
04/05/23	-	04/19/23	< 0.009
04/19/23	-	05/03/23	< 0.009
05/03/23	-	05/17/23	< 0.005
05/17/23	-	05/31/23	< 0.013
05/31/23	-	06/14/23	< 0.014
06/14/23	-	06/28/23	< 0.007
06/28/23	-	07/12/23	< 0.006
07/12/23	-	07/26/23	< 0.007
07/26/23	-	08/09/23	< 0.006
09/09/23	-	08/23/23	< 0.009
08/23/23	-	09/06/23	< 0.014
09/06/23	-	09/20/23	< 0.010
09/20/23	-	10/04/23	< 0.010
10/04/23	-	10/18/23	< 0.008
10/18/23	-	11/01/23	< 0.008
11/01/23	-	11/15/23	< 0.017
11/15/23	-	11/29/23	< 0.006
11/29/23	-	12/13/23	< 0.007
12/13/23	-	12/27/23	< 0.013
12/27/23	-	01/10/24	< 0.007

Results in picoCuries per cubic meter (pCi/m³)

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

Lower Alloways Creek School (AIAI03)

<u>Collection Period</u>			<u>I-131</u> <u>(pCi/m³)</u>
12/28/22	-	01/11/23	< 0.007
01/11/23	-	01/25/23	< 0.009
01/25/23	-	02/08/23	< 0.006
02/08/23	-	02/22/23	< 0.003
02/22/23	-	03/08/23	< 0.007
03/08/23	-	03/22/23	< 0.007
03/22/23	-	04/05/23	< 0.008
04/05/23	-	04/19/23	< 0.009
04/19/23	-	05/03/23	< 0.007
05/03/23	-	05/17/23	< 0.010
05/17/23	-	05/31/23	< 0.011
05/31/23	-	06/14/23	< 0.014
06/14/23	-	06/28/23	< 0.008
06/28/23	-	07/12/23	< 0.010
07/12/23	-	07/26/23	< 0.006
07/26/23	-	08/09/23	< 0.007
09/09/23	-	08/23/23	< 0.009
08/23/23	-	09/06/23	< 0.047 ¹
09/06/23	-	09/20/23	< 0.032 ¹
09/20/23	-	10/04/23	< 0.010
10/04/23	-	10/18/23	< 0.007
10/18/23	-	11/01/23	< 0.007
11/01/23	-	11/15/23	< 0.017
11/15/23	-	11/29/23	< 0.007
11/29/23	-	12/13/23	< 0.007
12/13/23	-	12/27/23	< 0.018
12/27/23	-	01/10/24	< 0.007

Results in picoCuries per cubic meter (pCi/m³)

¹ Power outage at sample location caused reduced biweekly sample volume.

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

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

<u>Collection Period</u>			<u>I-131</u> <u>(pCi/m³)</u>
12/28/22	-	01/11/23	< 0.007
01/11/23	-	01/25/23	< 0.007
01/25/23	-	02/08/23	< 0.006
02/08/23	-	02/22/23	< 0.006
02/22/23	-	03/08/23	< 0.006
03/08/23	-	03/22/23	< 0.008
03/22/23	-	04/05/23	< 0.008
04/05/23	-	04/19/23	< 0.006
04/19/23	-	05/03/23	< 0.009
05/03/23	-	05/17/23	< 0.006
05/17/23	-	05/31/23	< 0.014
05/31/23	-	06/14/23	< 0.013
06/14/23	-	06/28/23	< 0.008
06/28/23	-	07/12/23	< 0.007
07/12/23	-	07/26/23	< 0.008
07/26/23	-	08/09/23	< 0.006
09/09/23	-	08/23/23	< 0.008
08/23/23	-	09/06/23	< 0.016
09/06/23	-	09/20/23	< 0.008
09/20/23	-	10/04/23	< 0.013
10/04/23	-	10/18/23	< 0.007
10/18/23	-	11/01/23	< 0.014
11/01/23	-	11/15/23	< 0.013
11/15/23	-	11/29/23	< 0.011
11/29/23	-	12/13/23	< 0.006
12/13/23	-	12/27/23	< 0.013
12/27/23	-	01/10/24	< 0.005

Results in picoCuries per cubic meter (pCi/m³)

**New Jersey Department of Environmental Protection
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**BNE Background Locations
Gross Beta Activity in Bi-Weekly Air Particulate Samples**

BNE Office (COAP01)

<u>Collection Period</u>			<u>Particulate Gross Beta</u> <u>(pCi/m³)</u>
12/28/22	-	01/11/23	0.023 ± 0.002
01/11/23	-	01/25/23	0.013 ± 0.001
01/25/23	-	02/08/23	0.007 ± 0.001
02/08/23	-	02/22/23	0.020 ± 0.002
02/22/23	-	03/08/23	0.017 ± 0.001
03/08/23	-	03/22/23	0.016 ± 0.001
03/22/23	-	04/05/23	0.022 ± 0.002
04/05/23	-	04/19/23	0.019 ± 0.002
04/19/23	-	05/03/23	0.013 ± 0.002
05/03/23	-	05/17/23	0.016 ± 0.001
05/17/23	-	05/31/23	0.012 ± 0.001
05/31/23	-	06/14/23	0.014 ± 0.001
06/14/23	-	06/28/23	0.011 ± 0.001
06/28/23	-	07/12/23	0.019 ± 0.002
07/12/23	-	07/26/23	0.021 ± 0.002
07/26/23	-	08/09/23	0.018 ± 0.002
09/09/23	-	08/23/23	0.020 ± 0.001
08/23/23	-	09/06/23	0.025 ± 0.002
09/06/23	-	09/20/23	0.027 ± 0.002
09/20/23	-	10/04/23	0.015 ± 0.001
10/04/23	-	10/18/23	0.018 ± 0.002
10/18/23	-	11/01/23	0.016 ± 0.001
11/01/23	-	11/15/23	0.029 ± 0.002
11/15/23	-	11/29/23	0.022 ± 0.002
11/29/23	-	12/13/23	0.029 ± 0.002
12/13/23	-	12/27/23	0.021 ± 0.002
12/27/23	-	01/10/24	0.017 ± 0.001

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

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**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> <u>(pCi/m³)</u>
12/28/22	-	01/11/23	0.021 ± 0.002
01/11/23	-	01/25/23	0.013 ± 0.001
01/25/23	-	02/08/23	0.020 ± 0.002
02/08/23	-	02/22/23	0.019 ± 0.002
02/22/23	-	03/08/23	0.017 ± 0.002
03/08/23	-	03/22/23	0.015 ± 0.001
03/22/23	-	04/05/23	0.021 ± 0.002
04/05/23	-	04/19/23	0.019 ± 0.002
04/19/23	-	05/03/23	0.013 ± 0.001
05/03/23	-	05/17/23	0.015 ± 0.001
05/17/23	-	05/31/23	0.011 ± 0.001
05/31/23	-	06/14/23	0.012 ± 0.001
06/14/23	-	06/28/23	0.012 ± 0.001
06/28/23	-	07/12/23	0.020 ± 0.002
07/12/23	-	07/26/23	0.022 ± 0.002
07/26/23	-	08/09/23	0.019 ± 0.002
09/09/23	-	08/23/23	0.022 ± 0.001
08/23/23	-	09/06/23	0.023 ± 0.002
09/06/23	-	09/20/23	0.025 ± 0.002
09/20/23	-	10/04/23	0.014 ± 0.001
10/04/23	-	10/18/23	0.018 ± 0.002
10/18/23	-	11/01/23	0.016 ± 0.001
11/01/23	-	11/15/23	0.027 ± 0.002
11/15/23	-	11/29/23	0.021 ± 0.002
11/29/23	-	12/13/23	0.026 ± 0.002
12/13/23	-	12/27/23	0.019 ± 0.002
12/27/23	-	01/10/24	0.015 ± 0.001

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

**New Jersey Department of Environmental Protection
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**Oyster Creek
Gross Beta Activity in Bi-Weekly Air Particulate Samples**

Waretown Municipal Building (OCAP01)

<u>Collection Period</u>			<u>Particulate Gross Beta</u> <u>(pCi/m³)</u>
12/28/22	-	01/11/23	0.022 ± 0.002
01/11/23	-	01/25/23	0.013 ± 0.001
01/25/23	-	02/08/23	0.023 ± 0.002
02/08/23	-	02/22/23	0.019 ± 0.002
02/22/23	-	03/08/23	0.016 ± 0.001
03/08/23	-	03/22/23	0.015 ± 0.001
03/22/23	-	04/05/23	0.020 ± 0.002
04/05/23	-	04/19/23	0.019 ± 0.002
04/19/23	-	05/03/23	0.014 ± 0.001
05/03/23	-	05/17/23	0.014 ± 0.001
05/17/23	-	05/31/23	0.010 ± 0.001
05/31/23	-	06/14/23	0.012 ± 0.001
06/14/23	-	06/28/23	0.013 ± 0.001
06/28/23	-	07/12/23	0.020 ± 0.002
07/12/23	-	07/26/23	0.019 ± 0.002
07/26/23	-	08/09/23	0.018 ± 0.002
09/09/23	-	08/23/23	0.006 ± 0.000
08/23/23	-	09/06/23	0.021 ± 0.002
09/06/23	-	09/20/23	0.024 ± 0.002
09/20/23	-	10/04/23	0.015 ± 0.001
10/04/23	-	10/18/23	0.019 ± 0.002
10/18/23	-	11/01/23	0.016 ± 0.001
11/01/23	-	11/15/23	0.028 ± 0.002
11/15/23	-	11/29/23	0.021 ± 0.002
11/29/23	-	12/13/23	0.026 ± 0.002
12/13/23	-	12/27/23	0.017 ± 0.001
12/27/23	-	01/10/24	0.016 ± 0.001

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

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

Sands Point Harbor (OCAP02)

<u>Collection Period</u>			<u>Particulate Gross Beta</u> <u>(pCi/m³)</u>
12/28/22	-	01/11/23	0.022 ± 0.002
01/11/23	-	01/25/23	0.012 ± 0.001
01/25/23	-	02/08/23	0.020 ± 0.002
02/08/23	-	02/22/23	0.020 ± 0.001
02/22/23	-	03/08/23	0.017 ± 0.002
03/08/23	-	03/22/23	0.015 ± 0.002
03/22/23	-	04/05/23	0.021 ± 0.002
04/05/23	-	04/19/23	0.021 ± 0.002
04/19/23	-	05/03/23	0.013 ± 0.001
05/03/23	-	05/17/23	0.015 ± 0.001
05/17/23	-	05/31/23	0.010 ± 0.001
05/31/23	-	06/14/23	0.012 ± 0.001
06/14/23	-	06/28/23	0.010 ± 0.001
06/28/23	-	07/12/23	0.018 ± 0.001
07/12/23	-	07/26/23	0.021 ± 0.002
07/26/23	-	08/09/23	0.018 ± 0.002
09/09/23	-	08/23/23	0.019 ± 0.001
08/23/23	-	09/06/23	0.023 ± 0.002
09/06/23	-	09/20/23	0.028 ± 0.002
09/20/23	-	10/04/23	0.012 ± 0.001
10/04/23	-	10/18/23	0.019 ± 0.002
10/18/23	-	11/01/23	0.015 ± 0.001
11/01/23	-	11/15/23	0.028 ± 0.002
11/15/23	-	11/29/23	0.020 ± 0.002
11/29/23	-	12/13/23	0.030 ± 0.002
12/13/23	-	12/27/23	0.017 ± 0.002
12/27/23	-	01/10/24	0.013 ± 0.001

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

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

Forked River Marina (OCAP03)

<u>Collection Period</u>			<u>Particulate Gross Beta</u> <u>(pCi/m³)</u>
12/28/22	-	01/11/23	0.022 ± 0.002
01/11/23	-	01/25/23	0.012 ± 0.001
01/25/23	-	02/08/23	0.020 ± 0.002
02/08/23	-	02/22/23	0.020 ± 0.002
02/22/23	-	03/08/23	0.017 ± 0.001
03/08/23	-	03/22/23	0.015 ± 0.001
03/22/23	-	04/05/23	0.022 ± 0.002
04/05/23	-	04/19/23	0.021 ± 0.002
04/19/23	-	05/03/23	0.015 ± 0.001
05/03/23	-	05/17/23	0.014 ± 0.001
05/17/23	-	05/31/23	0.011 ± 0.001
05/31/23	-	06/14/23	0.012 ± 0.001
06/14/23	-	06/28/23	0.013 ± 0.001
06/28/23	-	07/12/23	0.019 ± 0.002
07/12/23	-	07/26/23	0.022 ± 0.002
07/26/23	-	08/09/23	0.019 ± 0.002
09/09/23	-	08/23/23	0.020 ± 0.001
08/23/23	-	09/06/23	0.009 ± 0.001
09/06/23	-	09/20/23	0.029 ± 0.002
09/20/23	-	10/04/23	0.013 ± 0.001
10/04/23	-	10/18/23	0.019 ± 0.002
10/18/23	-	11/01/23	0.016 ± 0.001
11/01/23	-	11/15/23	0.027 ± 0.002
11/15/23	-	11/29/23	0.023 ± 0.002
11/29/23	-	12/13/23	0.049 ± 0.006
12/13/23	-	12/27/23	0.019 ± 0.002
12/27/23	-	01/10/24	0.017 ± 0.002

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

NOTE: As of 01/10/24, the sample location has been discontinued. The decision to remove this location is based on (1) Distance from the OC station, (2) Plant in Decommissioning and not producing radionuclides as all fuel is removed from the core and the Spent Fuel Pool has been drained, and (3) comport to the reduced environmental sampling distance based on Decommissioning and the licensee's updated environmental program.

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**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> <u>(pCi/m³)</u>
12/28/22	-	01/11/23	0.020 ± 0.002
01/11/23	-	01/25/23	0.012 ± 0.001
01/25/23	-	02/08/23	0.020 ± 0.002
02/08/23	-	02/22/23	0.020 ± 0.002
02/22/23	-	03/08/23	0.016 ± 0.001
03/08/23	-	03/22/23	0.015 ± 0.001
03/22/23	-	04/05/23	0.022 ± 0.002
04/05/23	-	04/19/23	0.019 ± 0.002
04/19/23	-	05/03/23	0.014 ± 0.001
05/03/23	-	05/17/23	0.014 ± 0.001
05/17/23	-	05/31/23	0.011 ± 0.001
05/31/23	-	06/14/23	0.011 ± 0.001
06/14/23	-	06/28/23	0.013 ± 0.001
06/28/23	-	07/12/23	0.019 ± 0.002
07/12/23	-	07/26/23	0.021 ± 0.002
07/26/23	-	08/09/23	0.019 ± 0.002
09/09/23	-	08/23/23	0.023 ± 0.001
08/23/23	-	09/06/23	0.023 ± 0.002
09/06/23	-	09/20/23	0.029 ± 0.002
09/20/23	-	10/04/23	0.014 ± 0.001
10/04/23	-	10/18/23	0.018 ± 0.002
10/18/23	-	11/01/23	0.017 ± 0.002
11/01/23	-	11/15/23	0.026 ± 0.002
11/15/23	-	11/29/23	0.020 ± 0.002
11/29/23	-	12/13/23	0.025 ± 0.002
12/13/23	-	12/27/23	0.018 ± 0.002
12/27/23	-	01/10/24	0.016 ± 0.001

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

NOTE: As of 01/10/24, the sample location has been discontinued. The decision to remove this location is based on (1) Distance from the OC station, (2) Plant in Decommissioning and not producing radionuclides as all fuel is removed from the core and the Spent Fuel Pool has been drained, and (3) comport to the reduced environmental sampling distance based on Decommissioning and the licensee's updated environmental program.

**New Jersey Department of Environmental Protection
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**Oyster Creek
Gross Beta Activity in Bi-Weekly Air Particulate Samples**

JCP&L Substation (OCAP05)

<u>Collection Period</u>			<u>Particulate Gross Beta</u> <u>(pCi/m³)</u>
12/28/22	-	01/11/23	0.022 ± 0.002
01/11/23	-	01/25/23	0.013 ± 0.001
01/25/23	-	02/08/23	0.022 ± 0.002
02/08/23	-	02/22/23	0.022 ± 0.002
02/22/23	-	03/08/23	0.020 ± 0.002
03/08/23	-	03/22/23	0.015 ± 0.001
03/22/23	-	04/05/23	0.024 ± 0.002
04/05/23	-	04/19/23	0.022 ± 0.002
04/19/23	-	05/03/23	0.016 ± 0.001
05/03/23	-	05/17/23	0.017 ± 0.002
05/17/23	-	05/31/23	0.013 ± 0.001
05/31/23	-	06/14/23	0.012 ± 0.001
06/14/23	-	06/28/23	0.014 ± 0.001
06/28/23	-	07/12/23	0.024 ± 0.002
07/12/23	-	07/26/23	0.023 ± 0.002
07/26/23	-	08/09/23	0.019 ± 0.002
09/09/23	-	08/23/23	0.023 ± 0.001
08/23/23	-	09/06/23	0.025 ± 0.002
09/06/23	-	09/20/23	0.031 ± 0.002
09/20/23	-	10/04/23	0.016 ± 0.001
10/04/23	-	10/18/23	0.021 ± 0.002
10/18/23	-	11/01/23	0.016 ± 0.001
11/01/23	-	11/15/23	0.031 ± 0.002
11/15/23	-	11/29/23	0.024 ± 0.002
11/29/23	-	12/13/23	0.031 ± 0.002
12/13/23	-	12/27/23	0.023 ± 0.002
12/27/23	-	01/10/24	0.017 ± 0.001

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

NOTE: As of 01/10/24, the sample location has been discontinued. The decision to remove this location is based on (1) Distance from the OC station, (2) Plant in Decommissioning and not producing radionuclides as all fuel is removed from the core and the Spent Fuel Pool has been drained, and (3) comport to the reduced environmental sampling distance based on Decommissioning and the licensee's updated environmental program.

**New Jersey Department of Environmental Protection
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**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> <u>(pCi/m³)</u>
12/28/22	-	01/11/23	0.023 ± 0.002
01/11/23	-	01/25/23	0.013 ± 0.001
01/25/23	-	02/08/23	0.021 ± 0.002
02/08/23	-	02/22/23	0.020 ± 0.002
02/22/23	-	03/08/23	0.016 ± 0.001
03/08/23	-	03/22/23	0.014 ± 0.001
03/22/23	-	04/05/23	0.016 ± 0.001
04/05/23	-	04/19/23	0.019 ± 0.002
04/19/23	-	05/03/23	0.013 ± 0.001
05/03/23	-	05/17/23	0.015 ± 0.001
05/17/23	-	05/31/23	0.012 ± 0.001
05/31/23	-	06/14/23	0.011 ± 0.001
06/14/23	-	06/28/23	0.012 ± 0.001
06/28/23	-	07/12/23	0.020 ± 0.002
07/12/23	-	07/26/23	0.023 ± 0.002
07/26/23	-	08/09/23	0.019 ± 0.002
09/09/23	-	08/23/23	0.020 ± 0.001
08/23/23	-	09/06/23	0.021 ± 0.002
09/06/23	-	09/20/23	0.026 ± 0.002
09/20/23	-	10/04/23	0.014 ± 0.001
10/04/23	-	10/18/23	0.017 ± 0.002
10/18/23	-	11/01/23	0.014 ± 0.001
11/01/23	-	11/15/23	0.027 ± 0.002
11/15/23	-	11/29/23	0.020 ± 0.002
11/29/23	-	12/13/23	0.028 ± 0.002
12/13/23	-	12/27/23	0.019 ± 0.002
12/27/23	-	01/10/24	0.016 ± 0.001

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

**New Jersey Department of Environmental Protection
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**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> <u>(pCi/m³)</u>
12/28/22	-	01/11/23	0.020 ± 0.002
01/11/23	-	01/25/23	0.013 ± 0.001
01/25/23	-	02/08/23	0.020 ± 0.002
02/08/23	-	02/22/23	0.019 ± 0.002
02/22/23	-	03/08/23	0.017 ± 0.002
03/08/23	-	03/22/23	0.015 ± 0.001
03/22/23	-	04/05/23	0.020 ± 0.002
04/05/23	-	04/19/23	0.020 ± 0.002
04/19/23	-	05/03/23	0.014 ± 0.001
05/03/23	-	05/17/23	0.014 ± 0.001
05/17/23	-	05/31/23	0.011 ± 0.001
05/31/23	-	06/14/23	0.011 ± 0.001
06/14/23	-	06/28/23	0.013 ± 0.001
06/28/23	-	07/12/23	0.021 ± 0.002
07/12/23	-	07/26/23	0.020 ± 0.002
07/26/23	-	08/09/23	0.019 ± 0.002
09/09/23	-	08/23/23	0.021 ± 0.001
08/23/23	-	09/06/23	0.023 ± 0.002
09/06/23	-	09/20/23	0.028 ± 0.002
09/20/23	-	10/04/23	0.013 ± 0.001
10/04/23	-	10/18/23	0.017 ± 0.001
10/18/23	-	11/01/23	No Data ²
11/01/23	-	11/15/23	0.025 ± 0.002
11/15/23	-	11/29/23	0.021 ± 0.002
11/29/23	-	12/13/23	0.028 ± 0.002
12/13/23	-	12/27/23	0.019 ± 0.002
12/27/23	-	01/10/24	0.016 ± 0.001

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

² Sample not available.

**New Jersey Department of Environmental Protection
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**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> <u>(pCi/m³)</u>
12/28/22	-	01/11/23	0.024 ± 0.002
01/11/23	-	01/25/23	0.014 ± 0.001
01/25/23	-	02/08/23	0.023 ± 0.002
02/08/23	-	02/22/23	0.020 ± 0.002
02/22/23	-	03/08/23	0.016 ± 0.001
03/08/23	-	03/22/23	0.017 ± 0.001
03/22/23	-	04/05/23	0.022 ± 0.002
04/05/23	-	04/19/23	0.019 ± 0.002
04/19/23	-	05/03/23	0.021 ± 0.002
05/03/23	-	05/17/23	0.018 ± 0.002
05/17/23	-	05/31/23	0.012 ± 0.001
05/31/23	-	06/14/23	0.013 ± 0.001
06/14/23	-	06/28/23	0.013 ± 0.001
06/28/23	-	07/12/23	0.021 ± 0.002
07/12/23	-	07/26/23	0.022 ± 0.002
07/26/23	-	08/09/23	0.019 ± 0.002
09/09/23	-	08/23/23	0.021 ± 0.001
08/23/23	-	09/06/23	0.023 ± 0.002
09/06/23	-	09/20/23	0.024 ± 0.002
09/20/23	-	10/04/23	0.015 ± 0.001
10/04/23	-	10/18/23	0.018 ± 0.002
10/18/23	-	11/01/23	0.018 ± 0.002
11/01/23	-	11/15/23	0.025 ± 0.002
11/15/23	-	11/29/23	0.022 ± 0.002
11/29/23	-	12/13/23	0.027 ± 0.002
12/13/23	-	12/27/23	0.022 ± 0.002
12/27/23	-	01/10/24	0.017 ± 0.002

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

**New Jersey Department of Environmental Protection
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**Salem/Hope Creek
Gross Beta Activity in Bi-Weekly Air Particulate Samples**

Plant Access Road (AIAP02)

<u>Collection Period</u>			<u>Particulate Gross Beta</u> <u>(pCi/m³)</u>
12/28/22	-	01/11/23	0.021 ± 0.002
01/11/23	-	01/25/23	0.014 ± 0.001
01/25/23	-	02/08/23	0.027 ± 0.002
02/08/23	-	02/22/23	0.019 ± 0.002
02/22/23	-	03/08/23	0.017 ± 0.001
03/08/23	-	03/22/23	0.018 ± 0.002
03/22/23	-	04/05/23	0.023 ± 0.002
04/05/23	-	04/19/23	0.021 ± 0.002
04/19/23	-	05/03/23	0.016 ± 0.001
05/03/23	-	05/17/23	0.016 ± 0.001
05/17/23	-	05/31/23	0.011 ± 0.001
05/31/23	-	06/14/23	0.015 ± 0.001
06/14/23	-	06/28/23	0.014 ± 0.001
06/28/23	-	07/12/23	0.021 ± 0.002
07/12/23	-	07/26/23	0.020 ± 0.002
07/26/23	-	08/09/23	0.019 ± 0.002
09/09/23	-	08/23/23	0.023 ± 0.001
08/23/23	-	09/06/23	0.023 ± 0.002
09/06/23	-	09/20/23	0.023 ± 0.002
09/20/23	-	10/04/23	0.015 ± 0.001
10/04/23	-	10/18/23	0.019 ± 0.002
10/18/23	-	11/01/23	0.018 ± 0.001
11/01/23	-	11/15/23	0.026 ± 0.002
11/15/23	-	11/29/23	0.021 ± 0.002
11/29/23	-	12/13/23	0.028 ± 0.002
12/13/23	-	12/27/23	0.022 ± 0.001
12/27/23	-	01/10/24	0.016 ± 0.001

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

**New Jersey Department of Environmental Protection
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**Salem/Hope Creek
Gross Beta Activity in Bi-Weekly Air Particulate Samples**

Lower Alloways Creek School (AIAP03)

<u>Collection Period</u>			<u>Particulate Gross Beta</u> <u>(pCi/m³)</u>
12/28/22	-	01/11/23	0.021 ± 0.002
01/11/23	-	01/25/23	0.014 ± 0.001
01/25/23	-	02/08/23	0.022 ± 0.002
02/08/23	-	02/22/23	0.021 ± 0.002
02/22/23	-	03/08/23	0.016 ± 0.001
03/08/23	-	03/22/23	0.017 ± 0.001
03/22/23	-	04/05/23	0.021 ± 0.002
04/05/23	-	04/19/23	0.018 ± 0.016
04/19/23	-	05/03/23	0.015 ± 0.001
05/03/23	-	05/17/23	0.015 ± 0.001
05/17/23	-	05/31/23	0.011 ± 0.001
05/31/23	-	06/14/23	0.015 ± 0.001
06/14/23	-	06/28/23	0.013 ± 0.001
06/28/23	-	07/12/23	0.021 ± 0.002
07/12/23	-	07/26/23	0.021 ± -.002
07/26/23	-	08/09/23	0.020 ± 0.002
09/09/23	-	08/23/23	0.021 ± 0.001
08/23/23	-	09/06/23	0.030 ± 0.004
09/06/23	-	09/20/23	0.024 ± 0.003
09/20/23	-	10/04/23	0.015 ± 0.001
10/04/23	-	10/18/23	0.020 ± 0.002
10/18/23	-	11/01/23	0.019 ± 0.002
11/01/23	-	11/15/23	0.028 ± 0.002
11/15/23	-	11/29/23	0.021 ± 0.002
11/29/23	-	12/13/23	0.028 ± 0.002
12/13/23	-	12/27/23	0.022 ± 0.002
12/27/23	-	01/10/24	0.016 ± 0.001

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

**New Jersey Department of Environmental Protection
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**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> <u>(pCi/m³)</u>
12/28/22	-	01/11/23	0.024 ± 0.002
01/11/23	-	01/25/23	0.013 ± 0.001
01/25/23	-	02/08/23	0.022 ± 0.002
02/08/23	-	02/22/23	0.020 ± 0.002
02/22/23	-	03/08/23	0.016 ± 0.001
03/08/23	-	03/22/23	0.015 ± 0.001
03/22/23	-	04/05/23	0.020 ± 0.002
04/05/23	-	04/19/23	0.019 ± 0.002
04/19/23	-	05/03/23	0.013 ± 0.001
05/03/23	-	05/17/23	0.014 ± 0.001
05/17/23	-	05/31/23	0.013 ± 0.001
05/31/23	-	06/14/23	0.013 ± 0.001
06/14/23	-	06/28/23	0.014 ± 0.001
06/28/23	-	07/12/23	0.020 ± 0.002
07/12/23	-	07/26/23	0.019 ± 0.002
07/26/23	-	08/09/23	0.019 ± 0.002
09/09/23	-	08/23/23	0.022 ± 0.001
08/23/23	-	09/06/23	0.021 ± 0.002
09/06/23	-	09/20/23	0.024 ± 0.002
09/20/23	-	10/04/23	0.015 ± 0.001
10/04/23	-	10/18/23	0.018 ± 0.002
10/18/23	-	11/01/23	0.018 ± 0.002
11/01/23	-	11/15/23	0.026 ± 0.002
11/15/23	-	11/29/23	0.022 ± 0.002
11/29/23	-	12/13/23	0.028 ± 0.002
12/13/23	-	12/27/23	0.020 ± 0.002
12/27/23	-	01/10/24	0.011 ± 0.001

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

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2023 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>
12/28/22	-	04/05/23	< 0.2	< 0.2	< 0.2	105 ± 15	< 21.7	< 7.6
04/05/23	-	06/28/23	< 0.3	< 0.2	< 0.2	107 ± 14	< 30.1	< 13.0
06/28/23	-	10/04/23	< 0.3	< 0.2	< 0.2	109 ± 16	< 23.5	< 10.9
10/04/23	-	12/27/23	< 0.4	< 0.3	< 0.3	86 ± 14	< 38.4	< 18.4

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>
12/28/22	-	04/05/23	< 0.3	< 0.2	< 0.2	100 ± 13	< 33.6	< 9.6
04/05/23	-	06/28/23	< 0.3	< 0.3	< 0.3	96 ± 15	< 26.4	< 11.4
06/28/23	-	10/04/23	< 0.2	< 0.2	< 0.2	110 ± 15	< 35.5	< 10.3
10/04/23	-	12/27/23	< 0.2	< 0.2	< 0.2	75 ± 13	< 35.1	< 17.7

Results in 10⁻³ picoCuries per cubic meter (pCi/m³) +/- 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
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**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>
12/28/22	-	04/05/23	< 0.2	< 0.3	< 0.2	99 ± 14	< 29.9	< 7.9
04/05/23	-	06/28/23	< 0.2	< 0.3	< 0.2	87 ± 13	< 32.1	< 12.4
06/28/23	-	10/04/23	< 0.2	< 0.3	< 0.2	88 ± 14	< 16.8	< 15.2
10/04/23	-	12/27/23	< 0.3	< 0.3	< 0.2	78 ± 13	< 41.0	< 15.2

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>
12/28/22	-	04/05/23	< 0.4	< 0.3	< 0.2	103 ± 14	< 24.6	< 7.2
04/05/23	-	06/28/23	< 0.4	< 0.2	< 0.3	77 ± 12	< 17.9	< 14.2
06/28/23	-	10/04/23	< 0.2	< 0.3	< 0.2	96 ± 14	< 21.0	< 10.4
10/04/23	-	12/27/23	< 0.3	< 0.3	< 0.2	68 ± 12	< 57.3	< 31.3

Forked River Marina (OCAP03)

<u>Collection Period</u>			<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>Be-7</u>	<u>Sr-89</u>	<u>Sr-90</u>
12/28/22	-	04/05/23	< 0.3	< 0.3	< 0.2	112 ± 16	< 22.6	< 8.5
04/05/23	-	06/28/23	< 0.3	< 0.2	< 0.2	92 ± 14	< 40.0	< 10.3
06/28/23	-	10/04/23	< 0.2	< 0.3	< 0.3	93 ± 14	< 19.4	< 9.8
10/04/23	-	12/27/23	< 0.4	< 0.4	< 0.3	78 ± 15	< 33.6	< 17.0

Lacey Township Recreation Building (OCAP04)

<u>Collection Period</u>			<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>Be-7</u>	<u>Sr-89</u>	<u>Sr-90</u>
12/28/22	-	04/05/23	< 0.3	< 0.3	< 0.3	108 ± 15	< 24.5	< 8.3
04/05/23	-	06/28/23	< 0.3	< 0.3	< 0.2	88 ± 13	< 27.7	< 15.3
06/28/23	-	10/04/23	< 0.3	< 0.3	< 0.2	100 ± 14	< 19.5	< 7.7
10/04/23	-	12/27/23	< 0.3	< 0.3	< 0.3	82 ± 13	< 26.8	< 20.0

NOTE: As of 01/10/24, the sample locations OCAP03 and OCAP04 have been discontinued. The decision to remove this location is based on (1) Distance from the OC station, (2) Plant in Decommissioning and not producing radionuclides as all fuel is removed from the core and the Spent Fuel Pool has been drained, and (3) comport to the reduced environmental sampling distance based on Decommissioning and the licensee's updated environmental program.

Results in 10⁻³ picoCuries per cubic meter (pCi/m³) +/- 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
2023 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>
12/28/22	-	04/05/23	< 0.2	< 0.3	< 0.2	117 ± 15	< 34.5	< 9.6
04/05/23	-	06/28/23	< 0.3	< 0.3	< 0.3	104 ± 15	< 26.9	< 19.2
06/28/23	-	10/04/23	< 0.2	< 0.3	< 0.2	106 ± 14	< 34.6	< 13.2
10/04/23	-	12/27/23	< 0.2	< 0.3	< 0.2	90 ± 14	< 24.4	< 16.5

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>
12/28/22	-	04/05/23	< 0.2	< 0.2	< 0.2	98 ± 14	< 20.7	< 9.2
04/05/23	-	06/28/23	< 0.3	< 0.3	< 0.2	72 ± 12	< 29.7	< 20.2
06/28/23	-	10/04/23	< 0.3	< 0.2	< 0.2	93 ± 13	< 29.8	< 10.8
10/04/23	-	12/27/23	< 0.2	< 0.3	< 0.2	85 ± 13	< 22.2	< 13.3

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>
12/28/22	-	04/05/23	< 0.1	< 0.2	< 0.3	102 ± 14	< 37.6	< 6.9
04/05/23	-	06/28/23	< 0.4	< 0.3	< 0.2	85 ± 14	< 19.3	< 10.8
06/28/23	-	10/04/23	< 0.2	< 0.3	< 0.2	97 ± 14	< 17.7	< 13.0
10/04/23	-	12/27/23	< 0.2	< 0.3	< 0.2	80 ± 14	< 36.9	< 19.4

NOTE: As of 01/10/24, the sample location OCAP05 has been discontinued. The decision to remove this location is based on (1) Distance from the OC station, (2) Plant in Decommissioning and not producing radionuclides as all fuel is removed from the core and the Spent Fuel Pool has been drained, and (3) comport to the reduced environmental sampling distance based on Decommissioning and the licensee's updated environmental program.

Results in 10⁻³ picoCuries per cubic meter (pCi/m³) +/- 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
2023 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>
12/28/22	-	04/05/23	< 0.2	< 0.2	< 0.2	95 ± 13	< 20.8	< 7.8
04/05/23	-	06/28/23	< 0.3	< 0.3	< 0.3	103 ± 16	< 39.1	< 17.8
06/28/23	-	10/04/23	< 0.3	< 0.2	< 0.2	107 ± 15	< 19.7	< 12.8
10/04/23	-	12/27/23	< 0.4	< 0.3	< 0.2	76 ± 14	< 33.0	< 17.9

Plant Access Road (AIAP02)

<u>Collection Period</u>			<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>Be-7</u>	<u>Sr-89</u>	<u>Sr-90</u>
12/28/22	-	04/05/23	< 0.2	< 0.2	< 0.2	117 ± 17	< 24.6	< 11.2
04/05/23	-	06/28/23	< 0.3	< 0.3	< 0.3	102 ± 15	< 23.5	< 21.9
06/28/23	-	10/04/23	< 0.3	< 0.3	< 0.2	106 ± 15	< 26.6	< 13.5
10/04/23	-	12/27/23	< 0.2	< 0.3	< 0.2	78 ± 13	< 21.1	< 14.0

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>
12/28/22	-	04/05/23	< 0.2	< 0.4	< 0.2	108 ± 16	< 23.9	< 9.6
04/05/23	-	06/28/23	< 0.3	< 0.3	< 0.2	121 ± 17	< 68.1	< 34.8
06/28/23	-	10/04/23	< 0.3	< 0.3	< 0.3	95 ± 15	< 38.1	< 13.5
10/04/23	-	12/27/23	< 0.3	< 0.3	< 0.2	81 ± 12	< 30.7	< 16.0

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>
12/28/22	-	04/05/23	< 0.3	< 0.2	< 0.2	97 ± 13	< 19.8	< 31.0
04/05/23	-	06/28/23	< 0.3	< 0.3	< 0.3	91 ± 14	< 23.8	< 12.5
06/28/23	-	10/04/23	< 0.1	< 0.3	< 0.2	94 ± 13	< 17.2	< 18.4
10/04/23	-	12/27/23	< 0.3	< 0.3	< 0.3	77 ± 13	< 27.8	< 14.2

Results in 10⁻³ picoCuries per cubic meter (pCi/m³) +/- 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
2023 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>
06/05/23 - Clams	< 7	< 8	< 10	< 12	1,770 ± 303	< 86	< 113
10/03/23 - Clams	< 3	< 3	< 3	< 3	1,050 ± 113	< 130	< 166

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>
06/05/23 - Clams	< 10	< 11	< 11	< 8	1,480 ± 270	< 171	< 73
06/05/23 – White Perch	< 11	< 8	< 9	< 10	3,550 ± 468	< 312	< 281
06/05/23 – Striped Bass	< 11	< 23	< 16	< 18	3,610 ± 538	< 176	< 270
06/05/23 - Bluefish	< 10	< 12	< 9	< 11	3,760 ± 533	< 367	< 545
10/04/23 – Striped Bass	< 7	< 8	< 7	< 8	4,240 ± 493	< 127	< 306
10/04/23 – Amer. Eel	< 5	< 6	< 6	< 7	2,740 ± 333	< 214	< 329
10/04/23 – Atl. Herring	< 9	< 11	< 10	< 7	4,740 ± 534	< 180	< 387
10/05/23 – Crab	< 7	< 8	< 8	< 8	1,480 ± 238	< 140	< 136
10/02/23 - Clams	< 6	< 11	< 9	< 9	1,230 ± 234	< 124	< 200

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>
06/07/23 - Clams	< 9	< 7	< 11	< 9	1,860 ± 279	< 67	< 147
10/04/23 - Clams	< 6	< 7	< 8	< 8	1,810 ± 264	< 205	< 143

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

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>	<u>Sr-89</u>	<u>Sr-90</u>
06/06/23 – Striped Bass	< 13	< 14	< 11	< 13	4,260 ± 547	< 372	< 374
10/05/23 – Striped Bass	< 6	< 6	< 7	< 6	4,270 ± 475	< 306	< 424

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
2023 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>
04/20/23 – Striped Bass	< 13	< 14	< 16	< 14	3,210 ± 453	< 258	< 293
07/31/23 - Crab	< 7	< 9	< 9	< 7	2,420 ± 316	< 150	< 142
10/06/23 – Crab	< 8	< 12	< 11	< 8	3,080 ± 464	< 294	< 177
10/25/23 – Striped Bass	< 13	< 17	< 17	< 18	3,900 ± 541	< 198	< 257

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>
04/20/23 – Striped Bass	< 10	< 13	< 13	< 14	3,080 ± 437	< 127	< 120
07/31/23 - Crab	< 8	< 9	< 7	< 8	2,330 ± 328	< 153	< 159
10/06/23 – Crab	< 11	< 10	< 11	< 13	2,760 ± 434	< 145	< 182
10/02/23 – Striped Bass	< 21	< 17	< 18	< 18	4,050 ± 554	< 336	< 224

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>
04/20/23 – Striped Bass	< 16	< 13	< 15	< 15	3,970 ± 500	< 155	< 192
10/25/23 – Striped Bass	< 15	< 15	< 14	< 14	3,940 ± 590	< 259	< 198

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
2023 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>
06/05/23	177 ± 107	< 9	< 12	< 17	< 11	< 13	4,190 ± 497
10/02/23	121 ± 113	< 15	< 16	< 21	< 16	< 14	12,400 ± 1,360

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>
06/05/23	92 ± 75	< 7	< 9	< 11	< 7	< 8	1,570 ± 226
10/02/23	< 54	< 6	< 7	< 10	< 6	< 7	1,560 ± 210

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>
06/07/23	< 125	< 14	< 17	< 23	< 17	< 15	16,500 ± 1,660
10/04/23	< 152	< 18	< 20	< 32	< 21	< 22	17,100 ± 1,920

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>
06/05/23	203 ± 80	< 6	< 7	< 11	< 8	< 7	2,730 ± 347
10/03/23	424 ± 119	< 9	< 11	< 14	< 10	< 10	10,600 ± 1,060

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
2023 Radiological Environmental Monitoring Program**

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

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>
07/28/23	< 107	< 12	< 12	< 15	< 11	< 12	3,830 ± 437
11/30/23	< 80	< 9	< 11	< 13	< 10	< 10	4,530 ± 511

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>
07/28/23	< 128	< 13	< 14	< 17	< 12	< 12	6,330 ± 774
11/30/23	< 98	< 11	< 12	< 17	< 11	< 10	6,880 ± 741

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>
07/28/23	< 149	< 16	< 17	< 23	< 16	< 15	14,700 ± 1,710
11/30/23	< 136	< 18	< 21	< 28	< 17	< 20	< 152

Delaware Riverbank – 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>
07/28/23	308 ± 210	< 18	< 16	< 24	< 18	< 16	14,100 ± 1,590
11/30/23	< 115	< 15	< 17	< 22	< 17	< 17	12,900 ± 1,490

Shoreline – 0.89 Miles E (AIAQ08)

<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>
07/28/23	< 122	< 14	< 16	< 20	< 15	< 16	13,700 ± 1,430
12/05/23	< 110	< 15	< 14	< 23	< 15	< 13	12,600 ± 1,320

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

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	05/03/23	< 9	< 13	< 12	< 12	2,340 ± 370

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	05/03/23	< 8	< 9	< 9	< 9	2,130 ± 331
Peaches	06/29/23	< 8	< 9	< 9	< 11	1,830 ± 295
Corn	06/29/23	< 8	< 6	< 8	< 7	2,890 ± 423
Tomato	06/29/23	< 7	< 7	< 9	< 6	366 ± 114
Cabbage	06/29/23	< 9	< 13	< 11	< 12	1,940 ± 334
Peaches	07/20/23	< 5	< 4	< 4	< 4	1,970 ± 218
Peppers	07/20/23	< 4	< 3	< 4	< 4	1,610 ± 191

Onsite - NNW (AIVE14)

<u>Sample</u>	<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
Lambs Ear	07/31/23	< 26	< 26	< 28	< 22	8,370 ± 1,080
Lambs Ear	08/31/23	< 25	< 33	< 27	< 25	12,000 ± 1,490

Private Farm – SSW (AIVE15)

<u>Sample</u>	<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>K-40</u>
Lambs Ear	07/27/23	< 25	< 35	< 23	< 33	5,940 ± 981
Lambs Ear	08/31/23	< 29	< 31	< 28	< 27	9,640 ± 1,280

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

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	05/03/23	< 8	< 11	< 12	< 9	2,500 ± 363
Tomato	06/29/23	< 8	< 9	< 6	< 9	1,820 ± 294
Corn	06/29/23	< 15	< 10	< 21	< 16	2,770 ± 484
Cabbage	06/29/23	< 8	< 16	< 13	< 13	1,780 ± 328
Peppers	07/20/23	< 4	< 3	< 3	< 3	1,500 ± 173

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	07/27/23	< 12	< 16	< 18	< 14	2,090 ± 381
Tomato	08/31/23	< 7	< 8	< 7	< 7	2,180 ± 308

Private Farm – SE (AIVE24)

<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>
Lambs Ear	07/31/23	< 24	< 29	< 30	< 25	6,830 ± 1,080
Cabbage	07/31/23	< 18	< 20	< 22	< 20	4,830 ± 714

Private Farm – NE (AIVE27)

<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>
Peaches	06/29/23	< 7	< 8	< 7	< 8	1,380 ± 245

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
2023 Radiological Environmental Monitoring Program**

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

Private Farm – NNE (AIMI01³)

<u>Collection Date</u>	<u>Cs-137</u>	<u>I-131</u>	<u>K-40</u>	<u>Sr-89</u>	<u>Sr-90</u>
01/03/23	< 1.62	< 0.96	882 ± 91	< 0.72	< 0.95
02/06/23	< 2.27	< 0.72	2,050 ± 196	< 0.61	< 0.72
03/06/23	< 1.89	< 0.74	1,060 ± 125	< 1.61	< 0.90
04/03/23	< 1.65	< 0.79	1,490 ± 157	< 0.98	< 0.82
05/22/23	< 1.71	< 0.77	1,070 ± 119	< 0.65	< 0.80
06/05/23	< 1.43	< 0.82	894 ± 90	< 0.64	< 0.85
07/02/23	< 2.21	< 0.51	1,110 ± 127	< 0.42	< 0.63
08/07/23	< 1.84	< 0.57	738 ± 84	< 0.95	< 0.89
09/10/23	< 1.80	< 0.69	982 ± 103	< 0.84	< 0.81
10/03/23	< 1.85	< 0.94	1,150 ± 119	< 0.85	< 0.60
11/06/23	< 2.05	< 0.85	1,300 ± 138	< 0.76	< 0.90
12/11/23	< 1.77	< 0.82	1,040 ± 113	< 0.79	< 0.65

Private Farm – WNW (AIMI03)

<u>Collection Date</u>	<u>Cs-137</u>	<u>I-131</u>	<u>K-40</u>	<u>Sr-89</u>	<u>Sr-90</u>
01/03/23	< 1.42	< 0.87	975 ± 106	< 0.45	< 0.96
02/06/23	< 1.74	< 0.80	2,700 ± 242	< 0.90	< 0.78
03/06/23	< 1.69	< 0.62	1,000 ± 105	< 0.58	< 0.93
04/03/23	< 1.53	< 0.78	1,530 ± 147	< 0.63	< 0.53
05/08/23	< 1.59	< 0.57	1,130 ± 129	< 0.88	< 0.97
06/05/23	< 1.91	< 0.99	< 20	< 0.38	< 0.85
07/02/23	< 1.60	< 0.55	991 ± 97	< 0.62	< 0.99
08/07/23	< 1.52	< 0.58	1,030 ± 104	< 1.00	< 0.94
09/10/23	< 1.55	< 0.64	1,170 ± 122	< 0.75	< 0.82
10/03/23	< 1.69	< 1.28	1,130 ± 128	< 0.96	< 0.85
11/06/23	< 3.54	< 0.98	1,270 ± 138	< 0.83	< 0.88
12/11/23	< 1.77	< 0.70	1,240 ± 134	< 0.80	< 0.90

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

³ This location is considered a Control (Background) station. The Private Farm is located 11.8 miles (19 kilometers) from the station. Federal regulatory guidance for a Control Milk location is any milk source/farm between 9.3 miles (15 kilometers) and 18.6 miles (30 kilometers) from the nuclear plant.

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2023 Radiological Environmental Monitoring Program**

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

Private Farm – W (AIMI04)

<u>Collection Date</u>	<u>Cs-137</u>	<u>I-131</u>	<u>K-40</u>	<u>Sr-89</u>	<u>Sr-90</u>
01/03/23	< 1.22	< 0.85	783 ± 76	< 0.59	< 0.95
02/06/23	< 2.57	< 0.75	2,620 ± 254	< 0.76	< 0.85
03/06/23	< 1.84	< 0.60	1,040 ± 122	< 0.99	< 1.41
04/03/23	< 1.56	< 0.76	1,540 ± 164	< 0.58	< 0.98
05/08/23	< 1.85	< 0.61	1,260 ± 143	< 0.84	< 0.82
06/05/23	< 1.59	< 1.06	772 ± 78	< 0.68	< 0.88
07/02/23	< 1.72	< 0.51	1,430 ± 138	< 0.80	< 0.68
08/07/23	< 1.95	< 0.57	1,290 ± 136	< 0.73	< 0.86
09/10/23	< 1.68	< 0.52	1,280 ± 126	< 0.63	< 0.83
10/03/23	< 1.61	< 1.14	1,550 ± 149	< 0.61	< 0.64
11/06/23	< 2.37	< 0.71	1,330 ± 141	< 0.85	< 0.88
12/11/23	< 2.09	< 0.88	1,040 ± 112	< 0.73	< 0.82

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
2023 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>
06/05/23	< 1.73	< 1.75	< 1.86	< 2.18	< 238
10/02/23	< 1.32	< 1.34	< 1.36	< 1.36	< 224

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>
01/17/23	< 1.88	< 1.84	< 2.20	< 2.04	< 214
02/15/23	< 1.43	< 1.83	< 1.82	< 1.87	< 214
03/16/23	< 1.75	< 1.83	< 2.07	< 2.03	< 245
04/18/23	< 1.87	< 2.18	< 2.00	< 1.69	< 202
05/16/23	< 1.63	< 1.54	< 1.53	< 1.31	< 207
06/20/23	< 1.64	< 1.88	< 1.89	< 1.79	< 167
07/18/23	< 5.01	< 5.02	< 3.83	< 5.36	< 268
08/16/23	< 1.97	< 1.81	< 2.34	< 2.17	< 237
09/20/23	< 1.31	< 1.88	< 1.62	< 1.37	< 194
10/24/23	< 1.77	< 1.54	< 1.75	< 1.88	< 215
11/20/23	< 1.35	< 1.26	< 1.52	< 2.51	< 200
12/19/23	< 1.60	< 1.78	< 1.63	< 1.76	< 237

Results in picoCuries per Liter (pCi/L)

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2023 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>
06/05/23	< 1.53	< 1.91	< 1.80	< 1.78	< 233
10/03/23	< 1.29	< 1.03	< 1.30	< 1.18	< 223

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>
01/17/23	< 1.49	< 1.65	< 1.74	< 1.74	< 214
02/15/23	< 2.03	< 2.35	< 2.48	< 2.20	< 221
03/16/23	< 1.43	< 1.82	< 1.58	< 1.68	< 250
04/18/23	< 1.32	< 1.67	< 1.79	< 1.66	< 201
05/16/23	< 1.74	< 1.78	< 1.76	< 1.62	< 210
06/20/23	< 1.18	< 1.54	< 1.61	< 1.49	< 166
07/18/23	< 3.19	< 2.57	< 4.59	< 4.33	< 270
08/16/23	< 2.07	< 2.13	< 2.27	< 2.29	< 236
09/20/23	< 1.43	< 1.52	< 1.58	< 1.45	< 195
10/24/23	< 2.52	< 2.62	< 2.49	< 2.33	< 214
11/20/23	< 1.25	< 1.26	< 1.42	< 1.17	< 208
12/19/23	< 1.40	< 1.38	< 1.40	< 1.41	< 235

Results in picoCuries per Liter (pCi/L)

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2023 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)

<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>
01/04/23	< 1.70	< 2.22	< 2.16	< 1.87	1,590 ± 411 ⁴	< 0.82
01/17/23	< 2.16	< 2.02	< 2.26	< 2.25	< 234	< 0.82
02/07/23	< 1.43	< 1.22	< 1.16	< 1.31	< 212	< 0.72
02/20/23	< 1.48	< 1.45	< 1.55	< 1.61	481 ± 189 ⁴	< 0.84
03/06/23	< 1.64	< 1.52	< 1.46	< 1.49	< 250	< 0.86
03/21/23	< 1.41	< 1.41	< 1.49	< 1.42	< 222	< 0.75
04/04/23	< 1.69	< 1.66	< 1.87	< 1.68	< 226	< 0.94
04/20/23	< 1.33	< 1.27	< 1.36	< 1.38	< 240	< 0.97
05/04/23	< 1.16	< 1.23	< 1.14	< 1.21	< 209	< 0.98
05/16/23	< 1.23	< 1.35	< 1.19	< 1.33	< 243	< 0.74
06/07/23	< 1.55	< 1.78	< 1.80	< 1.49	< 221	< 0.84
06/25/23	< 1.67	< 1.79	< 2.17	< 2.14	< 219	< 0.89
07/07/23	< 2.11	< 1.50	< 1.87	< 1.75	< 251	1.37 ± 0.51 ⁵
07/22/23	< 1.24	< 1.16	< 1.17	< 1.21	< 198	< 0.73
08/09/23	< 1.42	< 1.48	< 1.45	< 1.43	< 219	< 1.00
08/23/23	< 1.26	< 1.32	< 1.19	< 1.33	220 + 150 ⁴	< 0.69
09/06/23	< 1.60	< 1.46	< 1.70	< 1.57	< 197	< 0.82
09/20/23	< 1.74	< 1.33	< 1.62	< 1.26	< 197	< 0.89
10/05/23	< 1.26	< 1.20	< 1.28	< 1.26	< 254	< 1.00
10/19/23	< 1.66	< 1.51	< 1.54	< 1.62	< 218	< 0.91
11/08/23	< 1.37	< 1.31	< 1.25	< 1.22	< 206	< 2.35
11/25/23	< 1.57	< 1.77	< 1.97	< 1.90	< 250	< 0.74
12/06/23	< 1.33	< 1.12	< 1.30	< 1.18	< 232	< 0.84
12/21/23	< 2.09	< 2.06	< 1.85	< 1.72	< 163	< 0.91

Results in picoCuries per Liter (pCi/L)

⁴ 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 tritium analysis result of 1,590 pCi/L is approximately 8 percent of the applicable federal limit of 20,000 pCi/L
The tritium analysis result of 481 pCi/L is approximately 3 percent of the applicable federal limit of 20,000 pCi/L
The tritium analysis result of 220 pCi/L is approximately 1 percent of the applicable federal limit of 20,000 pCi/L

⁵ Surface Water matrix is a non-potable water source (Delaware River). The Plant Discharge Outfall Area (AISW01) confirmed Iodine-131 (I-131) analysis result of 1.37 pCi/L is approximately 7% of the applicable federal limit of 20 pCi/L.

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2023 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)

<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>
01/04/23	< 1.90	< 1.90	< 2.15	< 1.77	< 226	< 0.88
01/17/23	< 1.61	< 1.81	< 2.08	< 1.78	< 231	< 0.78
02/07/23	< 1.47	< 1.43	< 1.56	< 1.57	< 236	< 0.85
02/20/23	< 1.68	< 1.87	< 1.80	< 1.85	< 216	< 0.91
03/06/23	< 1.35	< 1.47	< 1.46	< 1.37	< 247	< 0.73
03/21/23	< 1.44	< 1.49	< 1.48	< 1.35	< 225	< 0.84
04/04/23	< 1.71	< 1.48	< 1.59	< 1.55	< 223	< 0.97
04/20/23	< 1.39	< 1.50	< 1.55	< 1.49	< 239	< 0.71
05/04/23	< 1.13	< 1.33	< 1.24	< 1.21	< 209	< 0.79
05/16/23	< 1.15	< 1.11	< 1.11	< 1.04	< 243	< 0.84
06/07/23	< 1.38	< 1.37	< 1.44	< 1.39	< 241	< 0.62
06/25/23	< 1.45	< 1.43	< 1.35	< 1.42	< 221	< 0.66
07/07/23	< 1.92	< 1.62	< 1.71	< 1.55	< 265	< 0.66
07/22/23	< 1.20	< 1.28	< 1.30	< 1.18	< 199	< 0.67
08/09/23	< 1.52	< 1.62	< 1.63	< 1.66	< 221	< 1.50
08/23/23	< 1.66	< 1.54	< 1.66	< 1.56	< 212	< 0.70
09/06/23	< 1.32	< 1.11	< 1.26	< 1.29	< 197	< 0.88
09/20/23	< 1.45	< 1.36	< 1.36	< 1.31	< 200	< 0.95
10/05/23	< 1.57	< 1.71	< 1.57	< 1.58	< 252	< 1.41
10/19/23	< 1.54	< 1.50	< 1.76	< 1.69	< 216	< 0.88
11/08/23	< 1.50	< 1.47	< 1.55	< 1.55	< 203	< 1.45
11/25/23	< 1.61	< 1.84	< 1.98	< 1.86	< 247	< 0.68
12/06/23	< 1.70	< 1.65	< 1.87	< 1.61	< 210	< 0.91
12/21/23	< 1.40	< 1.17	< 1.21	< 1.30	< 163	< 0.90

Results in picoCuries per Liter (pCi/L)

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2023 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>
01/04/23	< 1.46	< 1.40	< 1.48	< 1.54	< 214	< 0.88
01/17/23	< 2.19	< 2.23	< 2.36	< 2.29	< 232	< 0.75
02/07/23	< 1.55	< 1.50	< 1.72	< 1.62	< 241	< 0.80
02/20/23	< 1.66	< 2.33	< 1.85	< 1.82	< 213	< 0.84
03/06/23	< 1.77	< 1.71	< 1.74	< 1.73	< 247	< 0.87
03/21/23	< 1.51	< 1.84	< 1.73	< 1.71	< 225	< 0.78
04/04/23	< 1.77	< 1.82	< 1.78	< 2.14	< 223	< 0.94
04/20/23	< 1.53	< 1.73	< 1.65	< 1.66	< 235	< 0.85
05/04/23	< 1.50	< 1.40	< 1.53	< 1.33	< 209	< 0.85
05/16/23	< 1.51	< 1.34	< 1.52	< 1.42	< 240	< 0.75
06/07/23	< 1.79	< 1.35	< 2.01	< 1.75	< 230	< 0.85
06/25/23	< 1.46	< 1.63	< 1.76	< 2.19	< 221	< 0.97
07/07/23	< 2.26	< 1.70	< 1.84	< 1.68	< 266	< 0.48
07/22/23	< 1.52	< 1.24	< 1.44	< 1.30	< 198	< 0.68
08/09/23	< 1.35	< 1.34	< 1.47	< 1.37	< 224	< 1.12
08/23/23	< 1.51	< 1.22	< 1.53	< 1.40	< 212	< 0.64
09/06/23	< 1.64	< 1.61	< 1.67	< 1.62	< 194	< 0.84
09/20/23	< 1.41	< 1.05	< 1.24	< 1.19	< 201	< 0.83
10/05/23	< 1.13	< 1.27	< 1.29	< 1.18	< 251	< 1.33
10/19/23	< 1.61	< 1.63	< 1.72	< 1.55	267 ± 156 ⁶	< 0.65
11/08/23	< 1.11	< 1.22	< 1.35	< 1.12	< 201	< 1.45
11/25/23	< 1.60	< 1.81	< 1.81	< 1.81	< 233	< 0.66
12/06/23	< 1.71	< 1.96	< 1.62	< 1.41	< 242	< 0.87
12/21/23	< 1.12	< 1.13	< 1.25	< 1.14	< 153	< 0.90

Results in picoCuries per Liter (pCi/L)

⁶ The Delaware River – Mad Horse Creek (AISW03) tritium analysis result of 267 pCi/L is approximately 1 percent of the applicable federal limit of 20,000 pCi/L.

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2023 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>
02/02/23	< 1.51	< 1.76	< 1.67	< 1.75	< 211
05/02/23	< 2.02	< 2.04	< 2.58	< 2.38	< 262
08/01/23	< 1.50	< 1.57	< 1.62	< 1.57	< 148
11/13/23	< 1.20	< 1.36	< 1.35	< 1.32	< 206

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>
02/02/23	< 1.67	< 2.03	< 1.95	< 1.97	< 210
05/02/23	< 2.05	< 2.30	< 2.14	< 2.17	< 257
08/01/23	< 2.47	< 2.85	< 2.91	< 2.36	< 149
11/02/23	< 1.62	< 1.69	< 1.90	< 1.83	< 217

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>
02/02/23	< 2.21	< 1.96	< 2.13	< 1.99	< 210
05/02/23	< 1.91	< 1.84	< 1.96	< 2.14	< 264
08/01/23	< 1.71	< 1.66	< 1.56	< 1.72	< 147
11/02/23	< 1.30	< 1.33	< 1.59	< 1.22	< 219

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>
02/02/23	< 1.85	< 2.40	< 2.32	< 2.06	< 220
05/02/23	< 1.92	< 1.93	< 2.15	< 2.17	< 252
08/01/23	< 1.72	< 1.57	< 1.78	< 1.76	< 147
11/02/23	< 1.47	< 1.44	< 1.70	< 1.57	< 219

Results in picoCuries per Liter (pCi/L)

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2023 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>
02/02/23	< 1.33	< 1.54	< 1.47	< 1.58	311 ± 150 ⁷	< 0.92
05/02/23	< 1.82	< 1.80	< 2.25	< 1.93	< 253	< 0.93
08/01/23	< 2.31	< 2.12	< 2.38	< 2.19	< 149	< 0.93
11/02/23	< 2.01	< 1.79	< 2.31	< 1.86	< 221	< 1.21

Lower Alloways Creek Police Station (AIWW02)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>H-3</u>	<u>I-131</u>
02/02/23	< 1.44	< 1.49	< 1.65	< 1.47	< 208	< 1.58
05/02/23	< 1.73	< 1.92	< 2.05	< 1.78	< 252	< 0.73
08/01/23	< 1.96	< 2.14	< 1.91	< 1.97	< 147	< 0.52
11/02/23	< 1.27	< 1.41	< 1.29	< 1.47	< 214	< 0.90

Salem Processing Center (AIWW03)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>H-3</u>	<u>I-131</u>
02/02/23	< 1.41	< 1.72	< 1.59	< 1.45	< 202	< 0.74
05/02/23	< 2.07	< 2.11	< 2.10	< 2.20	< 249	< 0.87
08/01/23	< 1.63	< 1.55	< 1.61	< 1.47	< 224	< 0.53
11/02/23	< 1.24	< 1.27	< 1.47	< 1.32	< 216	< 1.12

Lower Alloways Creek School (AIWW04)

<u>Collection Date</u>	<u>Co-58</u>	<u>Co-60</u>	<u>Cs-134</u>	<u>Cs-137</u>	<u>H-3</u>	<u>I-131</u>
02/02/23	< 1.53	< 1.45	< 1.54	< 1.55	< 201	< 1.70
05/02/23	< 2.05	< 2.30	< 2.47	< 2.23	< 251	< 0.87
08/01/23	< 1.31	< 1.51	< 1.59	< 1.48	< 149	< 0.87
11/02/23	< 1.64	< 1.87	< 1.69	< 1.73	< 213	< 2.08

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>
02/02/23	< 1.43	< 1.55	< 1.58	< 1.57	< 203	< 0.80
05/02/23	< 2.08	< 1.72	< 2.60	< 2.05	< 262	< 0.74
08/01/23	< 1.34	< 1.57	< 1.49	< 1.53	< 147	< 0.59
11/02/23	< 1.70	< 1.55	< 1.85	< 1.63	< 219	< 0.93

Results in picoCuries per Liter (pCi/L)

⁷ The Elsinboro School (AIWW01) tritium analysis result of 311 pCi/L is approximately 2 percent of the applicable federal limit of 20,000 pCi/L.

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2023 Radiological Environmental Monitoring Program**

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

<u>Station</u>	<u>Location</u>	<u>1st Quarter</u>		<u>2nd Quarter</u>		<u>3rd Quarter</u>		<u>4th Quarter</u>	
		<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>
CO01	BNE Office, Arctic Parkway, Ewing, NJ	8.5	7.4	19.6	17.3	12.2	1.6	15.5	7.9
CO02	Brendan T. Byrne State Forest, New Lisbon, NJ	8.0	5.5	17.2	9.2	11.2	6.7	13.9	5.3

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
2023 Radiological Environmental Monitoring Program**

**Oyster Creek
Thermoluminescent Dosimetry Data
Quarterly Results**

<u>Station</u>	<u>Location</u>	<u>1st Quarter</u>		<u>2nd Quarter</u>		<u>3rd Quarter</u>		<u>4th Quarter</u>	
		<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>
1	Ocean County Vocational School	6.8	4.2	15.0	5.2	10.0	6.6	15.3	15.9
2	Ocean Twp. Municipal Building	7.8	2.6	18.8	7.1	11.2	3.2	14.6	3.1
5	Sewage Pumping Station, Ocean Twp.	7.1	6.9	16.5	6.2	10.5	8.5	16.4	3.9
6	Oyster Creek, Gate #2, Forked River	8.3	3.9	18.6	5.3	11.1	5.7	14.2	4.4
8	Ocean Co. Memorial Cemetery, Waretown	7.3	7.5	15.0	3.4	10.3	9.4	12.4	3.9
10	Sheffield & Derby Rd, Forked River	6.8	3.5	14.7	4.5	9.4	4.8	13.0	3.0
11	Lakeside Drive, Forked River	7.5	2.1	15.5	2.4	10.1	3.2	14.3	4.3
12	Forked River Game Farm, Forked River	7.9	10.9	16.6	5.3	11.7	6.5	13.1	12.3
13	Restrooms, Lakeside Dr., Forked River	8.5	2.4	14.6	9.7	10.8	8.2	12.8	5.1
15	Recreation Center, Waretown	7.3	5.0	15.2	5.4	10.0	7.2	13.6	8.1
16	North Access Rd., Forked River	7.5	4.4	16.1	3.8	9.9	4.8	13.0	2.6
21	Rose Hill Road & Barnegat Blvd	8.3	11.0	16.5	3.4	9.6	6.4	14.5	4.8

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
2023 Radiological Environmental Monitoring Program**

**Oyster Creek
Thermoluminescent Dosimetry Data
Quarterly Results**

<u>Station</u>	<u>Location</u>	<u>1st Quarter</u>		<u>2nd Quarter</u>		<u>3rd Quarter</u>		<u>4th Quarter</u>	
		<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>
24	Forked River Site Access Rd. (N)	9.5	5.0	18.6	6.4	13.8	3.8	16.1	6.5
25	Forked River Site Access Rd. (NNW)	10.1	6.7	19.1	3.9	14.9	5.1	16.8	3.0
26	Forked River Site Access Rd. (NW)	9.7	2.3	17.6	2.5	13.2	5.1	14.7	4.5
27	Southern Area Stores Fence, FR Site (W)	12.5	2.9	21.3	10.6	17.8	4.1	18.6	2.4
28	Southern Area Stores, FR Site (WSW)	10.3	6.3	22.0	12.0	15.6	1.5	15.6	6.4
29	Southern Area Stores Access Rd (SSW)	7.8	3.4	16.6	15.0	11.0	3.5	12.8	4.5
30	Southern Area Stores Access Road (S)	8.7	6.0	19.9	2.1	12.2	4.9	14.3	7.2
31	Southern Area Stores Access Road (SSE)	8.0	3.3	19.2	11.9	11.6	3.0	17.6	5.0
32	U.S. Route 9 (ESE) Forked River., NJ	8.5	5.2	16.7	9.5	11.6	8.8	16.3	3.7
33	U.S. Route 9 (NE) Forked River, NJ	8.8	6.0	16.5	8.0	12.0	5.4	16.0	3.8
36	Orlando Dr. & Penguin Ct., Forked River, NJ	7.6	4.3	17.1	4.2	12.4	3.1	13.3	0.8
37	Bay Pkwy, Sands Point, Waretown, NJ	7.0	4.4	14.7	7.9	9.9	4.8	13.7	4.3
43	U.S. Route 9 (E) Forked River, NJ	8.1	4.6	16.7	7.6	11.5	6.2	13.4	2.4

Results are reported in units of milliroentgens (mR).

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

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

**New Jersey Department of Environmental Protection
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**Salem/Hope Creek
Thermoluminescent Dosimetry Data
Quarterly Results**

<u>Station</u>	<u>Location</u>	<u>1st Quarter</u>		<u>2nd Quarter</u>		<u>3rd Quarter</u>		<u>4th Quarter</u>	
		<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>
1	Access Road – Security Checkpoint	8.3	9.1	18.9	6.1	11.7	7.8	15.8	5.6
2	Poplar Road, Lower Alloways	8.2	3.8	18.6	5.3	12.0	6.2	16.3	5.2
3	Money and Eagle Island Road	8.9	5.3	20.6	7.8	13.3	5.9	19.5	6.1
4	Ft. Elfsborg / Hancocks – East	9.0	5.0	20.9	2.6	12.7	6.1	17.4	4.6
5	Ft. Elfsborg / Hancocks – West	11.0	2.8	25.4	3.5	16.9	7.3	22.0	7.0
6	Stathems Neck Road, Greenwich	7.9	5.4	18.9	1.9	12.4	7.2	15.9	5.4
7	Stow Neck Road Lower Alloways	7.5	4.4	15.5	8.5	10.8	5.6	13.4	5.2
8	Alloways Creek Neck Road - Middle	7.9	13.9	16.2	8.1	11.3	9.3	13.6	8.1
9	Alloways Creek Neck Road - North	9.3	8.7	19.8	3.5	14.2	7.4	16.9	4.8
10	Abbotts Farm Road	7.6	12.2	16.4	12.2	10.8	8.5	13.4	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
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**Salem/Hope Creek
Thermoluminescent Dosimetry Data
Quarterly Results**

<u>Station</u>	<u>Location</u>	<u>1st Quarter</u>		<u>2nd Quarter</u>		<u>3rd Quarter</u>		<u>4th Quarter</u>	
		<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>	<u>Result</u>	<u>%CV</u>
11	PSEG Education Center/EOF	8.4	4.3	19.4	8.0	12.9	9.9	16.2	12.9
12	Onsite Access Rd N Sector	9.1	5.7	22.7	12.6	13.7	2.8	19.8	13.8
13	Onsite Laydown Area - NNE Sector	9.1	7.5	21.3	8.3	13.0	4.6	19.0	9.2
14	Onsite Utility Pole NE Sector	7.7	4.5	18.5	5.4	10.8	9.4	16.4	7.0
15	Onsite Hope Creek Road – ENE Sector	8.5	12.5	19.8	11.5	11.5	7.9	17.3	7.2
16	Onsite Parking Lot ESE Sector	9.0	6.4	19.2	1.8	12.7	9.3	17.7	4.9
17	Onsite Salem NGS SE Sector	8.9	6.7	23.4	3.9	13.3	1.3	19.2	1.8
18	Bayside Road Bayside, NJ	8.4	5.6	19.2	8.0	12.8	2.9	17.4	4.2

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
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**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>1st Quarter</u>				<u>2nd Quarter</u>				<u>3rd Quarter</u>				<u>4th 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. Station, Ocean Township	7.1	6.9	9.9	5.5	16.5	6.2	12.0	7.3	10.5	8.5	10.7	4.8	16.4	3.9	9.1	13.0
13	Restrooms, Lakeside Dr. Forked River	8.5	2.4	10.1	3.4	14.6	9.7	12.6	3.0	10.7	8.2	10.4	2.4	12.8	5.1	13.9	5.7
21	Rose Hill and Barnegat Rd Barnegat Twp.	8.3	11.0	10.4	5.3	16.5	3.4	13.3	2.8	9.6	6.4	11.7	4.7	14.5	4.8	13.5	7.2

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). No Data during 2nd Quarter due to reduced collection/deployment due to Covid-19 pandemic

**New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2023 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>1st Quarter</u>				<u>2nd Quarter</u>				<u>3rd Quarter</u>				<u>4th 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 – Security Checkpoint	8.3	9.1	10.0	4.3	18.9	6.1	13.9	4.0	11.7	7.8	13.1	3.9	15.8	5.6	16.0	7.9
2	Poplar Road, Lower Alloways	8.2	3.8	10.9	8.7	18.6	5.3	14.8	3.8	12.0	6.2	13.3	5.4	16.3	5.2	21.6	5.6
3	Money and Eagle Island Roads	8.9	5.3	13.1	1.9	20.6	7.8	15.5	4.5	13.3	5.9	15.4	2.2	19.5	6.1	11.4	10.3
5	Ft. Elfsborg/ Hancocks - West	11.0	2.8	17.5	4.0	25.4	3.5	19.6	4.5	16.9	7.3	18.6	2.9	22.0	7.0	20.6	9.2

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
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**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>1st Quarter</u>				<u>2nd Quarter</u>				<u>3rd Quarter</u>				<u>4th 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 Road-Lower Alloways	7.5	4.4	9.7	3.7	15.5	8.5	13.0	4.0	10.8	5.6	10.2	8.1	13.4	5.2	16.2	3.8
9	Alloways Creek Neck Road - North	9.3	8.7	13.0	3.2	19.8	3.5	15.9	4.6	14.2	7.4	14.8	5.2	16.9	4.8	8.5	6.3
11	PSEG Ed. Center/EOF Salem City	8.4	4.3	12.3	3.4	19.4	8.0	15.1	2.3	12.9	9.9	13.7	2.9	16.2	12.9	14.9	7.7

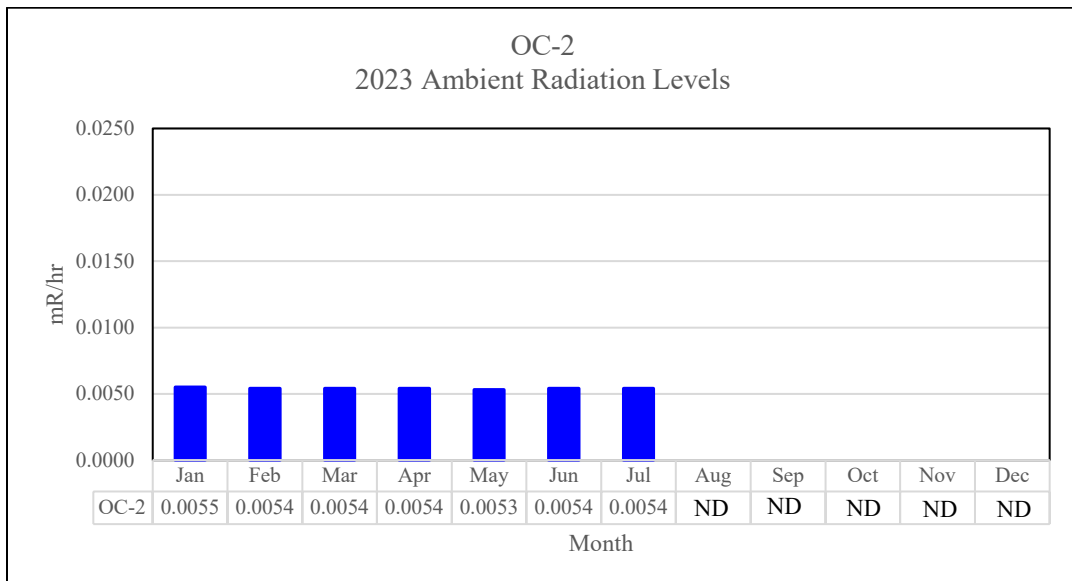
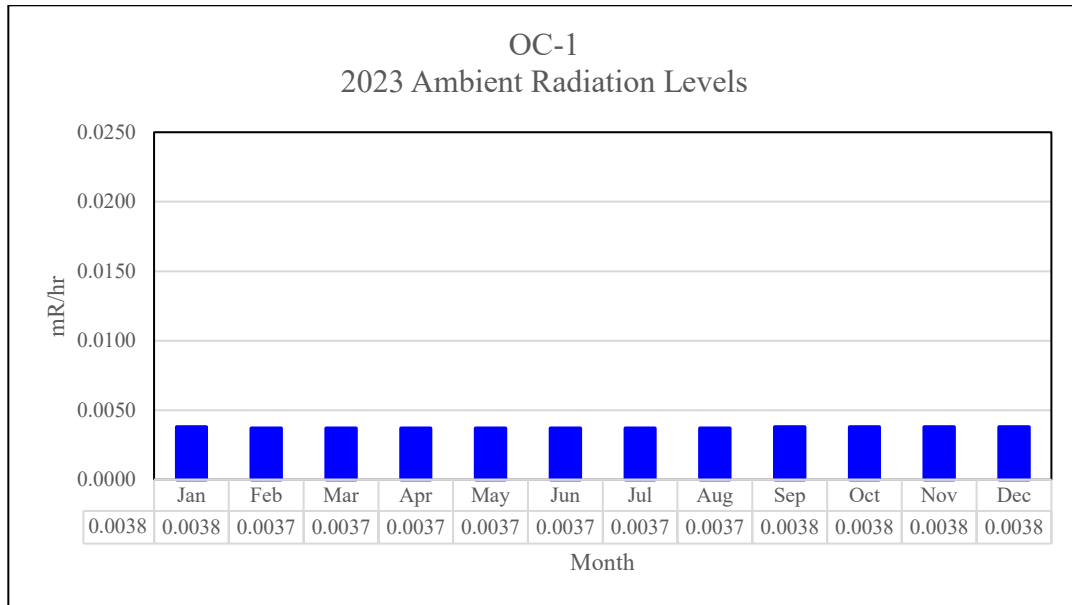
Results are reported in units of milliroentgens (mR)

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

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

**New Jersey Department of Environmental Protection
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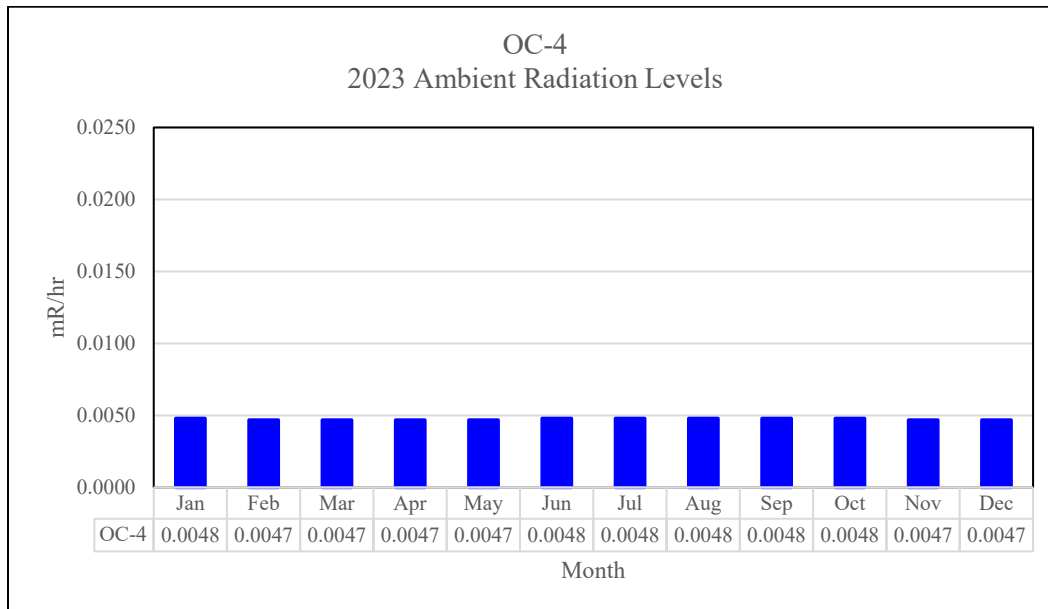
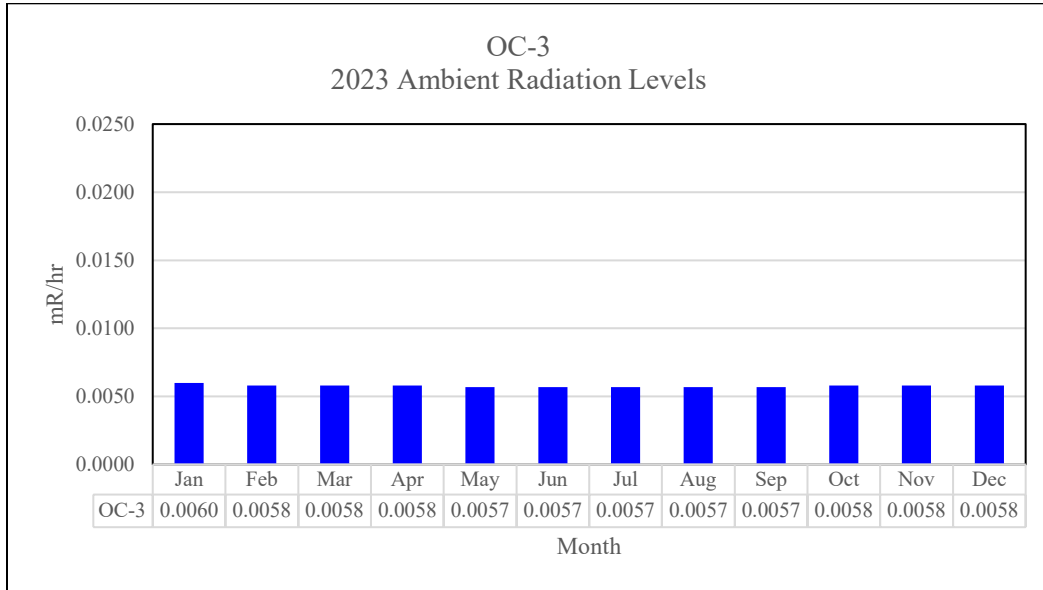
**Oyster Creek
Continuous Radiological Environmental Surveillance Telemetry (CREST) Data**



ND indicates 'No Data'

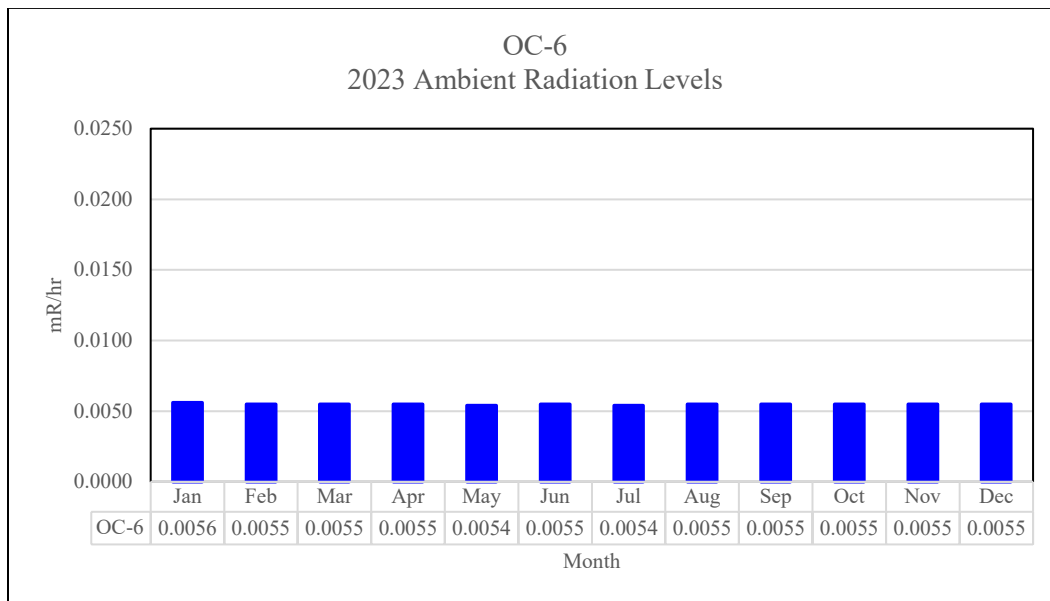
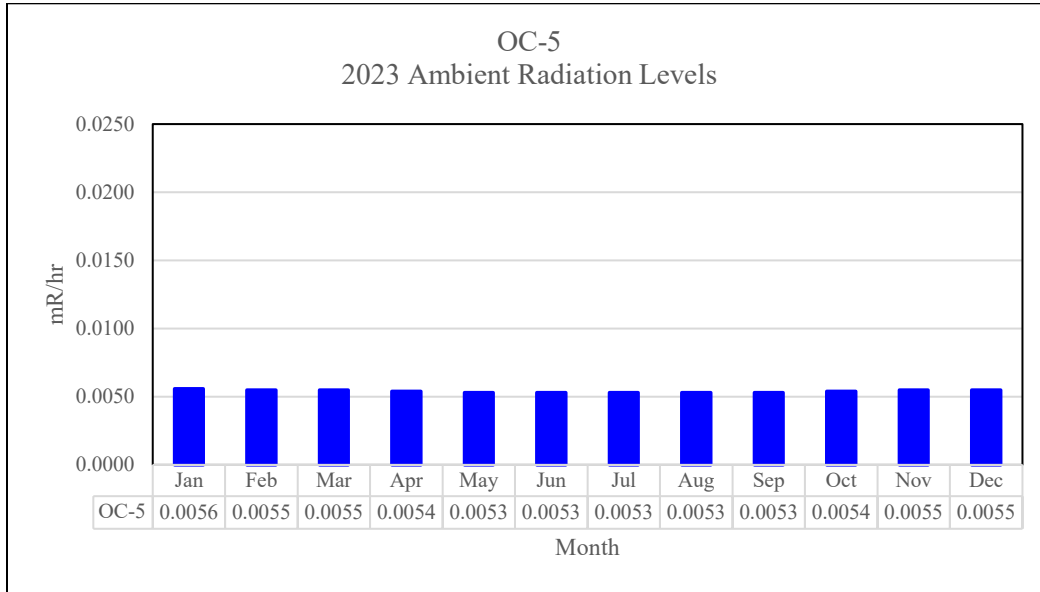
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**Oyster Creek
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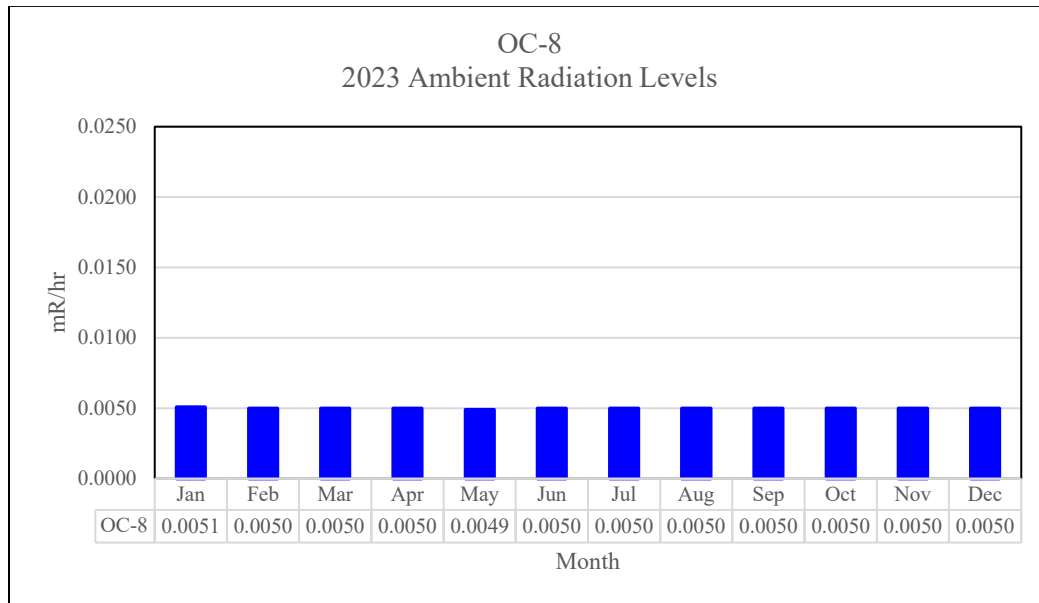
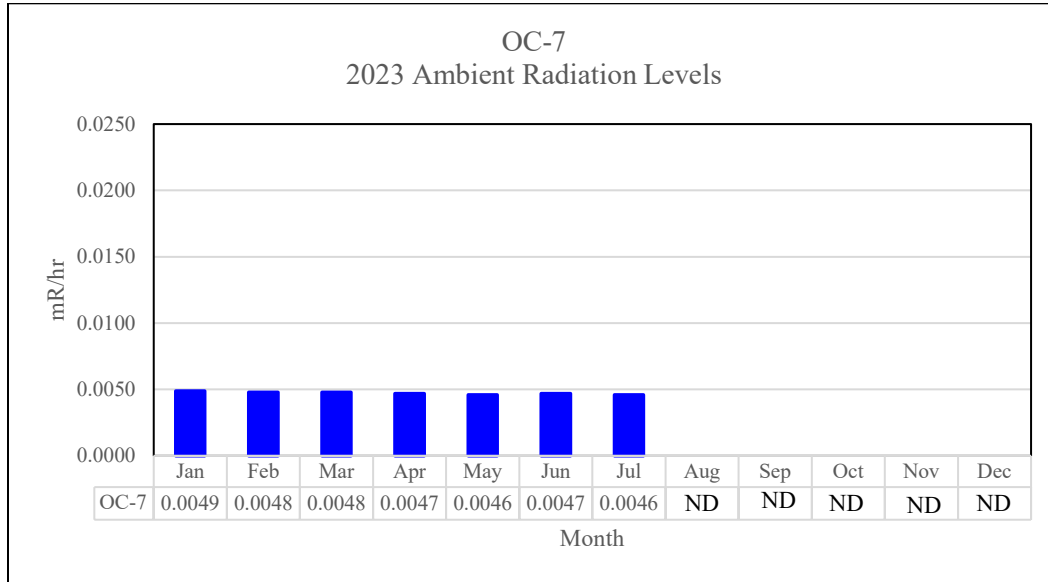
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**Oyster Creek
Continuous Radiological Environmental Surveillance Telemetry (CREST) Data**



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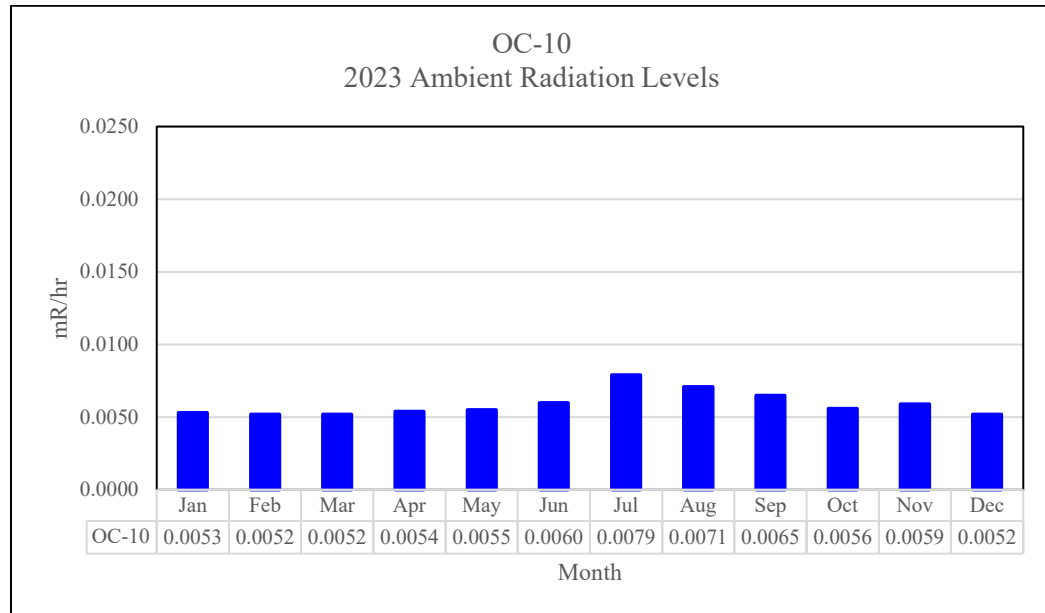
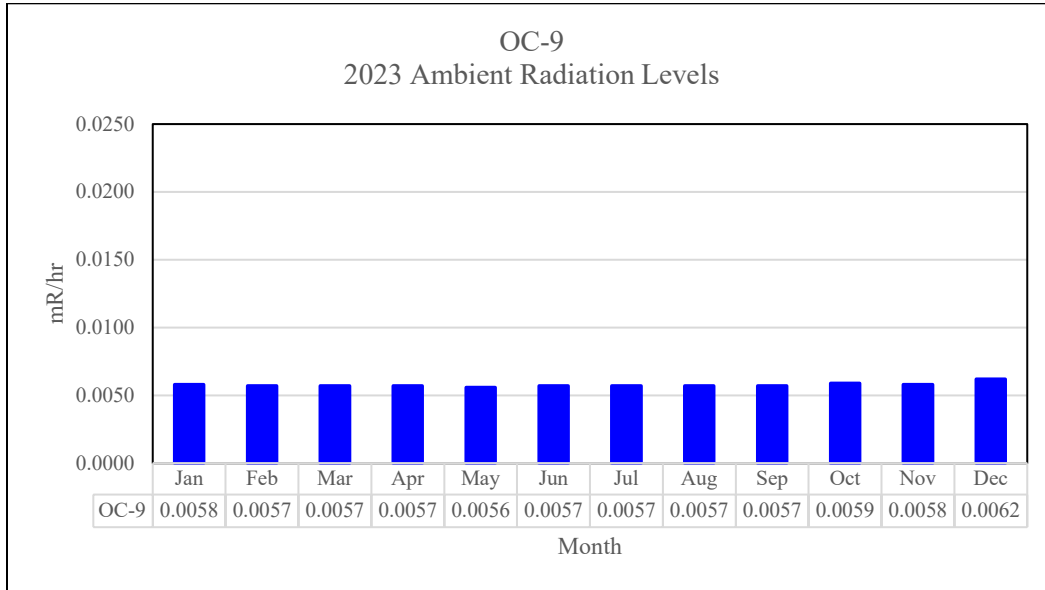
**Oyster Creek
Continuous Radiological Environmental Surveillance Telemetry (CREST) Data**



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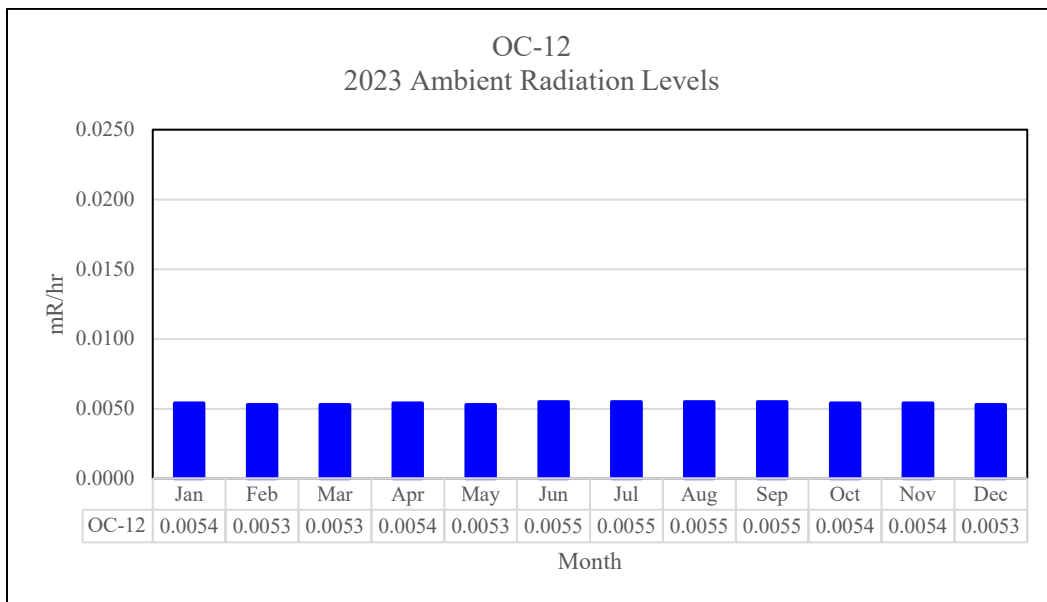
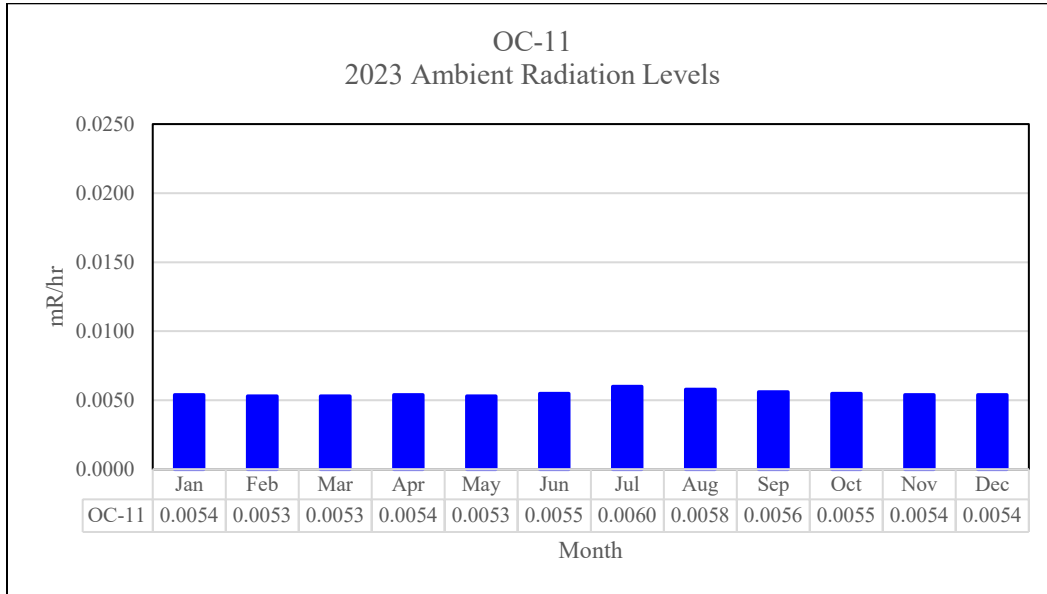
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**Oyster Creek
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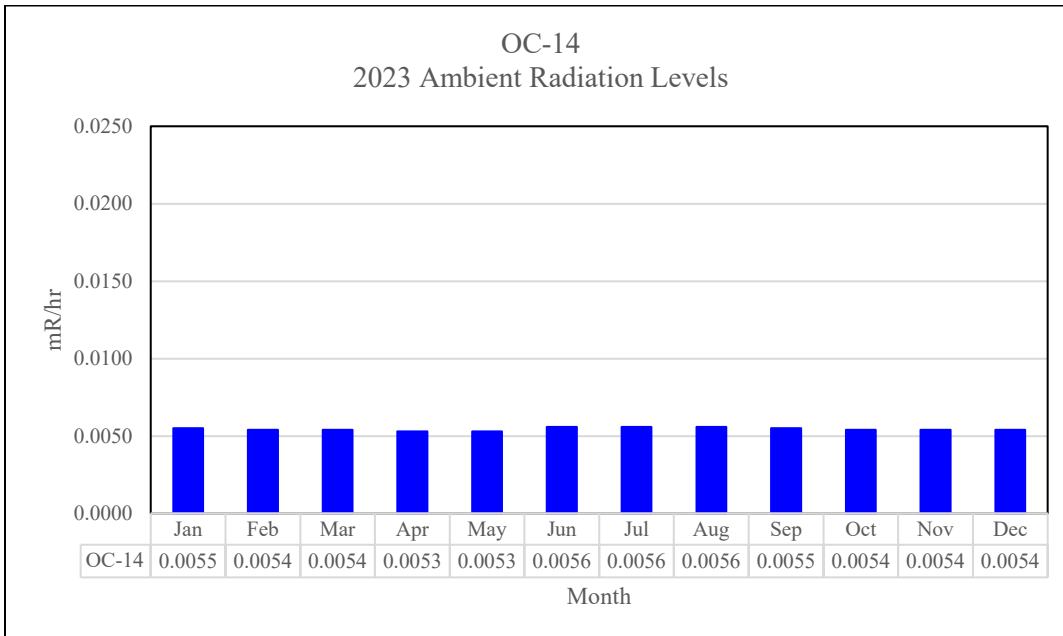
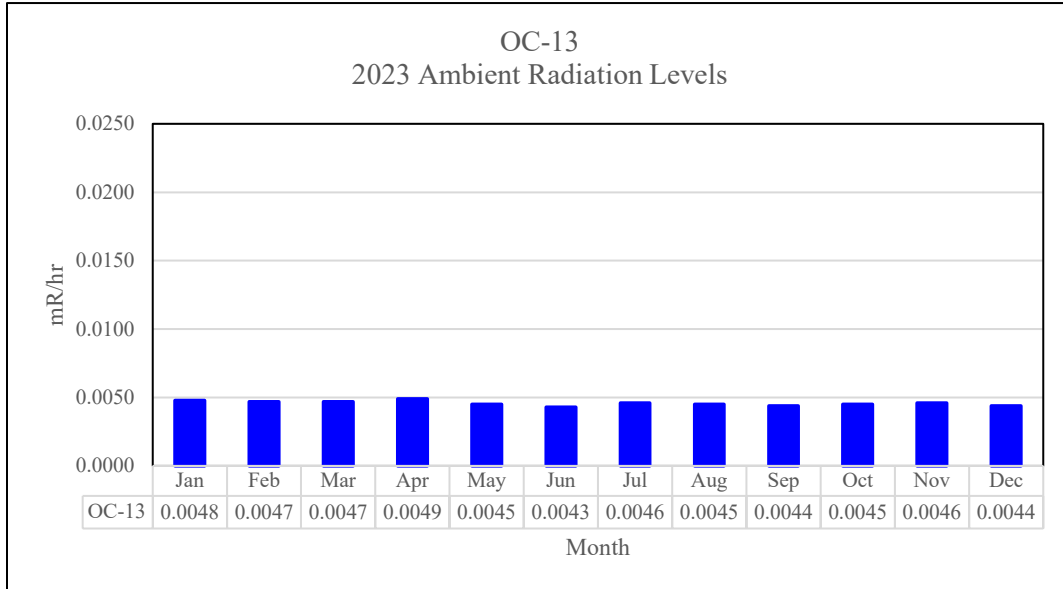
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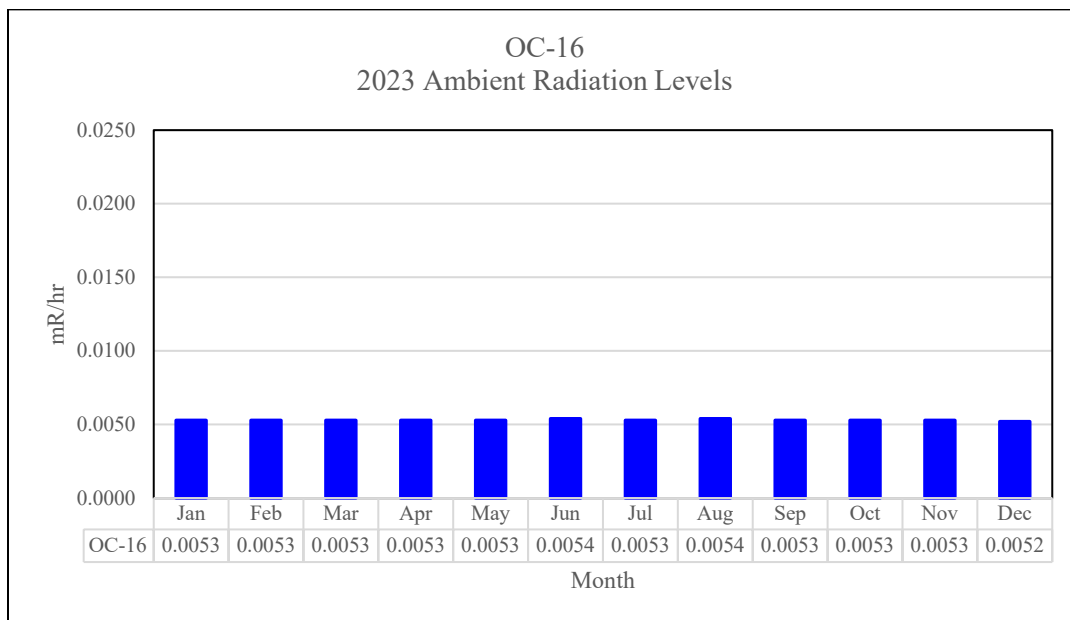
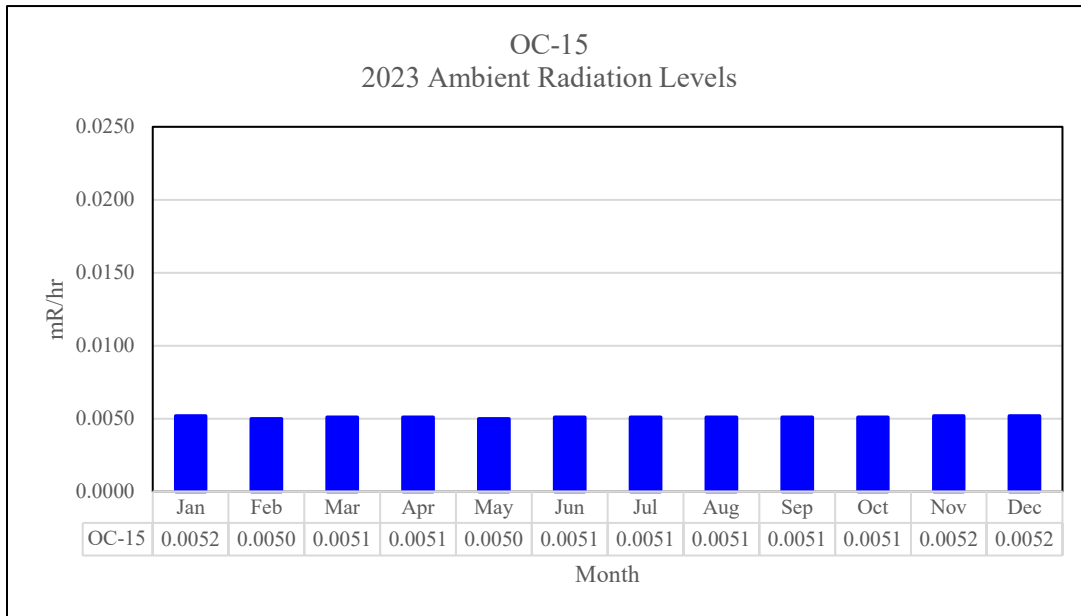
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**Oyster Creek
Continuous Radiological Environmental Surveillance Telemetry (CREST) Data**



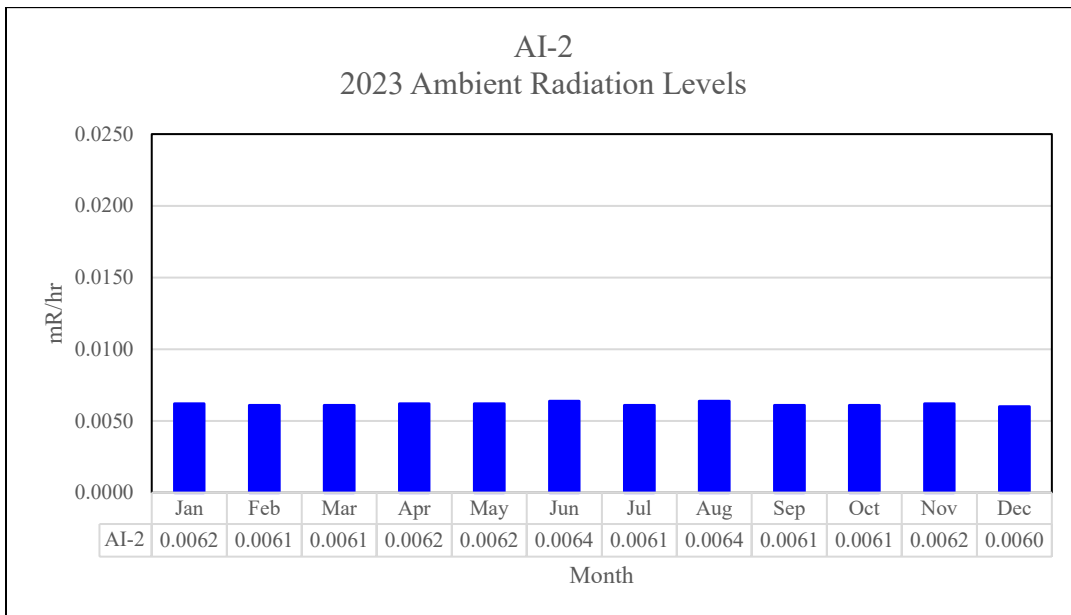
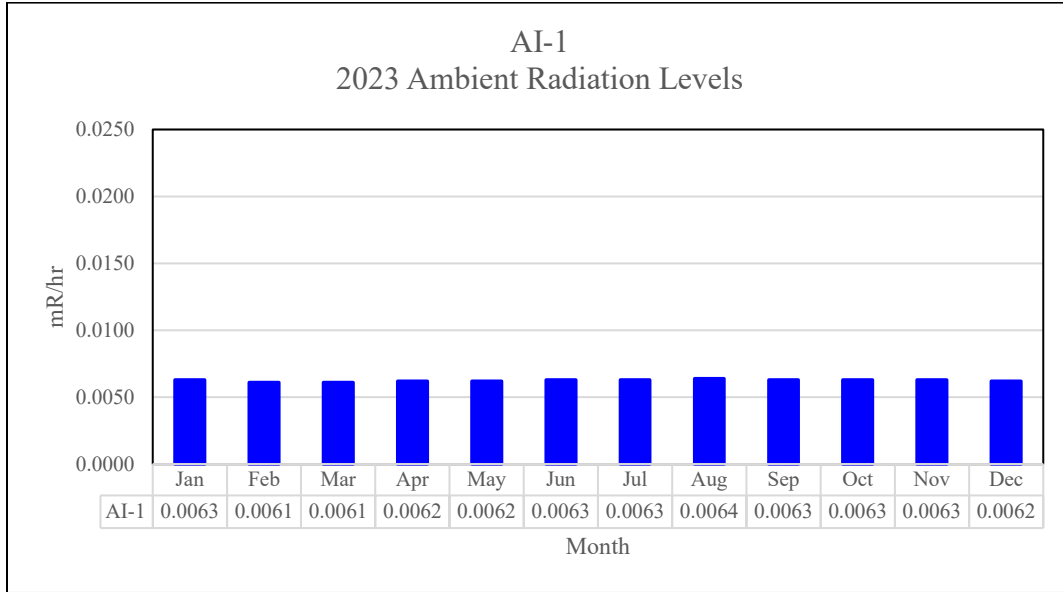
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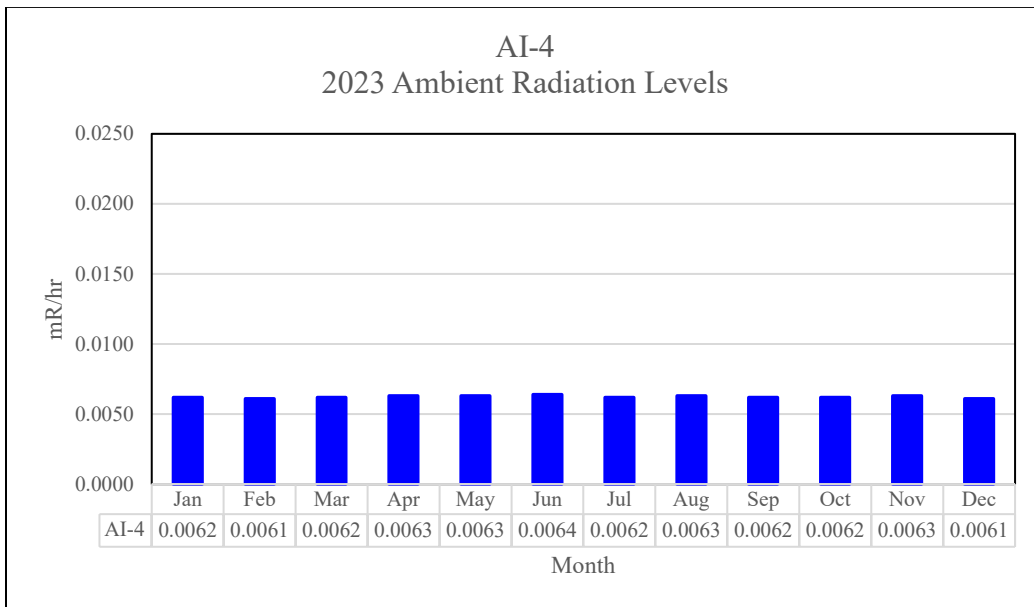
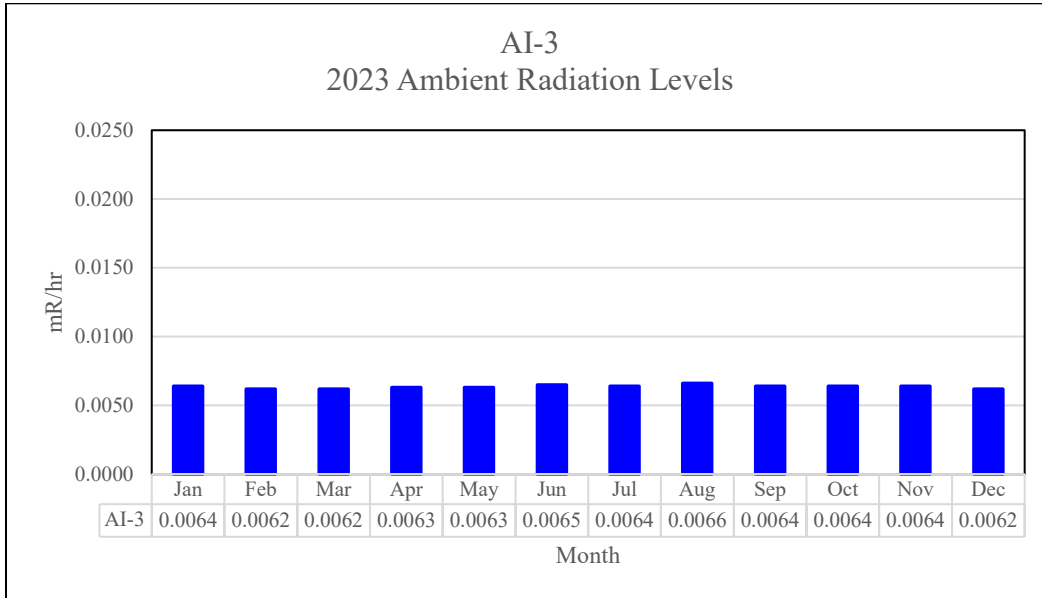
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**Salem/Hope Creek
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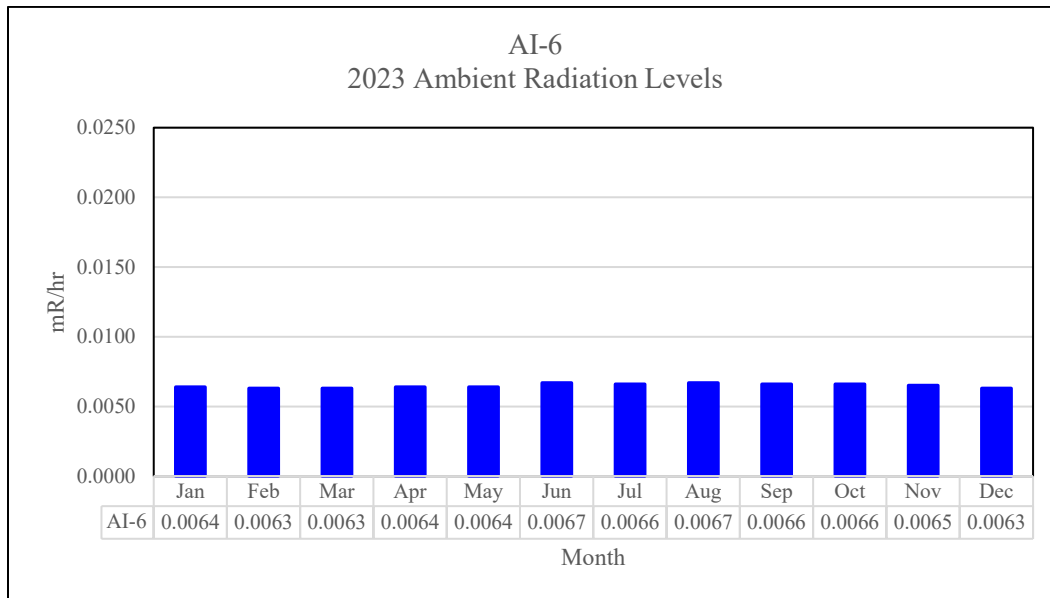
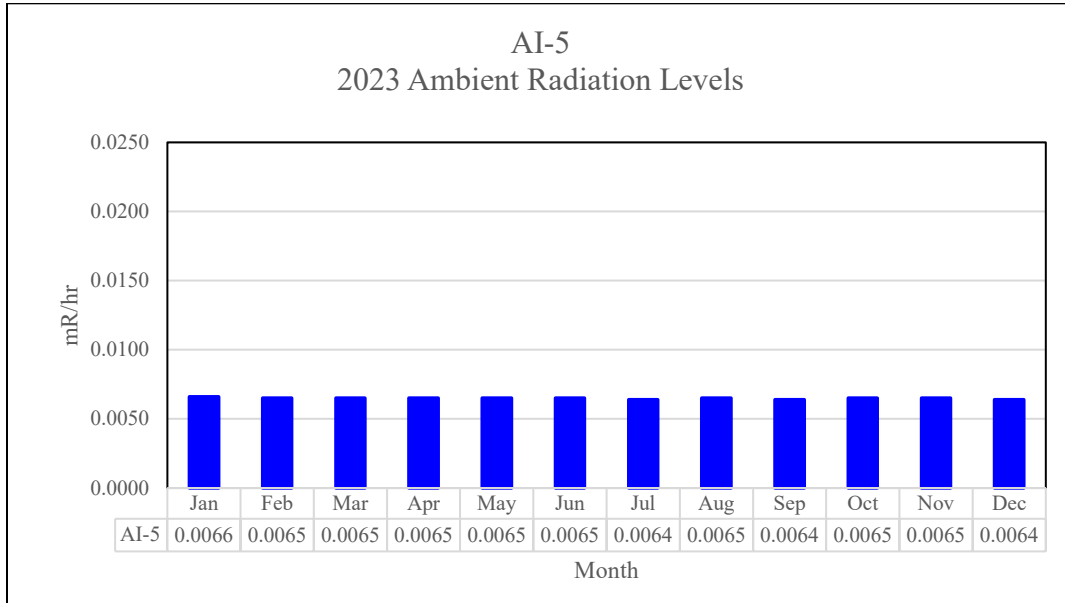
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**Salem/Hope Creek
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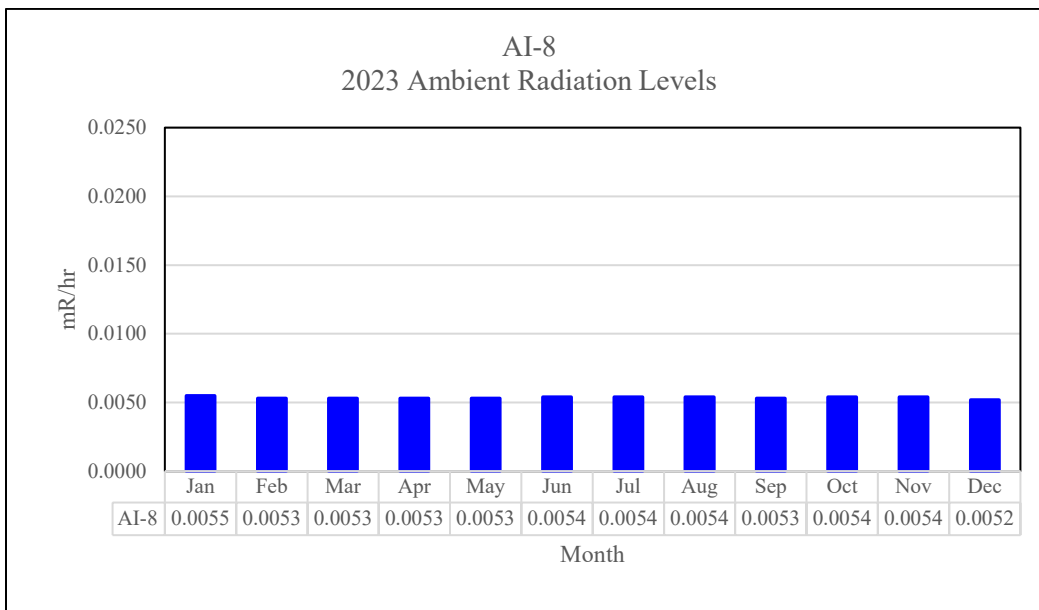
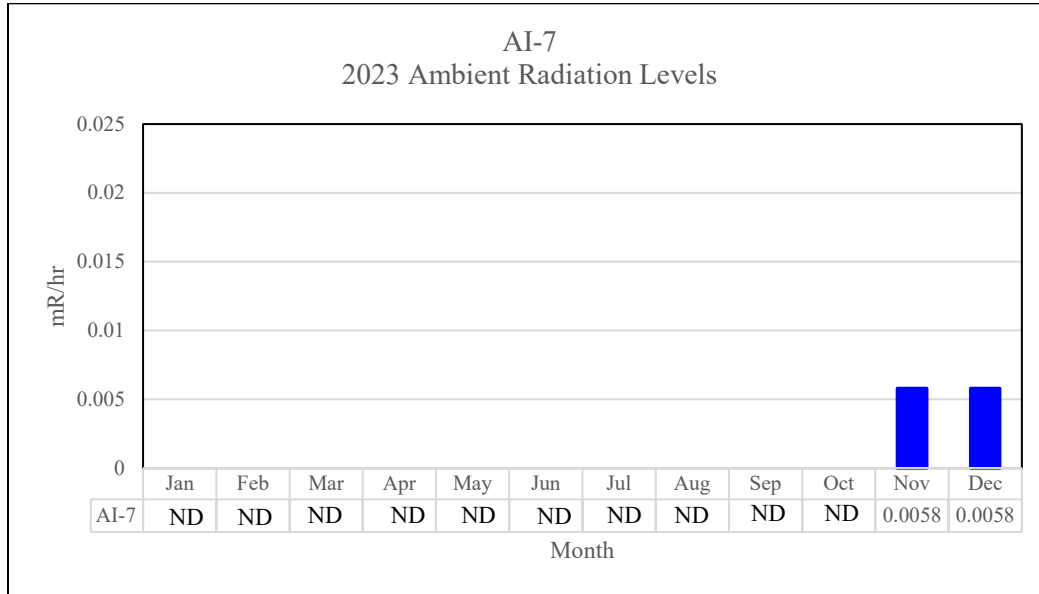
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ND indicates 'No Data'

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