New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

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

BNE Office (COAI01)

Collection Period			I-131 (pCi/m^3)
12/29/21	-	01/12/22	< 0.008
01/12/22	-	01/26/22	< 0.007
01/26/22	-	02/09/22	< 0.005
02/09/22	-	02/23/22	< 0.007
02/23/22	-	03/08/22	< 0.005
03/08/22	-	03/23/22	< 0.004
03/23/22	-	04/06/22	< 0.007
04/06/22	-	04/20/22	< 0.004
04/20/22	-	05/04/22	< 0.006
05/04/22	-	05/19/22	< 0.006
05/19/22	-	06/01/22	< 0.013
06/01/22	-	06/15/22	< 0.004
06/15/22	-	06/29/22	< 0.011
06/29/22	-	07/13/22	< 0.008
07/13/22	-	07/27/22	< 0.007
07/27/22	-	08/10/22	< 0.009
08/10/22	-	08/24/22	< 0.009
08/24/22	-	09/07/22	< 0.007
09/07/22	-	09/21/22	< 0.005
09/21/22	-	10/05/22	< 0.008
10/05/22	-	10/19/22	< 0.007
10/19/22	-	11/02/22	< 0.005
11/02/22	-	11/16/22	< 0.008
11/16/22	-	11/30/22	< 0.033
11/30/22	-	12/14/22	< 0.006
12/14/22	-	12/28/22	< 0.007

Results in picoCuries per cubic meter (pCi/m^3)

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

Brendan T. Byrne State Forest (COAI02)

Collection Period			I-131 (pCi/m^3)
12/29/21	-	01/12/22	< 0.006
01/12/22	-	01/26/22	< 0.007
01/26/22	-	02/09/22	< 0.004
02/09/22	-	02/23/22	< 0.006
02/23/22	-	03/08/22	< 0.005
03/08/22	-	03/23/22	< 0.004
03/23/22	-	04/06/22	< 0.004
04/06/22	-	04/20/22	< 0.003
04/20/22	-	05/04/22	< 0.012
05/04/22	-	05/19/22	< 0.005
05/19/22	-	06/01/22	< 0.012
06/01/22	-	06/15/22	No Data[1]
06/15/22	-	06/29/22	< 0.012
06/29/22	-	07/13/22	< 0.009
07/13/22	-	07/27/22	< 0.007
07/27/22	-	08/10/22	< 0.011
08/10/22	-	08/24/22	< 0.007
08/24/22	-	09/07/22	< 0.007
09/07/22	-	09/21/22	< 0.004
09/21/22	-	10/05/22	< 0.006
10/05/22	-	10/19/22	< 0.010
10/19/22	-	11/02/22	< 0.010
11/02/22	-	11/16/22	< 0.008
11/16/22	-	11/30/22	< 0.021
11/30/22	-	12/14/22	< 0.007
12/14/22	-	12/28/22	< 0.010

Results in picoCuries per cubic meter (pCi/m^3)

[1] Sample medium lost

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

Fort Elfsborg Road (AIAI01)

Collection Period			I-131 (pCi/m^3)
12/29/21	-	01/12/22	< 0.006
01/12/22	-	01/26/22	< 0.005
01/26/22	-	02/09/22	< 0.005
02/09/22	-	02/23/22	< 0.006
02/23/22	-	03/08/22	< 0.006
03/08/22	-	03/23/22	< 0.008
03/23/22	-	04/06/22	< 0.003
04/06/22	-	04/20/22	< 0.005
04/20/22	-	05/04/22	< 0.013
05/04/22	-	05/19/22	< 0.005
05/19/22	-	06/01/22	< 0.013
06/01/22	-	06/15/22	< 0.007
06/15/22	-	06/29/22	< 0.006
06/29/22	-	07/13/22	< 0.008
07/13/22	-	07/27/22	< 0.006
07/27/22	-	08/10/22	< 0.010
08/10/22	-	08/24/22	< 0.009
08/24/22	-	09/07/22	< 0.008
09/07/22	-	09/21/22	< 0.004
09/21/22	-	10/05/22	< 0.008
10/05/22	-	10/19/22	< 0.007
10/19/22	-	11/02/22	< 0.009
11/02/22	-	11/16/22	< 0.009
11/16/22	-	11/30/22	< 0.022
11/30/22	-	12/14/22	< 0.007
12/14/22	-	12/28/22	< 0.007

Results in picoCuries per cubic meter (pCi/m^3)

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

Plant Access Road (AIAI02)

Collection Period			I-131 (pCi/m^3)
12/29/21	-	01/12/22	< 0.005
01/12/22	-	01/26/22	< 0.007
01/26/22	-	02/09/22	< 0.005
02/09/22	-	02/23/22	< 0.006
02/23/22	-	03/08/22	< 0.004
03/08/22	-	03/23/22	< 0.005
03/23/22	-	04/06/22	< 0.007
04/06/22	-	04/20/22	< 0.005
04/20/22	-	05/04/22	< 0.005
05/04/22	-	05/19/22	< 0.006
05/19/22	-	06/01/22	< 0.013
06/01/22	-	06/15/22	< 0.006
06/15/22	-	06/29/22	< 0.004
06/29/22	-	07/13/22	< 0.007
07/13/22	-	07/27/22	< 0.005
07/27/22	-	08/10/22	< 0.007
08/10/22	-	08/24/22	< 0.006
08/24/22	-	09/07/22	< 0.007
09/07/22	-	09/21/22	< 0.003
09/21/22	-	10/05/22	< 0.007
10/05/22	-	10/19/22	< 0.008
10/19/22	-	11/02/22	< 0.009
11/02/22	-	11/16/22	< 0.010
11/16/22	-	11/30/22	< 0.023
11/30/22	-	12/14/22	< 0.006
12/14/22	-	12/28/22	< 0.012

Results in picoCuries per cubic meter (pCi/m^3)

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

Lower Alloways Creek School (AIAI03)

Collection Period			I-131 (pCi/m^3)
12/29/21	-	01/12/22	< 0.006
01/12/22	-	01/26/22	< 0.005
01/26/22	-	02/09/22	< 0.005
02/09/22	-	02/23/22	< 0.006
02/23/22	-	03/08/22	< 0.005
03/08/22	-	03/23/22	< 0.006
03/23/22	-	04/06/22	< 0.007
04/06/22	-	04/20/22	< 0.004
04/20/22	-	05/04/22	< 0.006
05/04/22	-	05/19/22	< 0.005
05/19/22	-	06/01/22	< 0.008
06/01/22	-	06/15/22	< 0.007
06/15/22	-	06/29/22	< 0.009
06/29/22	-	07/13/22	< 0.008
07/13/22	-	07/27/22	< 0.007
07/27/22	-	08/10/22	< 0.009
08/10/22	-	08/24/22	< 0.007
08/24/22	-	09/07/22	< 0.007
09/07/22	-	09/21/22	< 0.004
09/21/22	-	10/05/22	< 0.008
10/05/22	-	10/19/22	< 0.008
10/19/22	-	11/02/22	< 0.007
11/02/22	-	11/16/22	< 0.008
11/16/22	-	11/30/22	< 0.018
11/30/22	-	12/14/22	< 0.007
12/14/22	-	12/28/22	< 0.007

Results in picoCuries per cubic meter (pCi/m^3)

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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)

Collection Period			I-131 (pCi/m^3)
12/29/21	-	01/12/22	< 0.005
01/12/22	-	01/26/22	< 0.006
01/26/22	-	02/09/22	< 0.003
02/09/22	-	02/23/22	< 0.006
02/23/22	-	03/08/22	< 0.006
03/08/22	-	03/23/22	< 0.006
03/23/22	-	04/06/22	< 0.004
04/06/22	-	04/20/22	< 0.005
04/20/22	-	05/04/22	< 0.005
05/04/22	-	05/19/22	< 0.005
05/19/22	-	06/01/22	< 0.011
06/01/22	-	06/15/22	< 0.006
06/15/22	-	06/29/22	< 0.004
06/29/22	-	07/13/22	< 0.012
07/13/22	-	07/27/22	< 0.006
07/27/22	-	08/10/22	< 0.005
08/10/22	-	08/24/22	< 0.005
08/24/22	-	09/07/22	< 0.006
09/07/22	-	09/21/22	< 0.005
09/21/22	-	10/05/22	< 0.006
10/05/22	-	10/19/22	< 0.008
10/19/22	-	11/02/22	< 0.006
11/02/22	-	11/16/22	< 0.009
11/16/22	-	11/30/22	< 0.023
11/30/22	-	12/14/22	< 0.006
12/14/22	-	12/28/22	< 0.006

Results in picoCuries per cubic meter (pCi/m^3)

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)

Collection Period			Particulate Gross Beta (pCi/m^3)
12/29/21	-	01/12/22	0.029 ± 0.002
01/12/22	-	01/26/22	0.032 ± 0.002
01/26/22	-	02/09/22	0.026 ± 0.002
02/09/22	-	02/23/22	0.022 ± 0.002
02/23/22	-	03/08/22	0.029 ± 0.002
03/08/22	-	03/23/22	0.020 ± 0.002
03/23/22	-	04/06/22	0.016 ± 0.002
04/06/22	-	04/20/22	0.015 ± 0.002
04/20/22	-	05/04/22	0.020 ± 0.002
05/04/22	-	05/19/22	0.015 ± 0.002
05/19/22	-	06/01/22	0.018 ± 0.002
06/01/22	-	06/15/22	0.015 ± 0.001
06/15/22	-	06/29/22	0.013 ± 0.001
06/29/22	-	07/13/22	0.017 ± 0.001
07/13/22	-	07/27/22	0.021 ± 0.002
07/27/22	-	08/10/22	0.019 ± 0.002
08/10/22	-	08/24/22	0.016 ± 0.001
08/24/22	-	09/07/22	0.024 ± 0.002
09/07/22	-	09/21/22	0.020 ± 0.002
09/21/22	-	10/05/22	0.016 ± 0.001
10/05/22	-	10/19/22	0.024 ± 0.002
10/19/22	-	11/02/22	0.016 ± 0.001
11/02/22	-	11/16/22	0.015 ± 0.001
11/16/22	-	11/30/22	0.027 ± 0.002
11/30/22	-	12/14/22	0.021 ± 0.002
12/14/22	-	12/28/22	0.022 ± 0.002

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

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

Brendan T. Byrne State Forest (COAP02)

Collection Period			Particulate Gross Beta (pCi/m^3)
12/29/21	-	01/12/22	0.029 ± 0.002
01/12/22	-	01/26/22	0.033 ± 0.002
01/26/22	-	02/09/22	0.024 ± 0.002
02/09/22	-	02/23/22	0.021 ± 0.002
02/23/22	-	03/08/22	0.028 ± 0.002
03/08/22	-	03/23/22	0.019 ± 0.002
03/23/22	-	04/06/22	0.017 ± 0.002
04/06/22	-	04/20/22	0.014 ± 0.002
04/20/22	-	05/04/22	0.019 ± 0.002
05/04/22	-	05/19/22	0.012 ± 0.001
05/19/22	-	06/01/22	0.020 ± 0.002
06/01/22	-	06/15/22	0.014 ± 0.001
06/15/22	-	06/29/22	0.012 ± 0.001
06/29/22	-	07/13/22	0.015 ± 0.001
07/13/22	-	07/27/22	0.022 ± 0.002
07/27/22	-	08/10/22	0.019 ± 0.002
08/10/22	-	08/24/22	0.017 ± 0.002
08/24/22	-	09/07/22	0.024 ± 0.002
09/07/22	-	09/21/22	0.020 ± 0.002
09/21/22	-	10/05/22	0.015 ± 0.001
10/05/22	-	10/19/22	0.023 ± 0.002
10/19/22	-	11/02/22	0.016 ± 0.001
11/02/22	-	11/16/22	0.016 ± 0.001
11/16/22	-	11/30/22	0.023 ± 0.002
11/30/22	-	12/14/22	0.021 ± 0.002
12/14/22	-	12/28/22	0.021 ± 0.002

Results in picoCuries per cubic meter (pCi/m^3) +/- 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)

Collection Period			Particulate Gross Beta (pCi/m^3)
12/29/21	-	01/12/22	0.028 ± 0.002
01/12/22	-	01/26/22	0.031 ± 0.002
01/26/22	-	02/09/22	0.021 ± 0.002
02/09/22	-	02/23/22	0.021 ± 0.002
02/23/22	-	03/08/22	0.025 ± 0.002
03/08/22	-	03/23/22	0.019 ± 0.002
03/23/22	-	04/06/22	0.016 ± 0.002
04/06/22	-	04/20/22	0.014 ± 0.002
04/20/22	-	05/04/22	0.019 ± 0.002
05/04/22	-	05/19/22	0.014 ± 0.002
05/19/22	-	06/01/22	0.021 ± 0.002
06/01/22	-	06/15/22	0.011 ± 0.001
06/15/22	-	06/29/22	0.013 ± 0.001
06/29/22	-	07/13/22	0.013 ± 0.001
07/13/22	-	07/27/22	0.022 ± 0.002
07/27/22	-	08/10/22	0.020 ± 0.002
08/10/22	-	08/24/22	0.016 ± 0.001
08/24/22	-	09/07/22	0.019 ± 0.001
09/07/22	-	09/21/22	0.020 ± 0.002
09/21/22	-	10/05/22	0.014 ± 0.001
10/05/22	-	10/19/22	0.022 ± 0.002
10/19/22	-	11/02/22	0.014 ± 0.001
11/02/22	-	11/16/22	0.016 ± 0.001
11/16/22	-	11/30/22	0.026 ± 0.002
11/30/22	-	12/14/22	0.021 ± 0.002
12/14/22	-	12/28/22	0.021 ± 0.002

Results in picoCuries per cubic meter (pCi/m^3) +/- 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

Sands Point Harbor (OCAP02)

Collection Period			Particulate Gross Beta (pCi/m^3)
12/29/21	-	01/12/22	0.030 ± 0.002
01/12/22	-	01/26/22	0.032 ± 0.002
01/26/22	-	02/09/22	0.022 ± 0.002
02/09/22	-	02/23/22	0.021 ± 0.002
02/23/22	-	03/08/22	0.024 ± 0.002
03/08/22	-	03/23/22	0.018 ± 0.002
03/23/22	-	04/06/22	0.014 ± 0.001
04/06/22	-	04/20/22	0.014 ± 0.002
04/20/22	-	05/04/22	0.020 ± 0.002
05/04/22	-	05/19/22	0.015 ± 0.002
05/19/22	-	06/01/22	0.018 ± 0.002
06/01/22	-	06/15/22	0.012 ± 0.001
06/15/22	-	06/29/22	0.011 ± 0.001
06/29/22	-	07/13/22	0.013 ± 0.001
07/13/22	-	07/27/22	0.023 ± 0.002
07/27/22	-	08/10/22	0.018 ± 0.001
08/10/22	-	08/24/22	0.017 ± 0.001
08/24/22	-	09/07/22	0.021 ± 0.002
09/07/22	-	09/21/22	0.019 ± 0.002
09/21/22	-	10/05/22	0.014 ± 0.001
10/05/22	-	10/19/22	0.021 ± 0.002
10/19/22	-	11/02/22	0.016 ± 0.001
11/02/22	-	11/16/22	0.016 ± 0.001
11/16/22	-	11/30/22	0.025 ± 0.002
11/30/22	-	12/14/22	0.022 ± 0.002
12/14/22	-	12/28/22	0.021 ± 0.002

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

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

Forked River Marina (OCAP03)

Collection Period			Particulate Gross Beta (pCi/m^3)
12/29/21	-	01/12/22	0.029 ± 0.002
01/12/22	-	01/26/22	0.032 ± 0.002
01/26/22	-	02/09/22	0.026 ± 0.002
02/09/22	-	02/23/22	0.020 ± 0.002
02/23/22	-	03/08/22	0.027 ± 0.002
03/08/22	-	03/23/22	0.019 ± 0.002
03/23/22	-	04/06/22	0.014 ± 0.002
04/06/22	-	04/20/22	0.013 ± 0.002
04/20/22	-	05/04/22	0.020 ± 0.002
05/04/22	-	05/19/22	0.012 ± 0.001
05/19/22	-	06/01/22	0.021 ± 0.002
06/01/22	-	06/15/22	0.013 ± 0.001
06/15/22	-	06/29/22	0.012 ± 0.001
06/29/22	-	07/13/22	0.014 ± 0.001
07/13/22	-	07/27/22	0.022 ± 0.002
07/27/22	-	08/10/22	0.019 ± 0.002
08/10/22	-	08/24/22	0.018 ± 0.002
08/24/22	-	09/07/22	0.024 ± 0.002
09/07/22	-	09/21/22	0.020 ± 0.002
09/21/22	-	10/05/22	0.014 ± 0.001
10/05/22	-	10/19/22	0.023 ± 0.002
10/19/22	-	11/02/22	0.014 ± 0.001
11/02/22	-	11/16/22	0.015 ± 0.001
11/16/22	-	11/30/22	0.028 ± 0.002
11/30/22	-	12/14/22	0.022 ± 0.002
12/14/22	-	12/28/22	0.022 ± 0.002

Results in picoCuries per cubic meter (pCi/m^3) +/- 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

Lacey Twp. Recreation Building (OCAP04)

Collection Period			Particulate Gross Beta (pCi/m^3)
12/29/21	-	01/12/22	0.029 ± 0.002
01/12/22	-	01/26/22	0.031 ± 0.002
01/26/22	-	02/09/22	0.022 ± 0.002
02/09/22	-	02/23/22	0.021 ± 0.002
02/23/22	-	03/08/22	0.028 ± 0.002
03/08/22	-	03/23/22	0.018 ± 0.002
03/23/22	-	04/06/22	0.016 ± 0.002
04/06/22	-	04/20/22	0.015 ± 0.002
04/20/22	-	05/04/22	0.017 ± 0.002
05/04/22	-	05/19/22	0.014 ± 0.001
05/19/22	-	06/01/22	0.019 ± 0.002
06/01/22	-	06/15/22	0.013 ± 0.001
06/15/22	-	06/29/22	0.012 ± 0.001
06/29/22	-	07/13/22	0.014 ± 0.001
07/13/22	-	07/27/22	0.022 ± 0.002
07/27/22	-	08/10/22	0.019 ± 0.002
08/10/22	-	08/24/22	0.017 ± 0.001
08/24/22	-	09/07/22	0.022 ± 0.002
09/07/22	-	09/21/22	0.021 ± 0.002
09/21/22	-	10/05/22	0.015 ± 0.001
10/05/22	-	10/19/22	0.023 ± 0.002
10/19/22	-	11/02/22	0.015 ± 0.001
11/02/22	-	11/16/22	0.015 ± 0.001
11/16/22	-	11/30/22	0.024 ± 0.002
11/30/22	-	12/14/22	0.022 ± 0.002
12/14/22	-	12/28/22	0.021 ± 0.002

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

New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

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

JCP&L Substation (OCAP05)

Collection Period			Particulate Gross Beta (pCi/m^3)
12/29/21	-	01/12/22	0.030 ± 0.002
01/12/22	-	01/26/22	0.030 ± 0.002
01/26/22	-	02/09/22	0.023 ± 0.002
02/09/22	-	02/23/22	0.020 ± 0.002
02/23/22	-	03/08/22	0.026 ± 0.002
03/08/22	-	03/23/22	0.018 ± 0.002
03/23/22	-	04/06/22	0.015 ± 0.002
04/06/22	-	04/20/22	0.013 ± 0.001
04/20/22	-	05/04/22	0.019 ± 0.002
05/04/22	-	05/19/22	0.013 ± 0.001
05/19/22	-	06/01/22	0.018 ± 0.002
06/01/22	-	06/15/22	0.013 ± 0.001
06/15/22	-	06/29/22	0.013 ± 0.001
06/29/22	-	07/13/22	0.015 ± 0.001
07/13/22	-	07/27/22	0.024 ± 0.002
07/27/22	-	08/10/22	0.022 ± 0.002
08/10/22	-	08/24/22	0.018 ± 0.002
08/24/22	-	09/07/22	0.024 ± 0.002
09/07/22	-	09/21/22	0.022 ± 0.002
09/21/22	-	10/05/22	0.016 ± 0.001
10/05/22	-	10/19/22	0.025 ± 0.002
10/19/22	-	11/02/22	0.015 ± 0.001
11/02/22	-	11/16/22	0.018 ± 0.002
11/16/22	-	11/30/22	0.029 ± 0.002
11/30/22	-	12/14/22	0.023 ± 0.002
12/14/22	-	12/28/22	0.024 ± 0.002

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

New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

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

Finninger Farm, OC Dredge Site (OCAP06)[2]

Collection Period			Particulate Gross Beta (pCi/m^3)
12/30/21	-	01/13/22	0.036 ± 0.004
01/13/22	-	01/26/22	0.040 ± 0.004
01/26/22	-	02/10/22	0.029 ± 0.003
02/10/22	-	02/23/22	0.030 ± 0.003
02/23/22	-	03/10/22	No Data[3]
03/10/22	-	03/22/22	0.039 ± 0.004
03/22/22	-	04/04/22	0.026 ± 0.003
04/04/22	-	04/20/22	0.022 ± 0.003
04/20/22	-	05/02/22	0.025 ± 0.003
05/02/22	-	05/16/22	0.019 ± 0.003
05/16/22	-	05/31/22	0.027 ± 0.003
05/31/22	-	06/14/22	0.021 ± 0.002
06/14/22	-	06/27/22	0.020 ± 0.003
06/27/22	-	07/12/22	0.023 ± 0.002
07/12/22	-	07/26/22	0.033 ± 0.003
07/26/22	-	08/09/22	0.033 ± 0.003
08/09/22	-	08/23/22	0.023 ± 0.002
08/23/22	-	09/07/22	0.033 ± 0.003

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

[2] Sampling of OC06 has been discontinued per agreement between the licensee Holtec Decommissioning International (HDI) and the State of NJDEP. The final collection period ended on September 7, 2022
[3] Sample medium lost.

New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

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

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

Collection Period			Particulate Gross Beta (pCi/m^3)
12/29/21	-	01/12/22	0.032 ± 0.002
01/12/22	-	01/26/22	0.032 ± 0.002
01/26/22	-	02/09/22	0.023 ± 0.002
02/09/22	-	02/23/22	0.021 ± 0.002
02/23/22	-	03/08/22	0.025 ± 0.002
03/08/22	-	03/23/22	0.019 ± 0.002
03/23/22	-	04/06/22	0.016 ± 0.002
04/06/22	-	04/20/22	0.014 ± 0.002
04/20/22	-	05/04/22	0.021 ± 0.002
05/04/22	-	05/19/22	0.014 ± 0.001
05/19/22	-	06/01/22	0.018 ± 0.002
06/01/22	-	06/15/22	0.013 ± 0.001
06/15/22	-	06/29/22	0.012 ± 0.001
06/29/22	-	07/13/22	0.014 ± 0.001
07/13/22	-	07/27/22	0.022 ± 0.002
07/27/22	-	08/10/22	0.018 ± 0.001
08/10/22	-	08/24/22	0.015 ± 0.001
08/24/22	-	09/07/22	0.023 ± 0.002
09/07/22	-	09/21/22	0.019 ± 0.002
09/21/22	-	10/05/22	0.015 ± 0.001
10/05/22	-	10/19/22	0.023 ± 0.002
10/19/22	-	11/02/22	0.016 ± 0.001
11/02/22	-	11/16/22	0.016 ± 0.001
11/16/22	-	11/30/22	0.027 ± 0.002
11/30/22	-	12/14/22	0.022 ± 0.002
12/14/22	-	12/28/22	0.022 ± 0.002

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

New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 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)

Collection Period			Particulate Gross Beta (pCi/m^3)
12/29/21	-	01/12/22	0.028 ± 0.002
01/12/22	-	01/26/22	0.028 ± 0.002
01/26/22	-	02/09/22	0.025 ± 0.002
02/09/22	-	02/23/22	0.022 ± 0.002
02/23/22	-	03/08/22	0.026 ± 0.002
03/08/22	-	03/23/22	0.017 ± 0.002
03/23/22	-	04/06/22	0.016 ± 0.002
04/06/22	-	04/20/22	0.015 ± 0.002
04/20/22	-	05/04/22	0.020 ± 0.002
05/04/22	-	05/19/22	0.014 ± 0.002
05/19/22	-	06/01/22	0.019 ± 0.002
06/01/22	-	06/15/22	0.012 ± 0.001
06/15/22	-	06/29/22	0.011 ± 0.001
06/29/22	-	07/13/22	0.014 ± 0.001
07/13/22	-	07/27/22	0.021 ± 0.002
07/27/22	-	08/10/22	0.018 ± 0.002
08/10/22	-	08/24/22	0.017 ± 0.001
08/24/22	-	09/07/22	0.023 ± 0.002
09/07/22	-	09/21/22	0.019 ± 0.002
09/21/22	-	10/05/22	0.015 ± 0.001
10/05/22	-	10/19/22	0.023 ± 0.002
10/19/22	-	11/02/22	0.016 ± 0.001
11/02/22	-	11/16/22	0.015 ± 0.001
11/16/22	-	11/30/22	0.025 ± 0.002
11/30/22	-	12/14/22	0.019 ± 0.002
12/14/22	-	12/28/22	0.021 ± 0.002

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

New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

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

Fort Elfsborg Road (AIAP01)

Collection Period			Particulate Gross Beta (pCi/m^3)
12/29/21	-	01/12/22	0.030 ± 0.002
01/12/22	-	01/26/22	0.032 ± 0.002
01/26/22	-	02/09/22	0.028 ± 0.002
02/09/22	-	02/23/22	0.023 ± 0.002
02/23/22	-	03/08/22	0.029 ± 0.002
03/08/22	-	03/23/22	0.018 ± 0.002
03/23/22	-	04/06/22	0.016 ± 0.002
04/06/22	-	04/20/22	0.015 ± 0.002
04/20/22	-	05/04/22	0.021 ± 0.002
05/04/22	-	05/19/22	0.013 ± 0.002
05/19/22	-	06/01/22	0.020 ± 0.002
06/01/22	-	06/15/22	0.016 ± 0.001
06/15/22	-	06/29/22	0.003 ± 0.001
06/29/22	-	07/13/22	0.015 ± 0.001
07/13/22	-	07/27/22	0.023 ± 0.002
07/27/22	-	08/10/22	0.019 ± 0.002
08/10/22	-	08/24/22	0.019 ± 0.002
08/24/22	-	09/07/22	0.024 ± 0.002
09/07/22	-	09/21/22	0.021 ± 0.002
09/21/22	-	10/05/22	0.018 ± 0.001
10/05/22	-	10/19/22	0.022 ± 0.002
10/19/22	-	11/02/22	0.016 ± 0.001
11/02/22	-	11/16/22	0.015 ± 0.001
11/16/22	-	11/30/22	0.027 ± 0.002
11/30/22	-	12/14/22	0.024 ± 0.002
12/14/22	-	12/28/22	0.021 ± 0.002

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

New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

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

Plant Access Road (AIAP02)

Collection Period			Particulate Gross Beta (pCi/m^3)
12/29/21	-	01/12/22	0.030 ± 0.002
01/12/22	-	01/26/22	0.032 ± 0.002
01/26/22	-	02/09/22	0.026 ± 0.002
02/09/22	-	02/23/22	0.022 ± 0.002
02/23/22	-	03/08/22	0.025 ± 0.002
03/08/22	-	03/23/22	0.019 ± 0.002
03/23/22	-	04/06/22	0.021 ± 0.002
04/06/22	-	04/20/22	0.014 ± 0.001
04/20/22	-	05/04/22	0.021 ± 0.002
05/04/22	-	05/19/22	0.015 ± 0.002
05/19/22	-	06/01/22	0.020 ± 0.002
06/01/22	-	06/15/22	0.014 ± 0.001
06/15/22	-	06/29/22	0.013 ± 0.001
06/29/22	-	07/13/22	0.016 ± 0.001
07/13/22	-	07/27/22	0.025 ± 0.002
07/27/22	-	08/10/22	0.021 ± 0.002
08/10/22	-	08/24/22	0.017 ± 0.001
08/24/22	-	09/07/22	0.023 ± 0.002
09/07/22	-	09/21/22	0.022 ± 0.002
09/21/22	-	10/05/22	0.015 ± 0.001
10/05/22	-	10/19/22	0.022 ± 0.002
10/19/22	-	11/02/22	0.014 ± 0.001
11/02/22	-	11/16/22	0.016 ± 0.001
11/16/22	-	11/30/22	0.026 ± 0.002
11/30/22	-	12/14/22	0.023 ± 0.002
12/14/22	-	12/28/22	0.022 ± 0.002

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

New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

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

Lower Alloways Creek School (AIAP03)

Collection Period			Particulate Gross Beta (pCi/m^3)
12/29/21	-	01/12/22	0.031 ± 0.002
01/12/22	-	01/26/22	0.033 ± 0.002
01/26/22	-	02/09/22	0.025 ± 0.002
02/09/22	-	02/23/22	0.024 ± 0.002
02/23/22	-	03/08/22	0.029 ± 0.002
03/08/22	-	03/23/22	0.021 ± 0.002
03/23/22	-	04/06/22	0.017 ± 0.002
04/06/22	-	04/20/22	0.014 ± 0.002
04/20/22	-	05/04/22	0.022 ± 0.002
05/04/22	-	05/19/22	0.015 ± 0.002
05/19/22	-	06/01/22	0.018 ± 0.002
06/01/22	-	06/15/22	0.014 ± 0.001
06/15/22	-	06/29/22	0.013 ± 0.001
06/29/22	-	07/13/22	0.016 ± 0.001
07/13/22	-	07/27/22	0.023 ± 0.002
07/27/22	-	08/10/22	0.019 ± 0.002
08/10/22	-	08/24/22	0.017 ± 0.001
08/24/22	-	09/07/22	0.022 ± 0.002
09/07/22	-	09/21/22	0.022 ± 0.002
09/21/22	-	10/05/22	0.016 ± 0.001
10/05/22	-	10/19/22	0.022 ± 0.002
10/19/22	-	11/02/22	0.014 ± 0.001
11/02/22	-	11/16/22	0.017 ± 0.001
11/16/22	-	11/30/22	0.028 ± 0.002
11/30/22	-	12/14/22	0.024 ± 0.002
12/14/22	-	12/28/22	0.023 ± 0.002

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

New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

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

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

Collection Period			Particulate Gross Beta (pCi/m^3)
12/29/21	-	01/12/22	0.030 ± 0.002
01/12/22	-	01/26/22	0.032 ± 0.002
01/26/22	-	02/09/22	0.025 ± 0.002
02/09/22	-	02/23/22	0.020 ± 0.002
02/23/22	-	03/08/22	0.027 ± 0.002
03/08/22	-	03/23/22	0.019 ± 0.002
03/23/22	-	04/06/22	0.015 ± 0.002
04/06/22	-	04/20/22	0.015 ± 0.002
04/20/22	-	05/04/22	0.022 ± 0.002
05/04/22	-	05/19/22	0.013 ± 0.001
05/19/22	-	06/01/22	0.019 ± 0.002
06/01/22	-	06/15/22	0.015 ± 0.001
06/15/22	-	06/29/22	0.013 ± 0.001
06/29/22	-	07/13/22	0.016 ± 0.001
07/13/22	-	07/27/22	0.021 ± 0.002
07/27/22	-	08/10/22	0.019 ± 0.002
08/10/22	-	08/24/22	0.018 ± 0.001
08/24/22	-	09/07/22	0.021 ± 0.002
09/07/22	-	09/21/22	0.020 ± 0.002
09/21/22	-	10/05/22	0.015 ± 0.001
10/05/22	-	10/19/22	0.022 ± 0.002
10/19/22	-	11/02/22	0.015 ± 0.001
11/02/22	-	11/16/22	0.015 ± 0.001
11/16/22	-	11/30/22	0.028 ± 0.002
11/30/22	-	12/14/22	0.023 ± 0.002
12/14/22	-	12/28/22	0.023 ± 0.002

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

New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

BNE Background Location
Results of Analyses of Gamma Emitters and Strontium in
Quarterly Composite Air Samples

BNE Office (COAP01)

Collection Period			Co-60	Cs-134	Cs-137	Be-7	Sr-89	Sr-90
12/29/21	-	04/06/22	< 0.4	< 0.4	< 0.4	123 ± 8	< 27.7	< 14.3
04/06/22	-	06/29/22	< 0.3	< 0.3	< 0.3	115 ± 15	< 22.1	< 13.8
06/29/22	-	10/05/22	< 0.2	< 0.2	< 0.2	122 ± 17	< 35.0	< 8.6
10/05/22	-	12/28/22	< 0.2	< 0.3	< 0.2	94 ± 13	< 43.3	< 17.0

Brendan T. Byrne State Forest (COAP02)

Collection Period			Co-60	Cs-134	Cs-137	Be-7	Sr-89	Sr-90
12/29/21	-	04/06/22	< 0.3	< 0.3	< 0.2	126 ± 17	< 26.2	< 12.3
04/06/22	-	06/29/22	< 0.3	< 0.3	< 0.2	113 ± 16	< 29.8	< 20.1
06/29/22	-	10/05/22	< 0.3	< 0.3	< 0.3	115 ± 18	< 83.8	< 14.2
10/05/22	-	12/28/22	< 0.2	< 0.4	< 0.2	81 ± 15	< 26.0	< 10.1

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

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

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Oyster Creek
Results of Analyses of Gamma Emitters and Strontium in
Quarterly Composite Air Samples

Waretown Municipal Building (OCAP01)

Collection Period			Co-60	Cs-134	Cs-137	Be-7	Sr-89	Sr-90
12/29/21	-	04/06/22	< 0.4	< 0.3	< 0.3	123 ± 16	< 30.2	< 23.8
04/06/22	-	06/29/22	< 0.2	< 0.3	< 0.2	111 ± 16	< 35.1	< 11.6
06/29/22	-	10/05/22	< 0.1	< 0.3	< 0.2	126 ± 17	< 29.9	< 10.5
10/05/22	-	12/28/22	< 0.3	< 0.4	< 0.3	81 ± 14	< 30.6	< 15.1

Sands Point Harbor (OCAP02)

Collection Period			Co-60	Cs-134	Cs-137	Be-7	Sr-89	Sr-90
12/29/21	-	04/06/22	< 0.3	< 0.3	< 0.2	118 ± 16	< 38.4	< 13.1
04/06/22	-	06/29/22	< 0.3	< 0.3	< 0.2	101 ± 15	< 37.7	< 18.6
06/29/22	-	10/05/22	< 0.3	< 0.3	< 0.3	101 ± 14	< 32.7	< 15.7
10/05/22	-	12/28/22	< 0.3	< 0.2	< 0.2	87 ± 14	< 41.8	< 16.9

Forked River Marina (OCAP03)

Collection Period			Co-60	Cs-134	Cs-137	Be-7	Sr-89	Sr-90
12/29/21	-	04/06/22	< 0.3	< 0.3	< 0.3	135 ± 18	< 18.8	< 10.2
04/06/22	-	06/29/22	< 0.3	< 0.3	< 0.3	113 ± 15	< 33.3	< 10.8
06/29/22	-	10/05/22	< 0.2	< 0.2	< 0.2	120 ± 16	< 36.1	< 8.4
10/05/22	-	12/28/22	< 0.3	< 0.3	< 0.3	95 ± 15	< 28.4	< 11.8

Lacey Township Recreation Building (OCAP04)

Collection Period			Co-60	Cs-134	Cs-137	Be-7	Sr-89	Sr-90
12/29/21	-	04/06/22	< 0.3	< 0.4	< 0.4	116 ± 17	< 32.1	< 9.8
04/06/22	-	06/29/22	< 0.5	< 0.4	< 0.3	135 ± 20	< 22.6	< 11.0
06/29/22	-	10/05/22	< 0.3	< 0.3	< 0.2	116 ± 16	< 40.4	< 15.1
10/05/22	-	12/28/22	< 0.4	< 0.3	< 0.3	89 ± 15	< 27.5	< 11.7

Results in 10^{-3} picoCuries per cubic meter (pCi/m^3) +/- 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
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Oyster Creek
Results of Analyses of Gamma Emitters and Strontium in
Quarterly Composite Air Samples

Jersey Central Power and Light Substation (OCAP05)

Collection Period			Co-60	Cs-134	Cs-137	Be-7	Sr-89	Sr-90
12/29/21	-	04/06/22	< 0.3	< 0.2	< 0.2	115 ± 15	< 23.2	< 17.8
04/06/22	-	06/29/22	< 0.5	< 0.4	< 0.3	118 ± 17	< 25.4	< 18.2
06/29/22	-	10/05/22	< 0.2	< 0.2	< 0.2	128 ± 16	< 50.4	< 13.0
10/05/22	-	12/28/22	< 0.6	< 0.6	< 0.4	111 ± 20	< 56.7	< 15.4

Finninger Farm, OC Dredge Site (OCAP06)[4]

Collection Period			Co-60	Cs-134	Cs-137	Be-7	Sr-89	Sr-90
12/30/21	-	04/04/22	< 0.6	< 0.5	< 0.6	104 ± 20	< 88.1	< 40.3
04/04/22	-	06/27/22	< 0.6	< 0.7	< 0.5	104 ± 21	< 63.9	< 29.3
06/27/22	-	09/07/22	< 0.7	< 0.7	< 0.4	111 ± 27	< 136.0	< 25.9

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

Collection Period			Co-60	Cs-134	Cs-137	Be-7	Sr-89	Sr-90
12/29/21	-	04/06/22	< 0.3	< 0.3	< 0.3	129 ± 18	< 26.4	< 9.8
04/06/22	-	06/29/22	< 0.2	< 0.2	< 0.2	115 ± 15	< 67.6	< 28.1
06/29/22	-	10/05/22	< 0.2	< 0.2	< 0.2	111 ± 15	< 41.2	< 12.2
10/05/22	-	12/28/22	< 0.3	< 0.2	< 0.2	84 ± 13	< 23.3	< 18.4

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

Collection Period			Co-60	Cs-134	Cs-137	Be-7	Sr-89	Sr-90
12/29/21	-	04/06/22	< 0.3	< 0.4	< 0.2	122 ± 15	< 51.6	< 22.7
04/06/22	-	06/29/22	< 0.2	< 0.3	< 0.3	107 ± 16	< 24.1	< 17.3
06/29/22	-	10/05/22	< 0.2	< 0.3	< 0.3	125 ± 16	< 49.9	< 8.3
10/05/22	-	12/28/22	< 0.7	< 0.4	< 0.4	102 ± 18	< 50.7	< 13.4

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

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

[4] Sampling of OC06 has been discontinued per agreement between the licensee Holtec Decommissioning International (HDI) and the State NJDEP. The final collection period ended on September 7, 2022

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Salem / Hope Creek
Results of Analyses of Gamma Emitters and Strontium in
Quarterly Composite Air Samples

Fort Elfsborg Road (AIAP01)

Collection Period			Co-60	Cs-134	Cs-137	Be-7	Sr-89	Sr-90
12/29/21	-	04/06/22	< 0.3	< 0.2	< 0.2	111 ± 14	< 23.9	< 10.9
04/06/22	-	06/29/22	< 0.2	< 0.3	< 0.2	91 ± 13	< 40.1	< 13.8
06/29/22	-	10/05/22	< 0.2	< 0.2	< 0.2	129 ± 17	< 44.1	< 9.9
10/05/22	-	12/28/22	< 0.3	< 0.3	< 0.3	82 ± 14	< 29.7	< 21.7

Plant Access Road (AIAP02)

Collection Period			Co-60	Cs-134	Cs-137	Be-7	Sr-89	Sr-90
12/29/21	-	04/06/22	< 0.2	< 0.3	< 0.3	116 ± 15	< 22.7	< 15.1
04/06/22	-	06/29/22	< 0.3	< 0.3	< 0.3	111 ± 16	< 23.8	< 90.9
06/29/22	-	10/05/22	< 0.2	< 0.2	< 0.2	121 ± 14	< 26.5	< 11.4
10/05/22	-	12/28/22	< 0.3	< 0.2	< 0.2	82 ± 13	< 27.9	< 9.5

Lower Alloways Creek School (AIAP03)

Collection Period			Co-60	Cs-134	Cs-137	Be-7	Sr-89	Sr-90
12/29/21	-	04/06/22	< 0.3	< 0.3	< 0.2	110 ± 14	< 38.2	< 18.1
04/06/22	-	06/29/22	< 0.4	< 0.3	< 0.3	124 ± 17	< 26.9	< 10.8
06/29/22	-	10/05/22	< 0.2	< 0.2	< 0.2	128 ± 16	< 43.2	< 11.9
10/05/22	-	12/28/22	< 0.3	< 0.3	< 0.2	85 ± 13	< 28.8	< 18.8

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

Collection Period			Co-60	Cs-134	Cs-137	Be-7	Sr-89	Sr-90
12/29/21	-	04/06/22	< 0.4	< 0.4	< 0.4	129 ± 18	< 39.7	< 12.2
04/06/22	-	06/29/22	< 0.3	< 0.3	< 0.4	107 ± 15	< 32.8	< 22.0
06/29/22	-	10/05/22	< 0.5	< 0.4	< 0.3	134 ± 20	< 57.4	< 12.7
10/05/22	-	12/28/22	< 0.2	< 0.3	< 0.2	82 ± 12	< 34.2	< 12.9

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

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

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Oyster Creek
Results of Analyses of Gamma Emitters and Strontium in Fish/Shellfish Samples

Stouts Creek (OCFS01)

Collection Date	Co-58	Co-60	Cs-134	Cs-137	K-40	Sr-89	Sr-90
05/24/22 - Clams	< 8	< 14	< 14	< 12	1,320 ± 269	< 294	< 321
10/10/22 - Clams	< 13	< 16	< 14	< 14	1,130 ± 225	< 213	< 180

East of Site – Barnegat Bay (OCFS02)

Collection Date	Co-58	Co-60	Cs-134	Cs-137	K-40	Sr-89	Sr-90
05/23/22 - Clams	< 13	< 13	< 14	< 15	1,540 ± 329	< 312	< 504
05/25/22–Bullnose Ray	< 13	< 15	< 14	< 11	2,280 ± 363	< 430	< 534
10/10/22 - Clams	< 11	< 11	< 9	< 10	1,240 ± 229	< 84	< 93
10/11/22 – Amer. Eel	< 7	< 8	< 5	< 5	2,980 ± 336	< 298	< 192
10/11/22 – Striped Bass	< 6	< 6	< 6	< 6	4,060 ± 449	< 204	< 306

Great Bay / Little Egg Harbor (OCFS03)

Collection Date	Co-58	Co-60	Cs-134	Cs-137	K-40	Sr-89	Sr-90
05/25/22 - Clams	< 13	< 15	< 16	< 15	1,300 ± 339	< 167	< 265
10/12/22 - Clams	< 20	< 23	< 21	< 17	1,490 ± 335	< 161	< 158

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

Collection Date	Co-58	Co-60	Cs-134	Cs-137	K-40	Sr-89	Sr-90
10/12/22 – Striped Bass	< 6	< 8	< 6	< 7	4,090 ± 512	< 192	< 178

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

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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)

Collection Date	Co-58	Co-60	Cs-134	Cs-137	K-40	Sr-89	Sr-90
05/02/22 – Channel Catfish	< 11	< 11	< 12	< 12	1,990 ± 293	< 731	< 944
07/12/22 - Crab	< 5	< 6	< 5	< 5	2,970 ± 363	< 89	< 129
08/22/22 - Crab	< 9	< 8	< 9	< 8	2,020 ± 262	< 199	< 249
09/25/22 - Crab	< 7	< 7	< 8	< 8	2,850 ± 355	< 242	< 158
10/07/22 – Striped Bass	<18	< 20	< 19	< 18	3,440 ± 591	< 240	< 183

Delaware River – West Bank Upstream (AIFS02)

Collection Date	Co-58	Co-60	Cs-134	Cs-137	K-40	Sr-89	Sr-90
05/02/22 – Striped Bass	< 9	< 9	< 11	< 9	2,670 ± 356	< 500	< 556
07/14/22 - Crab	< 6	< 5	< 5	< 5	2,990 ± 311	< 191	< 198
08/22/22 – Crab	< 9	< 10	< 9	< 9	2,560 ± 332	< 496	< 241
09/25/22 - Crab	< 7	< 8	< 7	< 7	2,530 ± 316	< 289	< 247
10/07/22 – Striped Bass	< 15	< 19	< 17	< 15	3,460 ± 571	< 409	< 500

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

Collection Date	Co-58	Co-60	Cs-134	Cs-137	K-40	Sr-89	Sr-90
05/02/22 – Striped Bass	< 11	< 12	< 10	< 11	1,910 ± 315	< 367	< 659
10/07/22 – Striped Bass	< 13	< 13	< 14	< 13	3,670 ± 530	< 177	< 789

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.

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Oyster Creek
Results of Analyses of Gamma Emitters in Aquatic Sediment Samples

Barnegat Bay (OCAQ01)

Collection Date	Be-7	Co-58	Co-60	Cs-134	Cs-137	Mn-54	K-40
05/23/22	< 88	< 9	< 11	< 15	< 9	< 9	928 ± 123
10/10/22	179 ± 71	< 7	< 6	< 11	< 8	< 7	1,420 ± 211

Oyster Creek Discharge Canal (OCAQ02)

Collection Date	Be-7	Co-58	Co-60	Cs-134	Cs-137	Mn-54	K-40
05/23/22	< 98	< 9	< 10	< 14	< 8	< 10	1,390 ± 220
10/11/22	129 ± 85	< 7	17 ± 9[5]	< 9	< 9	< 7	1,690 ± 215

Great Bay / Little Egg Harbor (OCAQ03)

Collection Date	Be-7	Co-58	Co-60	Cs-134	Cs-137	Mn-54	K-40
05/24/22	< 216	< 24	< 27	< 29	< 25	< 25	15,900 ± 1,700
10/12/22	< 139	< 17	< 16	< 25	< 16	< 16	15,000 ± 1,420

Stouts Creek (OCAQ04)

Collection Date	Be-7	Co-58	Co-60	Cs-134	Cs-137	Mn-54	K-40
05/24/22	156 ± 105	< 8	< 9	< 12	< 8	< 8	5,630 ± 578
10/10/22	146 ± 88	< 7	< 7	< 10	< 8	< 6	3,100 ± 355

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.

[5] Trace activity likely a result of controlled liquid discharges during Decommissioning at Oyster Creek. Activity was within federal regulatory guidelines for the release of effluent per 10CFR20, Appendix B, "Standards for Protection Against Radiation".

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

Delaware River Near Site Helipad (AIAQ01)

Collection Date	Be-7	Co-58	Co-60	Cs-134	Cs-137	Mn-54	K-40
08/01/22	< 154	< 16	< 17	< 21	< 18	< 16	7,370 ± 911
11/29/22	< 159	< 18	< 19	< 30	< 22	< 21	12,000 ± 1,220

Delaware River Near Plant Discharge Outfall Area – Salem Station NGS (AIAQ02)

Collection Date	Be-7	Co-58	Co-60	Cs-134	Cs-137	Mn-54	K-40
07/26/22	< 143	< 13	< 13	< 24	< 16	< 18	5,020 ± 682
11/15/22	< 62	< 7	< 8	< 9	< 6	< 7	2,790 ± 340

Delaware River - Near Hope Creek NGS Cooling Tower Blow Down Discharge Line Outfall (AIAQ03)

Collection Date	Be-7	Co-58	Co-60	Cs-134	Cs-137	Mn-54	K-40
07/26/22	< 138	< 15	< 19	< 20	< 15	< 16	5,360 ± 673
11/15/22	< 151	< 16	< 19	< 21	< 18	< 16	8,580 ± 901

West Bank of Delaware River – Upstream (AIAQ05)

Collection Date	Be-7	Co-58	Co-60	Cs-134	Cs-137	Mn-54	K-40
07/26/22	< 237	< 25	< 27	< 40	< 32	< 27	16,900 ± 1,650
11/15/22	< 132	< 15	< 14	< 23	< 13	< 12	14,900 ± 1,500

Delaware Riverbank – 1.0 Miles W of Mad Horse Creek (AIAQ06)

Collection Date	Be-7	Co-58	Co-60	Cs-134	Cs-137	Mn-54	K-40
07/26/22	< 171	< 17	< 19	< 26	< 21	< 23	13,500 ± 1,490
11/15/22	< 132	< 14	< 12	< 20	< 13	< 13	17,500 ± 1,700

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.

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Oyster Creek
Results of Analyses of Gamma Emitters in Vegetable Samples

Oyster Creek Onsite Garden - ESE (OCVE01)[6]

Sample	Collection Date	Co-58	Co-60	Cs-134	Cs-137	K-40
Cabbage	07/19/22	< 7	< 12	< 10	< 10	1,330 ± 263
Kale	07/19/22	< 9	< 10	< 9	< 10	1,850 ± 281
Cabbage	08/30/22	< 20	< 19	< 21	< 19	1,940 ± 482
Cabbage	09/27/22	< 18	< 13	< 21	< 29	1,250 ± 395
Collards	09/27/22	< 23	< 28	< 32	< 32	2,290 ± 593

Private Farm – NW (OCVE02)

Sample	Collection Date	Co-58	Co-60	Cs-134	Cs-137	K-40
Cabbage	06/30/22	< 15	< 13	< 16	< 18	3,700 ± 539
Collards	06/30/22	< 15	< 15	< 20	< 14	4,040 ± 579
Cabbage	07/19/22	< 9	< 9	< 9	< 9	1,670 ± 272
Cabbage	08/30/22	< 17	< 16	< 20	< 22	3,230 ± 615
Kale	08/30/22	< 16	< 20	< 22	< 18	3,950 ± 596
Collards	08/30/22	< 16	< 13	< 13	< 13	3,770 ± 590
Cabbage	09/27/22	< 15	< 16	< 21	< 22	3,580 ± 601
Kale	09/27/22	< 25	< 13	< 27	< 23	4,770 ± 746
Collards	09/27/22	< 14	< 20	< 19	< 16	4,720 ± 747

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.

[6] No samples available during June 2022

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Oyster Creek
Results of Analyses of Gamma Emitters in Vegetable Samples

Oyster Creek Onsite Garden - SE (OCVE03)

Sample	Collection Date	Co-58	Co-60	Cs-134	Cs-137	K-40
Cabbage	06/30/20	< 16	< 18	< 20	< 19	5,370 ± 763
Collards	06/30/20	< 18	< 17	< 19	< 18	6,550 ± 837
Cabbage	07/19/22	< 7	< 8	< 8	< 8	3,640 ± 428
Collards	07/19/22	< 8	< 9	< 11	< 9	3,610 ± 453
Cabbage	08/30/22	< 22	< 22	< 21	< 20	5,450 ± 851
Collards	08/30/22	< 16	< 20	< 17	< 16	5,710 ± 765
Collards	09/27/22	< 17	< 13	< 20	< 15	5,730 ± 826

Oyster Creek Onsite Garden - E (OCVE07)[7]

Sample	Collection Date	Co-58	Co-60	Cs-134	Cs-137	K-40
Collards	07/19/22	< 8	< 12	< 8	< 11	1,540 ± 279
Collards	08/30/22	< 24	< 23	< 22	< 19	3,250 ± 623

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.

[7] No samples available during June 2022

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

Local Farm - NNE (AIVE04)

Sample	Collection Date	Co-58	Co-60	Cs-134	Cs-137	K-40
Asparagus	05/04/22	< 19	< 15	< 18	< 18	2,280 ± 485
Tomatoes	08/02/22	< 8	< 9	< 9	< 9	1,860 ± 312
Corn	08/02/22	< 12	< 17	< 14	< 12	2,550 ± 459
Peppers	08/02/22	<13	< 10	< 11	< 14	1,600 ± 349

Local Farm - NNE (AIVE05)

Sample	Collection Date	Co-58	Co-60	Cs-134	Cs-137	K-40
Asparagus	05/04/22	< 12	< 12	< 15	< 12	1,860 ± 346

Farm Market – NE (AIVE11)

Sample	Collection Date	Co-58	Co-60	Cs-134	Cs-137	K-40
Corn	08/02/22	< 7	< 7	< 6	< 6	2,240 ± 311
Tomatoes	08/02/22	< 5	< 7	< 5	< 6	2,390 ± 313
Peaches	08/02/22	< 6	< 8	< 7	< 6	1,560 ± 262
Peppers	08/02/22	< 8	< 8	< 8	< 7	1,540 ± 250
Cabbage	08/02/22	< 14	< 18	< 17	< 14	3,200 ± 509

Onsite - NNW (AIVE14)

Sample	Collection Date	Co-58	Co-60	Cs-134	Cs-137	K-40
Lambs Ear	08/28/22	< 24	< 28	< 26	< 24	9,020 ± 1,260

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

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

Private Farm – SSW (AIVE15)

Sample	Collection Date	Co-58	Co-60	Cs-134	Cs-137	K-40
Lambs Ear	06/28/22	< 14	< 28	< 22	< 21	9,730 ± 1,230
Lambs Ear	08/28/22	< 28	< 30	< 29	< 30	11,500 ± 1,340

Private Farm – NNE (AIVE18)

Sample	Collection Date	Co-58	Co-60	Cs-134	Cs-137	K-40
Asparagus	05/04/22	< 13	< 18	< 10	< 20	2,050 ± 376
Corn	08/02/22	< 8	< 10	< 8	< 7	2,700 ± 389
Tomatoes	08/02/22	< 6	< 6	< 6	< 6	2,250 ± 282
Peaches	08/02/22	< 5	< 6	< 6	< 5	1,760 ± 254
Peppers	08/02/22	< 8	< 8	< 9	< 7	1,380 ± 222
Cabbage	10/27/22	< 14	< 10	< 16	< 20	2,220 ± 420

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.

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

State of New Jersey Dairy Farm (COMI01) [8]

Collection Date	Cs-137	I-131	K-40	Sr-89	Sr-90
03/07/22	< 1.53	< 0.44	1,290 ± 122	< 0.93	< 1.67
06/13/22	< 3.57	< 0.64	1,250 ± 137	< 1.22	< 2.47
09/19/22	< 1.81	< 0.53	1,160 ± 124	< 0.67	< 0.91

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.

[8] No sample collected during the fourth quarter. In December of 2022, the New Jersey Department of Corrections (DOC) informed the BNE that due to the lack of funding and personnel, they had eliminated milk production on their farms throughout the state. This included Jones Farm, the BNE's background (control) milk sampling location in Ewing, NJ

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

Private Farm – NNE (AIMI01[9])

Collection Date	Cs-137	I-131	K-40	Sr-89	Sr-90
01/03/22	< 1.62	< 0.52	1,150 ± 128	< 0.53	< 0.55
02/07/22	< 1.47	< 0.79	1,150 ± 125	< 0.69	< 0.85
03/07/22	< 1.98	< 0.62	1,060 ± 112	< 0.62	< 1.14
04/04/22	< 2.26	< 0.51	1,390 ± 157	< 0.73	< 0.91
05/02/22	< 1.97	< 0.61	1,080 ± 116	< 0.96	< 1.40
06/06/22	< 2.17	< 0.59	1,570 ± 178	< 0.74	< 0.90
07/05/22	< 2.19	< 0.54	1,390 ± 164	< 0.87	< 0.84
08/08/22	< 2.08	< 0.48	1,330 ± 145	< 0.68	< 0.68
09/06/22	< 2.17	< 0.57	1,100 ± 118	< 0.59	< 0.95
10/03/22	< 2.24	< 0.54	1,480 ± 165	< 0.71	< 0.89
11/07/22	< 1.97	< 0.55	859 ± 98	< 0.60	< 0.87
12/05/22	< 1.64	< 0.60	995 ± 117	< 1.66	< 1.22

Private Farm – WNW (AIMI03)

Collection Date	Cs-137	I-131	K-40	Sr-89	Sr-90
01/03/22	< 1.74	< 0.57	1,100 ± 122	< 0.79	< 0.85
02/07/22	< 2.31	< 0.71	1,090 ± 121	< 0.54	< 0.50
03/07/22	< 1.49	< 0.54	947 ± 100	< 0.62	< 0.74
04/04/22	< 1.89	< 0.56	608 ± 72	< 0.53	< 0.94
05/02/22	< 1.75	< 1.50	828 ± 94	< 0.89	< 0.63
06/06/22	< 2.99	< 0.56	1,580 ± 158	< 0.88	< 0.87
07/05/22	< 2.19	< 0.65	1,140 ± 131	< 0.81	< 0.70
08/08/22	< 1.86	< 0.67	1,530 ± 171	< 0.91	< 0.85
09/06/22	< 1.88	< 0.57	1,160 ± 136	< 0.71	< 0.92
10/03/22	< 1.89	< 0.58	1,370 ± 152	< 0.81	< 0.84
11/07/22	< 1.97	< 0.61	1,230 ± 128	< 0.85	< 0.89
12/05/22	< 2.27	< 0.62	983 ± 108	< 1.00	< 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

[9] This location is considered a background (control) milk sampling location. The Private Farm is located 11.8 miles (19 kilometers) from the station.

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

Private Farm – W (AIMI04)

Collection Date	Cs-137	I-131	K-40	Sr-89	Sr-90
01/03/22	< 1.79	< 0.55	1,120 ± 115	< 0.81	< 0.85
02/07/22	< 1.66	< 0.72	1,190 ± 134	< 0.72	< 0.75
03/07/22	< 2.56	< 0.44	1,000 ± 111	< 0.79	< 1.05
04/04/22	< 2.19	< 0.64	1,350 ± 141	< 0.87	< 0.90
05/02/22	< 1.90	< 0.65	864 ± 100	< 0.81	< 0.60
06/06/22	< 2.25	< 0.71	1,510 ± 163	< 0.66	< 0.90
07/05/22	< 2.05	< 0.61	982 ± 119	< 0.79	< 0.65
08/08/22	< 2.34	< 0.46	1,740 ± 196	< 0.77	< 0.67
09/06/22	< 1.85	< 0.54	1,300 ± 145	< 0.66	< 0.74
10/03/22	< 2.48	< 0.63	1,890 ± 194	< 0.64	< 0.99
11/09/22	< 1.64	< 0.82	667 ± 82	< 0.68	< 0.99
12/05/22	< 1.42	< 0.63	996 ± 99	< 1.49	< 1.00

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

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Oyster Creek
Results of Analyses of Gamma Emitters and Tritium (H-3) in Surface Water

Barnegat Bay (OCSW01)

Collection Date	Co-58	Co-60	Cs-134	Cs-137	H-3
05/23/22	< 1.73	< 1.71	< 1.85	< 1.70	< 189
10/10/22	< 1.71	< 1.34	< 1.84	< 1.66	< 254

Great Bay / Little Egg Harbor (OCSW02)

Collection Date	Co-58	Co-60	Cs-134	Cs-137	H-3
01/25/22	< 2.85	< 3.06	< 3.04	< 2.54	< 224
02/23/22	< 1.73	< 1.79	< 1.70	< 1.81	< 277
03/22/22	< 1.66	< 1.81	< 1.67	< 3.45	< 286
04/19/22	< 1.55	< 1.34	< 1.54	< 1.37	< 273
05/25/22	< 1.67	< 1.98	< 1.70	< 1.73	< 168
06/23/22	< 2.05	< 2.29	< 2.38	< 2.14	< 185
07/28/22	< 1.80	< 1.74	< 1.91	< 1.95	< 204
08/17/22	< 2.23	< 2.44	< 2.44	< 2.21	< 181
09/22/22	< 2.01	< 1.75	< 2.02	< 1.86	< 202
10/22/22	< 1.77	< 1.59	< 1.64	< 1.51	< 205
11/22/22	< 1.37	< 1.38	< 1.38	< 1.31	< 275
12/28/22	< 1.68	< 1.75	< 2.05	< 1.78	< 254

Results in picoCuries per Liter (pCi/L)

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

Stouts Creek (OCSW03)

Collection Date	Co-58	Co-60	Cs-134	Cs-137	H-3
05/24/22	< 1.71	< 1.62	< 1.86	< 1.64	< 169
10/10/22	< 1.82	< 2.21	< 2.22	< 2.12	< 251

Oyster Creek Discharge Canal (OCSW04)

Collection Date	Co-58	Co-60	Cs-134	Cs-137	H-3
01/26/22	< 2.17	< 2.37	< 2.04	< 1.99	< 205
02/23/22	< 2.30	< 2.27	< 2.47	< 2.42	< 278
03/22/22	< 1.73	< 1.71	< 2.16	< 1.76	< 269
04/19/22	< 1.32	< 1.45	< 1.47	< 1.30	< 275
05/25/22	< 1.75	< 2.02	< 1.75	< 1.85	< 179
06/23/22	< 1.66	< 1.81	< 2.33	< 1.98	< 168
07/28/22	< 1.41	< 1.61	< 1.52	< 1.55	< 235
08/17/22	< 1.91	< 1.73	< 2.05	< 2.06	< 171
09/22/22	< 1.37	< 1.61	< 1.58	< 1.56	< 202
10/22/22	< 1.49	< 1.73	< 1.62	< 1.72	< 200
11/22/22	< 1.82	< 2.17	< 1.95	< 2.80	< 271
12/28/22	< 1.82	< 1.94	< 2.09	< 2.09	< 242

Results in picoCuries per Liter (pCi/L)

New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 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)

Collection Date	Co-58	Co-60	Cs-134	Cs-137	H-3	I-131
01/08/22	< 1.21	< 1.26	< 1.30	< 1.10	< 253	< 0.86
01/18/22	< 1.41	< 1.68	< 1.76	< 1.65	< 270	< 0.74
02/09/22	< 1.84	< 1.90	< 2.24	< 2.03	< 242	< 1.43
02/24/22	< 2.22	< 2.58	< 2.58	< 2.38	< 265	< 0.96
03/10/22	< 1.43	< 1.25	< 1.45	< 1.46	< 181	< 0.65
03/24/22	< 1.61	< 1.63	< 1.79	< 1.59	< 274	< 0.76
04/05/22	< 1.72	< 1.39	< 1.47	< 1.39	< 231	< 0.87
04/21/22	< 1.90	< 2.10	< 2.02	< 1.95	1,530 ± 362[10]	< 1.31
05/04/22	< 2.16	< 2.66	< 2.46	< 2.80	< 207	< 0.88
05/20/22	< 1.45	< 1.43	< 1.49	< 1.36	< 175	< 0.83
06/08/22	< 1.37	< 1.27	< 1.37	< 1.21	< 163	< 0.76
06/20/22	< 1.46	< 1.73	< 1.74	< 1.63	< 179	< 0.74
07/07/22	< 1.26	< 1.40	< 1.50	< 1.45	< 203	< 0.88
07/22/22	< 1.92	< 1.82	< 1.83	< 1.79	< 214	< 1.08
08/11/22	< 1.64	< 1.86	< 1.86	< 1.67	< 215	< 0.81
08/23/22	< 1.41	< 1.65	< 1.66	< 1.59	< 233	< 0.89
09/08/22	< 1.38	< 1.52	< 1.45	< 1.35	< 225	< 0.76
09/21/22	< 1.33	< 1.35	< 1.34	< 1.32	< 211	< 0.89
10/06/22	< 2.70	< 2.57	< 3.10	< 3.53	< 234	< 0.88
10/21/22	< 1.68	< 1.51	< 1.71	< 1.89	< 251	< 0.87
11/07/22	< 1.27	< 1.45	< 1.46	< 1.47	352 ± 166[10]	< 0.80
11/22/22	< 1.31	< 1.41	< 1.10	< 1.21	< 214	< 0.63
12/05/21	< 1.55	< 1.64	< 1.72	< 1.74	< 270	< 0.73
12/21/22	< 1.11	< 1.16	< 1.22	< 1.11	< 223	< 0.79

Results in picoCuries per Liter (pCi/L)

[10] 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 reading of 1,530 pCi/L is approximately 8 percent of the applicable limit. The reading of 352 pCi/L is approximately 2 percent of the applicable limit.

New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 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)

Collection Date	Co-58	Co-60	Cs-134	Cs-137	H-3	I-131
01/08/22	< 1.32	< 1.27	< 1.39	< 1.14	< 267	< 0.76
01/18/22	< 1.74	< 2.05	< 1.93	< 1.79	< 282	< 0.88
02/09/22	< 1.40	< 1.57	< 1.74	< 1.68	< 241	< 0.93
02/24/22	< 1.26	< 1.64	< 1.63	< 1.43	< 273	< 0.86
03/10/22	< 1.56	< 1.55	< 1.58	< 1.58	< 186	< 0.33
03/24/22	< 1.56	< 1.64	< 1.73	< 1.59	< 284	< 1.75
04/05/22	< 1.38	< 1.22	< 1.30	< 1.23	< 217	< 0.86
04/21/22	< 1.61	< 1.25	< 1.55	< 1.50	< 292	< 0.89
05/04/22	< 1.96	< 1.92	< 2.16	< 2.61	< 202	< 0.92
05/20/22	< 2.38	< 2.34	< 2.04	< 2.02	< 188	< 0.86
06/08/22	< 1.32	< 1.14	< 1.08	< 1.12	< 165	< 0.84
06/20/22	< 1.69	< 1.96	< 1.93	< 1.69	< 171	< 0.82
07/07/22	< 1.45	< 1.78	< 1.57	< 2.69	< 203	< 0.86
07/22/22	< 1.73	< 1.64	< 1.73	< 1.79	< 216	< 1.17
08/11/22	< 2.06	< 2.26	< 2.17	< 2.00	< 208	< 0.89
08/23/22	< 1.77	< 2.00	< 1.82	< 1.73	< 236	< 0.91
09/08/22	< 1.59	< 1.78	< 1.57	< 1.54	< 203	< 0.90
09/21/22	< 1.43	< 1.54	< 1.70	< 1.48	< 198	< 0.88
10/06/22	< 2.37	< 2.37	< 2.85	< 2.72	< 225	< 0.88
10/21/22	< 1.82	< 1.97	< 1.86	< 1.75	< 255	< 0.74
11/07/22	< 1.28	< 1.39	< 1.38	< 1.20	< 226	< 0.80
11/22/22	< 1.27	< 1.31	< 1.32	< 1.35	< 210	< 0.93
12/05/22	< 1.69	< 1.69	< 1.79	< 1.56	< 274	< 0.82
12/21/22	< 1.68	< 1.61	< 1.60	< 1.66	< 213	< 0.89

Results in picoCuries per Liter (pCi/L)

New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 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)

Collection Date	Co-58	Co-60	Cs-134	Cs-137	H-3	I-131
01/08/22	< 1.25	< 1.32	< 1.34	< 1.22	< 253	< 0.70
01/18/22	< 1.49	< 1.46	< 1.52	< 1.55	< 284	< 0.86
02/09/22	< 1.87	< 1.94	< 2.08	< 1.92	< 234	< 1.41
02/24/22	< 1.53	< 1.73	< 1.62	< 1.52	< 271	< 0.76
03/10/22	< 1.56	< 1.49	< 1.58	< 1.51	< 177	< 0.62
03/24/22	< 1.55	< 1.57	< 1.49	< 1.39	< 269	< 0.93
04/05/22	< 2.32	< 2.07	< 2.01	< 1.84	< 198	< 0.85
04/21/22	< 1.33	< 1.21	< 1.24	< 1.21	< 294	< 0.99
05/04/22	< 1.67	< 1.53	< 1.66	< 1.50	< 202	< 0.90
05/20/22	< 1.52	< 1.50	< 1.58	< 1.59	< 177	< 0.90
06/08/22	< 1.94	< 1.93	< 2.25	< 2.01	< 165	< 0.89
06/20/22	< 1.81	< 2.00	< 1.97	< 1.80	< 170	< 0.81
07/07/02	< 1.73	< 2.06	< 1.94	< 1.75	< 197	< 1.46
07/22/22	< 1.85	< 1.89	< 1.90	< 1.82	< 215	< 1.06
08/11/22	< 1.50	< 1.66	< 1.66	< 1.44	< 191	< 0.81
08/23/22	< 1.50	< 1.80	< 1.79	< 1.83	< 221	< 0.87
09/08/22	< 1.41	< 1.52	< 1.54	< 1.38	< 228	< 0.85
09/21/22	< 1.40	< 1.49	< 1.56	< 1.61	< 193	< 0.89
10/06/22	< 2.28	< 2.38	< 2.22	< 2.51	< 235	< 0.88
10/21/22	< 1.96	< 1.83	< 2.19	< 2.08	< 261	< 0.89
11/07/22	< 1.18	< 1.34	< 1.29	< 1.46	< 220	< 0.80
11/22/22	< 1.21	< 1.25	< 1.37	< 1.18	< 213	< 0.71
12/05/22	< 1.39	< 1.73	< 1.49	< 1.56	< 268	< 0.77
12/21/22	< 1.22	< 1.23	< 1.23	< 1.26	< 206	< 1.46

Results in picoCuries per Liter (pCi/L)

New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 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)

Collection Date	Co-58	Co-60	Cs-134	Cs-137	H-3
01/24/22	< 1.56	< 1.94	< 1.97	< 1.93	< 221
04/05/22	< 1.71	< 1.61	< 1.75	< 2.57	< 191
07/06/22	< 1.49	< 1.56	< 1.86	< 1.51	< 198
10/18/22	< 1.86	< 1.93	< 2.19	< 2.03	< 233

Forked River Marina (OCWW02)

Collection Date	Co-58	Co-60	Cs-134	Cs-137	H-3
01/20/22	< 1.48	< 2.35	< 2.00	< 1.96	< 239
04/05/22	< 1.59	< 1.45	< 1.73	< 1.60	< 182
07/06/22	< 1.54	< 1.52	< 1.73	< 1.70	< 178
10/20/22	< 1.56	< 1.82	< 1.95	< 1.81	< 243

Lacey MUA Pumping Station (OCWW03)

Collection Date	Co-58	Co-60	Cs-134	Cs-137	H-3
01/20/22	< 1.90	< 2.00	< 2.23	< 2.00	< 242
04/05/22	< 1.75	< 1.61	< 1.41	< 1.51	< 191
07/06/22	< 1.71	< 1.91	< 1.74	< 1.81	< 198
10/20/22	< 1.52	< 1.84	< 1.52	< 1.64	< 235

Ocean Township MUA Pumping Station (OCWW04)

Collection Date	Co-58	Co-60	Cs-134	Cs-137	H-3
01/20/22	< 1.64	< 1.81	< 1.93	< 1.70	< 232
04/05/22	< 1.50	< 1.22	< 1.48	< 1.28	< 194
07/06/22	< 1.35	< 1.50	< 1.54	< 1.69	< 207
10/20/22	< 1.48	< 1.33	< 1.59	< 1.64	< 233

Results in picoCuries per Liter (pCi/L)

New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

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

Elsinboro School (AIWW01)

Collection Date	Co-58	Co-60	Cs-134	Cs-137	H-3	I-131
01/20/22	< 1.96	< 2.39	< 2.09	< 2.03	< 234	< 0.63
04/05/22	< 1.75	< 1.39	< 1.59	< 1.73	< 194	< 0.82
07/06/22	< 1.39	< 1.84	< 1.71	< 1.65	< 203	< 0.87
10/20/22	< 1.53	< 1.74	< 1.63	< 1.54	< 239	< 0.83

Lower Alloways Creek Police Station (AIWW02)

Collection Date	Co-58	Co-60	Cs-134	Cs-137	H-3	I-131
01/20/22	< 1.35	< 1.99	< 1.84	< 2.25	< 225	< 0.89
04/05/22	< 1.45	< 1.22	< 1.41	< 1.26	< 193	< 0.81
07/06/22	< 1.41	< 1.66	< 1.43	< 1.71	< 205	< 0.94
10/20/22	< 1.73	< 1.36	< 1.74	< 1.55	< 231	< 0.90

Salem Processing Center (AIWW03)

Collection Date	Co-58	Co-60	Cs-134	Cs-137	H-3	I-131
01/20/22	< 1.65	< 1.91	< 1.94	< 1.98	< 232	< 0.70
04/05/22	< 1.64	< 1.66	< 1.48	< 2.13	< 198	< 0.76
07/06/22	< 1.57	< 1.68	< 1.64	< 1.49	< 188	< 0.90
10/20/22	< 1.40	< 1.63	< 1.53	< 1.41	< 228	< 0.80

Lower Alloways Creek School (AIWW04)

Collection Date	Co-58	Co-60	Cs-134	Cs-137	H-3	I-131
01/20/22	< 1.60	< 1.80	< 1.91	< 1.74	< 226	< 0.86
04/05/22	< 1.36	< 1.33	< 1.36	< 1.36	< 184	< 0.77
07/06/22	< 1.24	< 1.54	< 1.41	< 1.49	< 193	< 0.86
10/20/22	< 1.18	< 1.29	< 1.36	< 1.36	< 233	< 0.76

City of Salem Water & Sewage Department (AIWW05)

Collection Date	Co-58	Co-60	Cs-134	Cs-137	H-3	I-131
01/20/22	< 1.68	< 1.86	< 1.63	< 1.64	< 235	< 0.88
04/05/22	< 1.49	< 1.38	< 1.44	< 1.22	< 182	< 0.81
07/06/22	< 2.93	< 2.69	< 2.60	< 2.94	< 205	< 0.89
10/20/22	< 1.36	< 1.26	< 1.57	< 1.61	< 243	< 0.67

Results in picoCuries per Liter (pCi/L)

New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

BNE Background Location
Thermoluminescent Dosimetry Data
Quarterly Results

		1st Quarter		2nd Quarter		3rd Quarter		4th Quarter	
Station	**Location**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**
CO01	BNE Office, Arctic Parkway, Ewing, NJ	10.7	5.2	8.8	6.7	10.0	10.2	10.6	7.8
CO02	Brendan T. Byrne State Forest, New Lisbon, NJ	8.3	6.7	7.2	3.5	9.3	8.5	9.6	8.8

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
2022 Radiological Environmental Monitoring Program

Oyster Creek
Thermoluminescent Dosimetry Data
Quarterly Results

		1st Quarter		2nd Quarter		3rd Quarter		4th Quarter	
Station	**Location**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**
1	Ocean County Vocational School	6.8	2.0	6.3	4.4	7.3	10.4	8.7	9.7
2	Ocean Twp. Municipal Building	7.2	9.5	7.3	4.2	8.6	4.2	8.3	3.4
3	Sewage Pumping Station, Forked River	6.9	8.6	7.2	0.0	11.0	7.1	9.8	1.5
4	Twin River Station, Forked River	6.8	6.5	6.4	9.4	8.0	1.8	7.6	6.2
5	Sewage Pumping Station, Ocean Twp.	7.0	7.1	7.6	6.6	9.3	9.6	9.5	4.1
6	Oyster Creek, Gate #2, Forked River	7.2	5.3	7.1	0.9	8.6	2.3	9.0	6.5
7	Finninger Farm, Forked River	6.1	4.2	6.8	5.2	7.0	5.6	8.5	5.5
8	Ocean Co. Memorial Cemetery, Waretown	6.5	1.4	7.3	13.9	7.5	6.2	9.6	9.0
9	Oyster Creek Building 17, Forked River	7.5	9.2	7.9	5.1	8.2	2.8	10.4	9.1
10	Sheffield & Derby Rd, Forked River	6.2	2.5	7.1	7.3	7.7	3.9	8.7	5.9
11	Lakeside Drive, Forked River	8.0	7.1	7.3	5.2	8.5	2.4	8.6	9.0
12	Forked River Game Farm, Forked River	7.3	4.7	7.5	10.5	8.4	4.2	9.2	1.7

Results are reported in units of milliroentgens (mR)

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

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

New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

Oyster Creek
Thermoluminescent Dosimetry Data
Quarterly Results

		1st Quarter		2nd Quarter		3rd Quarter		4th Quarter	
Station	**Location**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**
13	Restrooms, Lakeside Dr., Forked River	6.8	4.2	7.2	9.8	7.8	5.7	8.1	8.2
14	Sands Pt. Park, Dock Ave., Waretown	7.2	4.2	7.9	2.5	8.4	3.1	7.9	6.0
15	Recreation Center, Waretown	6.7	7.0	7.0	10.2	7.6	7.4	9.1	5.5
16	North Access Rd., Forked River	6.9	4.0	8.0	2.4	10.8	0.9	10.1	5.2
20	Third Avenue, Barnegat Light	6.4	3.6	7.5	5.4	8.6	3.1	9.1	6.8
21	Rose Hill Road & Barnegat Blvd	7.9	6.6	7.7	6.4	9.4	9.7	10.3	7.4
22	Bay Way & Clairmore Avenue	8.0	14.7	7.1	5.5	9.1	2.3	9.6	4.7
23	Island Beach State Park, Parking Lot A5	5.7	3.5	6.4	2.0	7.4	4.0	7.2	5.5
24	Forked River Site Access Rd. (N)	9.3	14.7	8.3	6.1	10.4	5.3	10.9	7.8
25	Forked River Site Access Rd. (NNW)	9.0	2.5	9.6	4.4	10.4	6.1	10.5	12.2
26	Forked River Site Access Rd. (NW)	8.2	8.6	8.5	3.5	9.6	12.3	12.0	20.9
27	Southern Area Stores Fence, FR Site	10.7	8.4	10.4	0.0	13.0	5.5	11.2	4.9

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
2022 Radiological Environmental Monitoring Program

Oyster Creek
Thermoluminescent Dosimetry Data
Quarterly Results

		1st Quarter		2nd Quarter		3rd Quarter		4th Quarter	
Station	**Location**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**
28	Southern Area Stores, FR Site (WSW)	8.6	6.3	8.9	5.6	9.5	4.3	10.3	3.7
29	Southern Area Stores Access Rd (SSW)	6.7	7.9	7.4	7.5	8.5	12.4	8.1	10.2
30	Southern Area Stores Access Road (S)	7.5	3.2	7.7	7.9	9.7	2.6	9.1	13.1
31	Southern Area Stores Access Road (SSE)	6.7	3.5	7.7	7.2	8.5	2.6	8.5	3.8
32	U.S. Route 9 (ESE) Forked River., NJ	6.6	4.9	7.8	3.4	7.8	3.1	9.2	9.2
33	U.S. Route 9 (NE) Forked River, NJ	6.6	6.9	7.6	2.9	8.2	4.8	9.0	4.5
34	Garden St Pkwy Svc. Forked River, NJ	8.5	12.3	8.8	9.9	11.3	2.5	9.3	4.8
35	U.S. Route 9 & Harbor Inn Rd, Bayville, NJ	7.7	7.6	8.0	0.0	8.0	0.8	8.6	7.7
36	Orlando Dr. & Penguin Ct., Forked River, NJ	7.4	6.9	7.9	8.2	7.8	1.8	8.4	8.2
37	Bay Pkwy, Sands Point, Waretown, NJ	6.2	4.7	7.3	2.7	6.9	10.5	8.2	7.1
38	Hightide & Bonita Dr., Waretown, NJ	7.8	8.4	7.2	9.5	7.5	7.8	9.3	8.4
39	Brook & School St. Barnegat, NJ	7.3	10.4	7.0	3.8	8.4	9.1	9.4	3.9

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
2022 Radiological Environmental Monitoring Program

Oyster Creek
Thermoluminescent Dosimetry Data
Quarterly Results

		1st Quarter		2nd Quarter		3rd Quarter		4th Quarter	
Station	**Location**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**
40	County Rt. 554, Barnegat, NJ	7.0	8.3	7.2	8.5	10.7	6.0	9.6	5.5
41	County Rt. 532, Waretown, NJ	7.4	1.1	6.6	6.0	7.6	0.8	8.1	6.9
42	Lacey Rd. WEST, Forked River, NJ	8.0	3.5	8.0	5.0	9.0	4.4	9.6	7.4
43	U.S. Route 9 (E) Forked River, NJ	6.9	8.0	7.4	1.5	7.7	11.5	9.8	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
2022 Radiological Environmental Monitoring Program

Salem/Hope Creek
Thermoluminescent Dosimetry Data
Quarterly Results

		1st Quarter		2nd Quarter		3rd Quarter		4th Quarter	
Station	**Location**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**
1	Access Road – Security Checkpoint	8.6	3.6	7.8	6.6	9.6	5.0	10.7	4.6
2	Poplar Road, Lower Alloways	8.6	4.8	8.1	6.7	10.3	6.7	11.9	9.8
3	Money and Eagle Island Road	9.2	9.0	8.8	4.6	10.6	5.5	11.5	3.7
4	Ft. Elfsborg / Hancocks – East	10.0	3.4	9.0	8.2	10.4	1.8	11.7	3.6
5	Ft. Elfsborg / Hancocks – West	11.6	7.5	10.9	6.8	13.1	7.5	16.0	7.1
6	Stathems Neck Road	7.9	12.4	7.9	8.9	9.6	2.4	11.3	3.6
7	Stow Neck Road Lower Alloways	7.8	8.5	7.4	7.3	8.0	5.6	10.3	9.9
8	Alloways Creek Neck Road - Middle	8.5	6.3	7.9	7.8	8.4	6.3	10.4	10.5
9	Alloways Creek Neck Road - North	9.3	6.5	9.0	10.4	10.5	4.5	13.0	3.8
10	Abbotts Farm Road	7.4	6.0	7.3	5.4	8.7	7.5	9.8	2.0

Results are reported in units of milliroentgens (mR)

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

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

New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

Salem/Hope Creek
Thermoluminescent Dosimetry Data
Quarterly Results

		1st Quarter		2nd Quarter		3rd Quarter		4th Quarter	
Station	**Location**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**
11	PSEG Education Center/EOF	9.1	6.0	8.5	5.1	10.1	10.4	11.4	4.3
12	Onsite Access Rd N Sector	9.7	2.2	7.3	4.6	12.0	8.1	14.3	1.5
13	Onsite Laydown Area - NNE Sector	9.9	4.2	8.7	6.3	10.3	17.0	12.7	3.6
14	Onsite Utility Pole NE Sector	8.0	5.5	9.0	6.8	9.9	7.5	10.9	7.2
15	Onsite Hope Creek Road – ENE Sector	8.8	1.7	8.3	16.3	10.0	7.1	11.0	5.0
16	Onsite Parking Lot ESE Sector	9.0	3.3	8.7	5.4	10.3	5.7	12.1	7.8
17	Onsite Salem NGS SE Sector	10.0	5.0	8.8	3.0	11.3	6.6	12.5	6.0
18	Bayside Road Bayside, NJ	7.5	2.9	8.2	4.5	8.7	16.9	11.5	3.6

Results are reported in units of milliroentgens (mR)

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

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

New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

Comparison of NJDEP and Mirion Technologies Thermoluminescent Dosimetry Data for Oyster Creek
Quarterly Results for Co-located Dosimeters

		1st Quarter				2nd Quarter				3rd Quarter				4th Quarter			
		NJDEP		Mirion		NJDEP		Mirion		NJDEP		Mirion		NJDEP		Mirion	
Station	**Location**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**
5	Sewage Pump. Station, Ocean Township	7.0	7.1	*	*	7.6	6.6	6.6	7.7	9.3	9.6	8.8	7.5	9.5	4.1	9.1	6.7
7	Finninger Farm,OCNGS Forked River	6.1	4.2	*	*	6.8	5.2	4.8	4.1	7.0	5.6	5.8	4.0	8.5	5.5	6.2	4.0
13	Restrooms, Lakeside Dr. Forked River	6.8	4.2	*	*	7.2	9.8	5.8	7.4	7.8	5.7	7.1	6.5	8.1	8.2	7.8	5.0
21	Rose Hill and Barnegat Rd Barnegat Twp.	7.9	6.6	*	*	7.7	6.4	5.5	4.2	9.4	9.7	7.9	5.8	10.3	7.4	8.2	5.8

** Mirion badges were not available during 2022-01 due to manufacturing and shipping issues.*

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
2022 Radiological Environmental Monitoring Program

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

		1st Quarter				2nd Quarter				3rd Quarter				4th Quarter			
		NJDEP		Mirion		NJDEP		Mirion		NJDEP		Mirion		NJDEP		Mirion	
Station	**Location**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**
1	Access Road – Security Checkpoint	8.6	3.6	*	*	7.8	6.6	6.5	3.6	9.6	5.0	8.8	4.5	10.7	4.6	9.0	4.5
2	Poplar Road, Lower Alloways	8.6	4.8	*	*	8.1	6.7	6.9	5.3	10.3	6.7	9.1	2.2	11.9	9.8	9.3	2.2
3	Money and Eagle Island Roads	9.2	9.0	*	*	8.8	4.6	7.1	1.6	10.6	5.5	10.9	3.1	11.5	3.7	11.0	3.1
5	Ft. Elfsborg/ Hancocks - West	11.6	7.5	*	*	10.9	6.8	9.6	5.3	13.1	7.5	14.9	4.7	16.0	7.1	14.8	4.7

** Mirion badges were not available during 2022-01 due to manufacturing and shipping issues.*

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
2022 Radiological Environmental Monitoring Program

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

		1st Quarter				2nd Quarter				3rd Quarter				4th Quarter			
		NJDEP		Mirion		NJDEP		Mirion		NJDEP		Mirion		NJDEP		Mirion	
Station	**Location**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**	**Result**	**%CV**
7	Stow Neck Road-Lower Alloways	7.8	8.5	*	*	7.4	7.3	6.1	4.2	8.0	5.6	7.2	6.9	10.3	9.9	7.5	6.9
9	Alloways Creek Neck Road - North	9.3	6.5	*	*	9.0	10.4	8.3	4.8	10.5	4.5	11.7	5.3	13.0	3.8	11.8	5.3
11	PSEG Ed. Center/EOF Salem City	9.1	6.0	*	*	8.5	5.1	7.4	7.7	10.1	10.4	9.3	5.0	11.4	4.3	9.5	5.0

** Mirion badges were not available during 2022-01 due to manufacturing and shipping issues.*

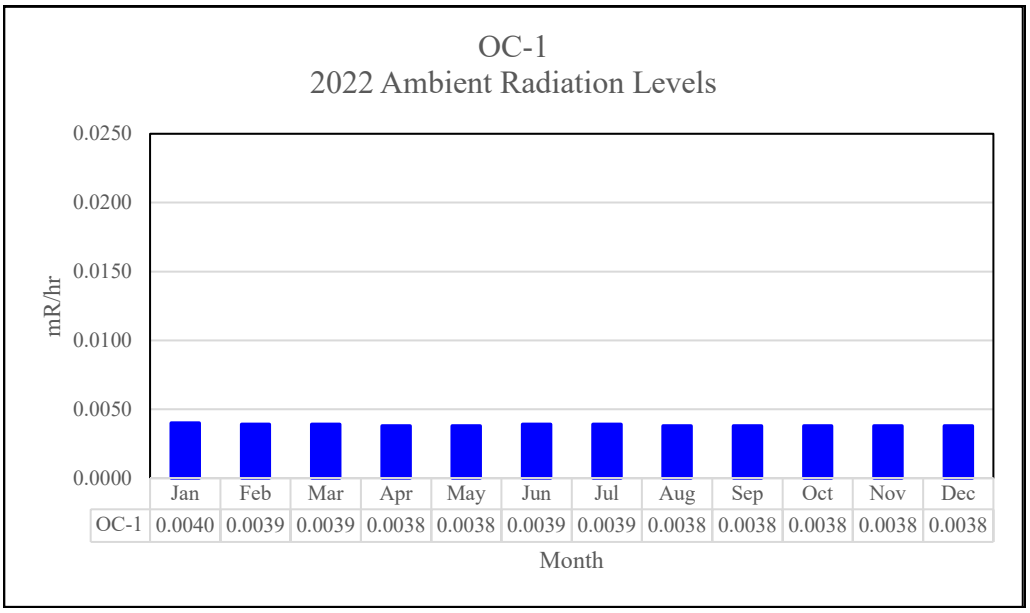
Results are reported in units of milliroentgens (mR)

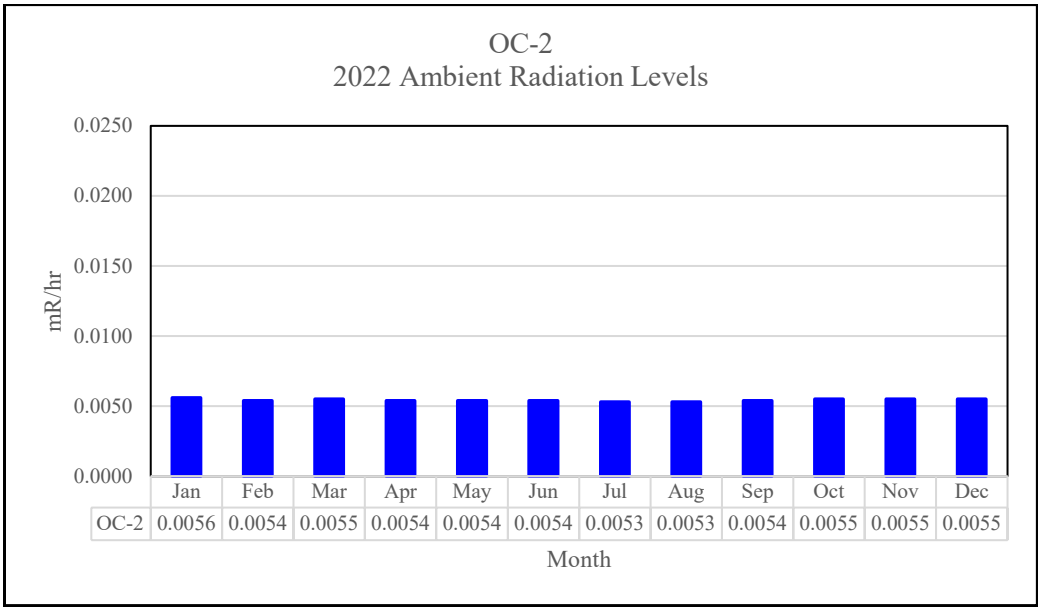
CV is the coefficient of variation; the ratio of the standard deviation to the mean and is normally reported as a percentage.

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

New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

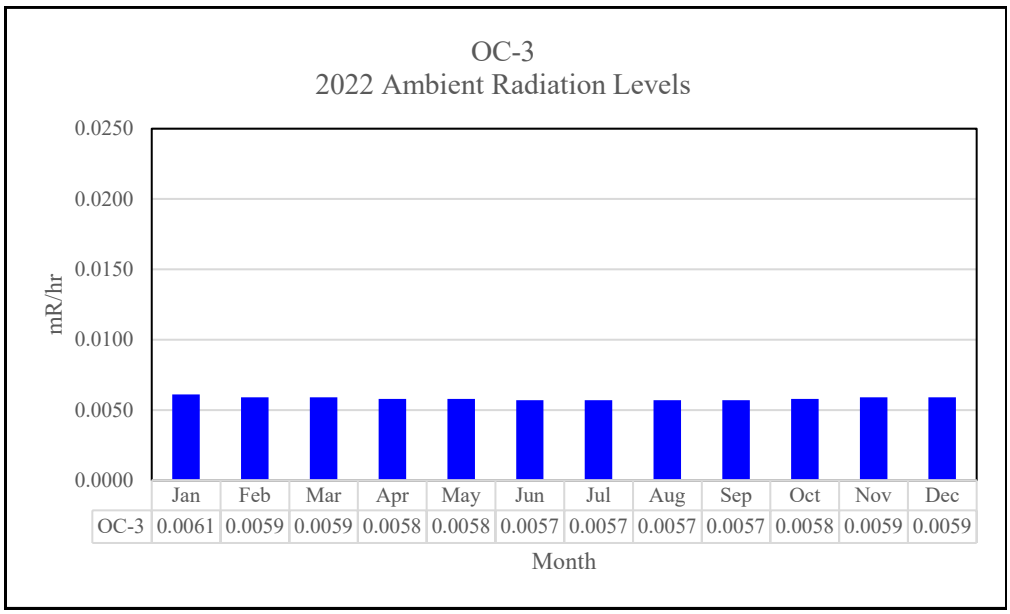
Oyster Creek
Continuous Radiological Environmental Surveillance Telemetry (CREST) Data

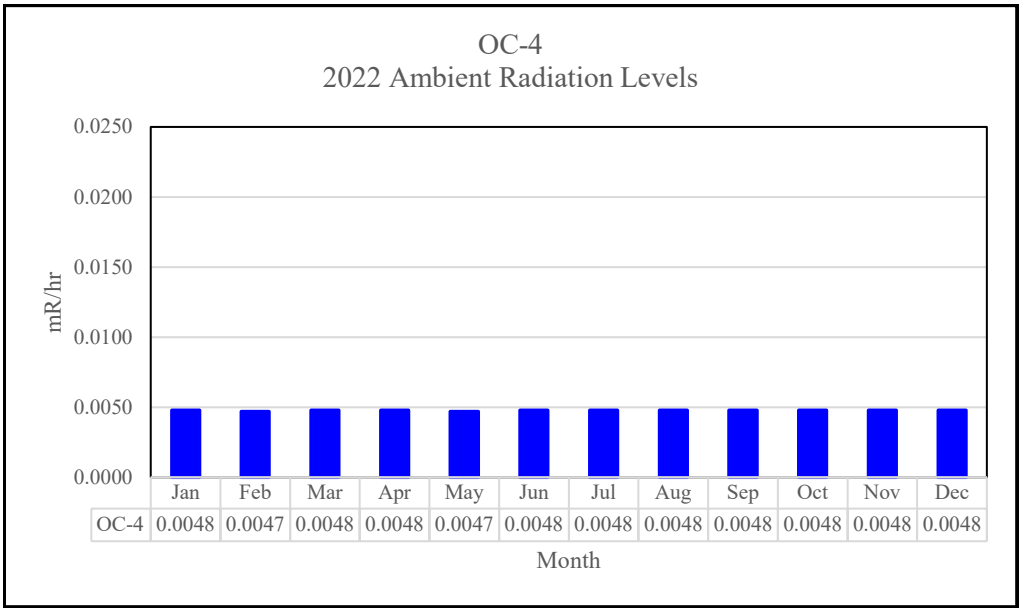




New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

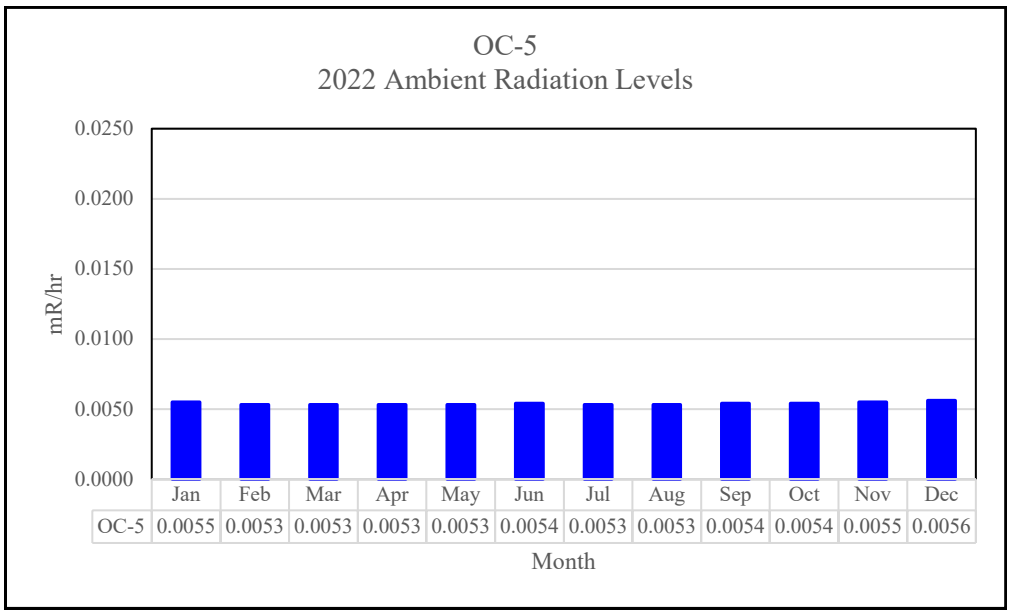
Oyster Creek
Continuous Radiological Environmental Surveillance Telemetry (CREST) Data

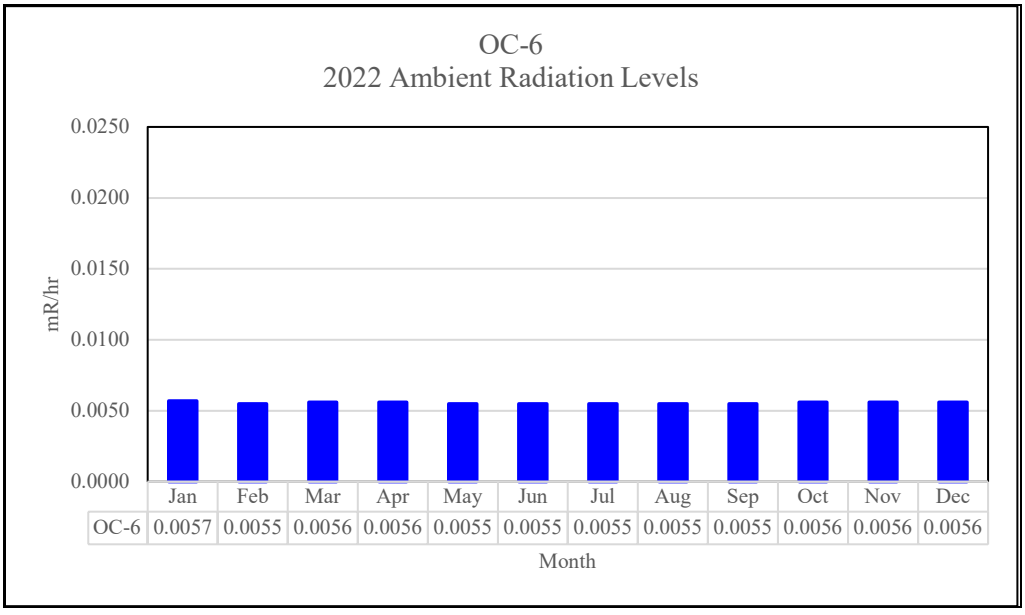




New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

Oyster Creek
Continuous Radiological Environmental Surveillance Telemetry (CREST) Data





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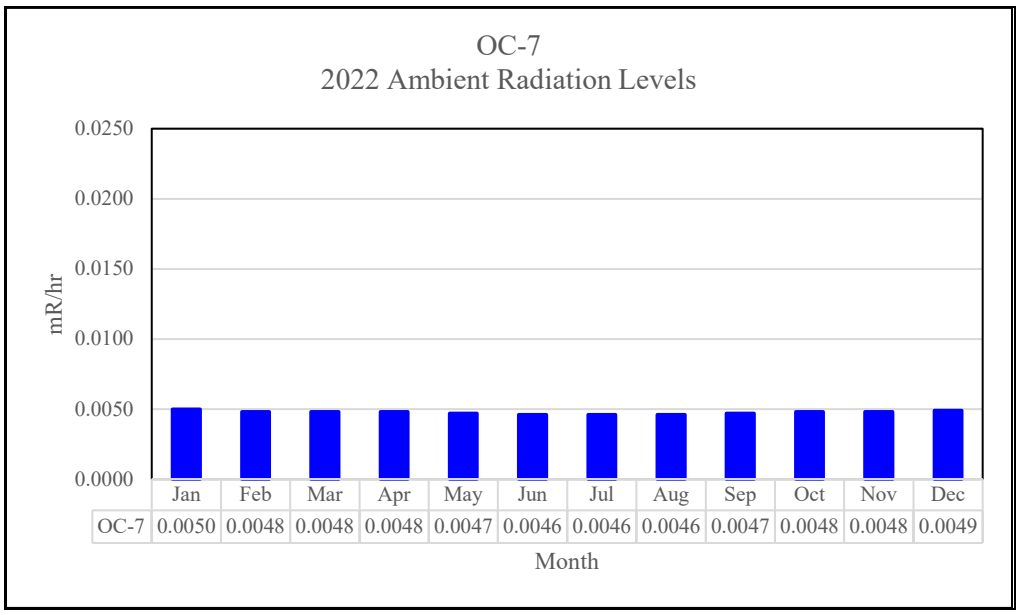
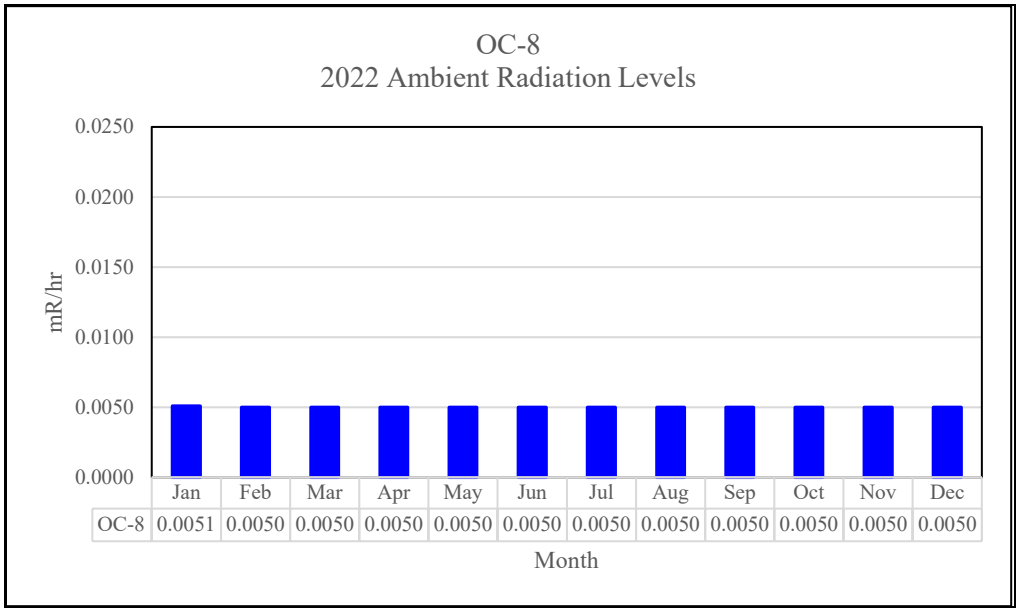
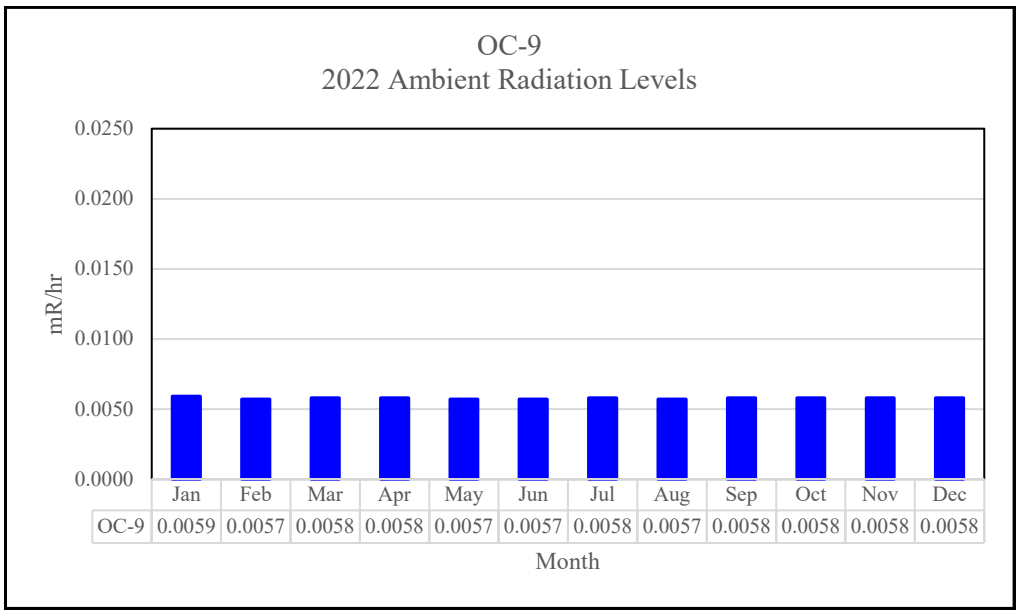
Oyster Creek
Continuous Radiological Environmental Surveillance Telemetry (CREST) Data





New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

Oyster Creek
Continuous Radiological Environmental Surveillance Telemetry (CREST) Data



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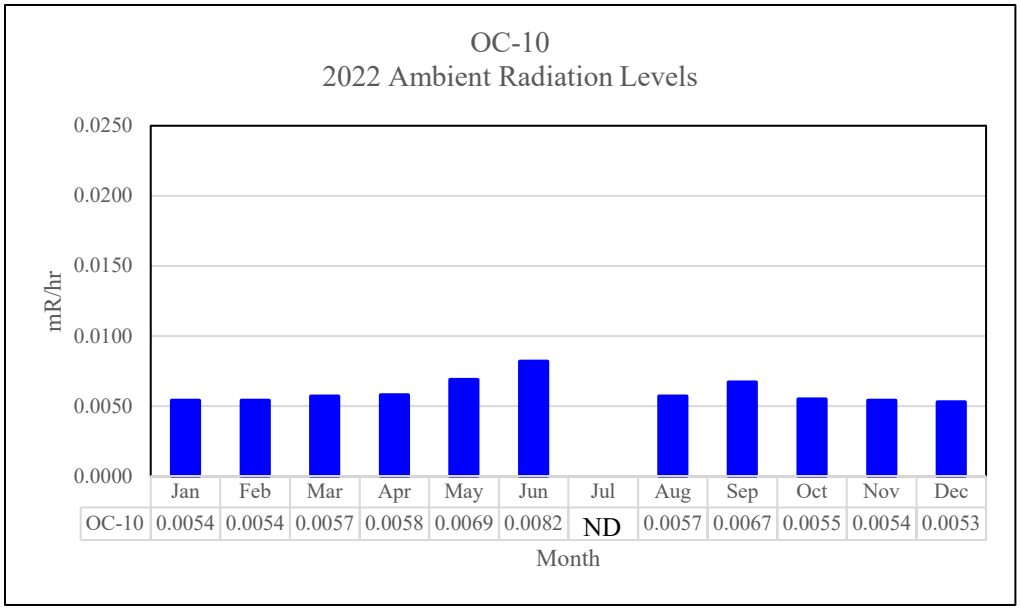
OC-9	0.0059	0.0057	0.0058	0.0058	0.0057	0.0057	0.0058	0.0057	0.0058	0.0058	0.0058	0.0058

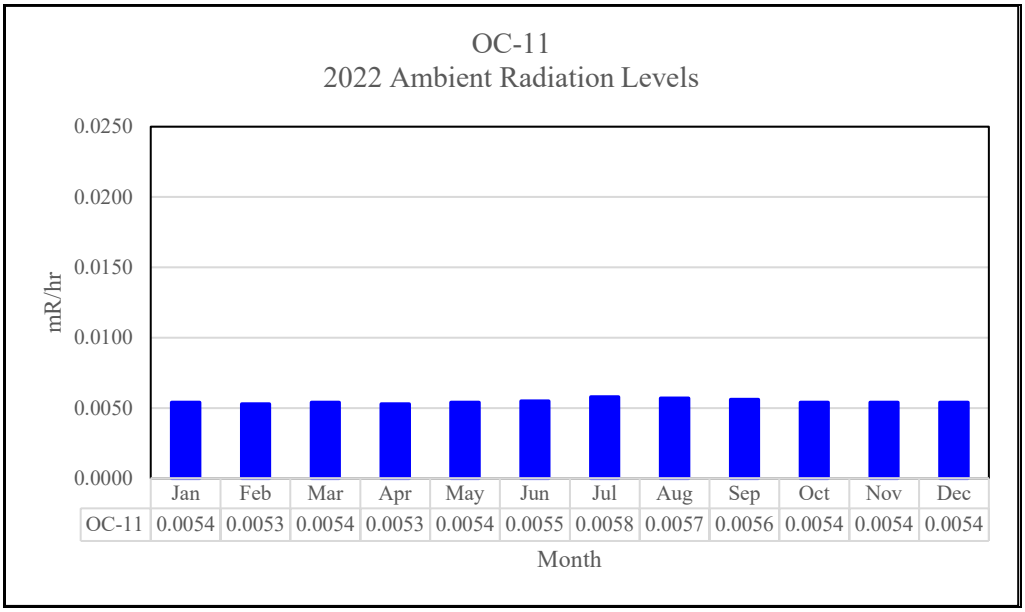


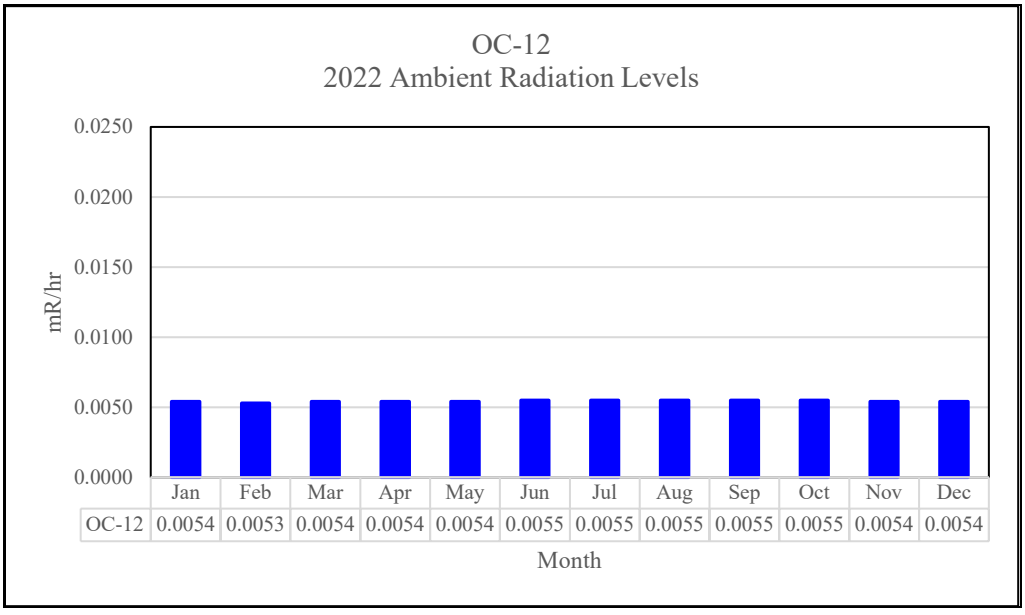
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
OC-10	0.0054	0.0054	0.0057	0.0058	0.0069	0.0082	ND	0.0057	0.0067	0.0055	0.0054	0.0053

ND indicates 'No Data'

New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

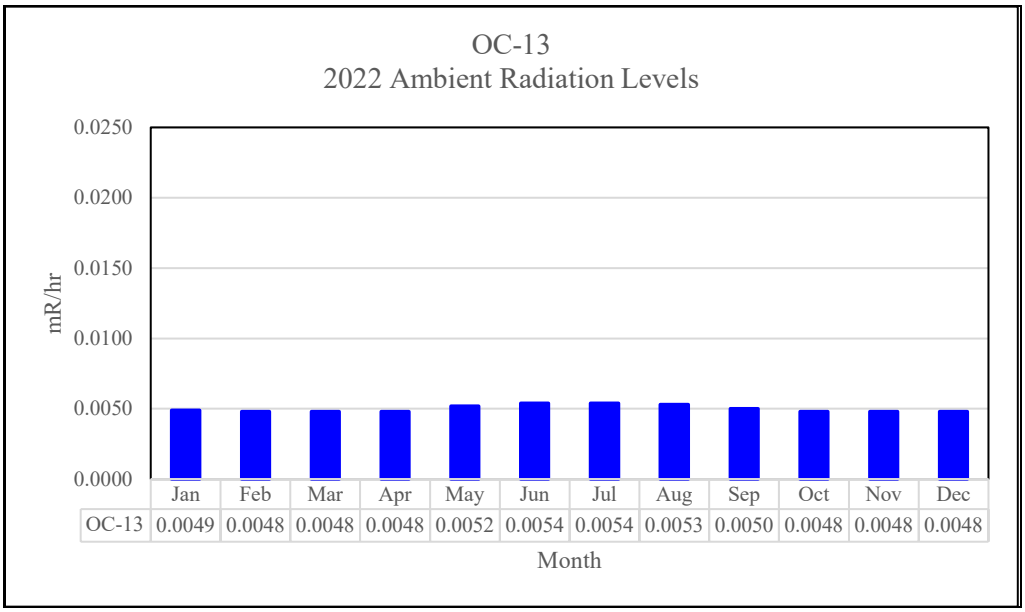
Oyster Creek
Continuous Radiological Environmental Surveillance Telemetry (CREST) Data

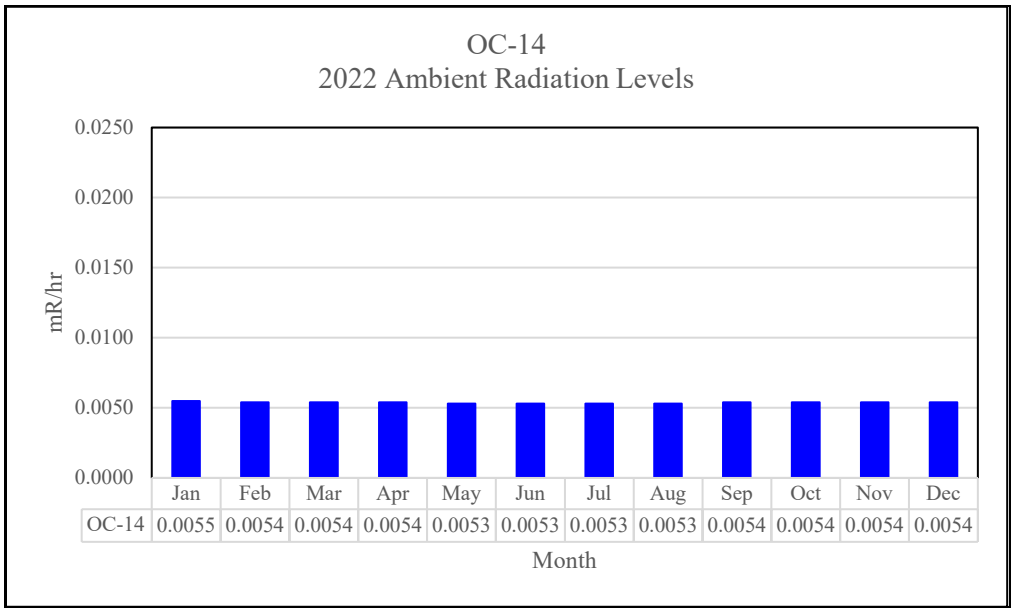




New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

Oyster Creek
Continuous Radiological Environmental Surveillance Telemetry (CREST) Data





New Jersey Department of Environmental Protection
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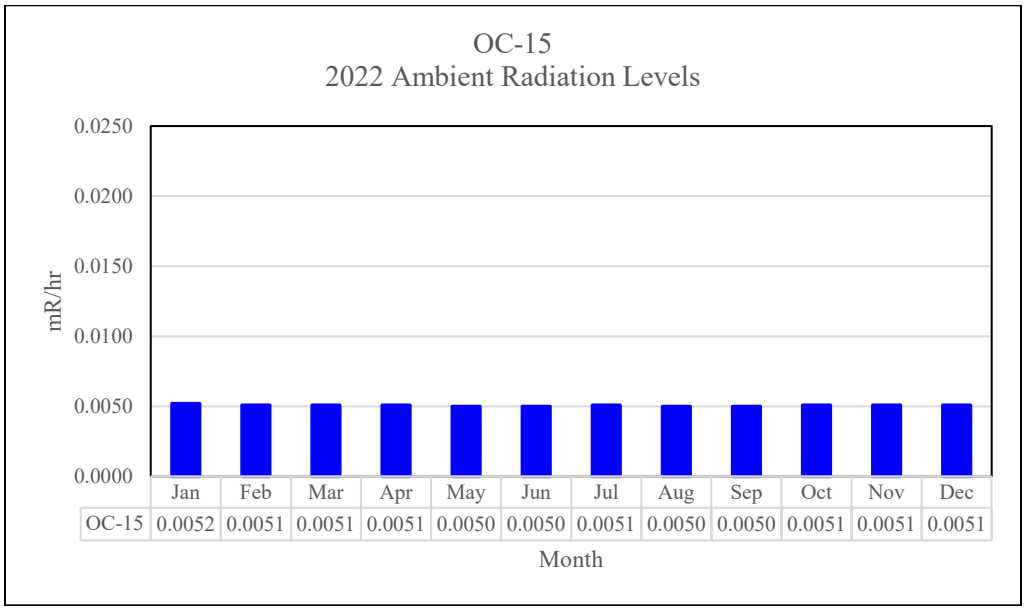
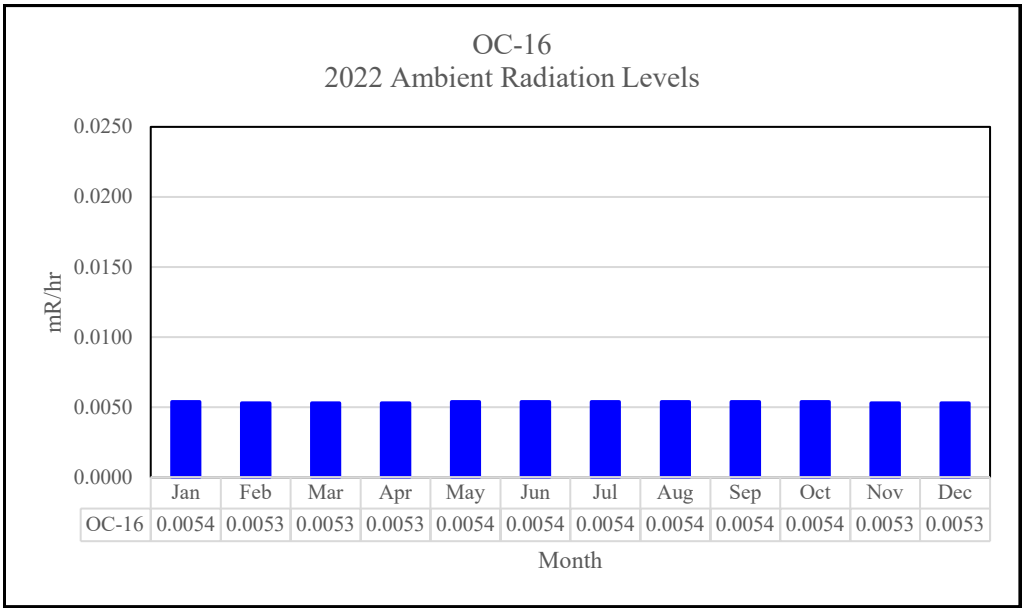
2022 Radiological Environmental Monitoring Program

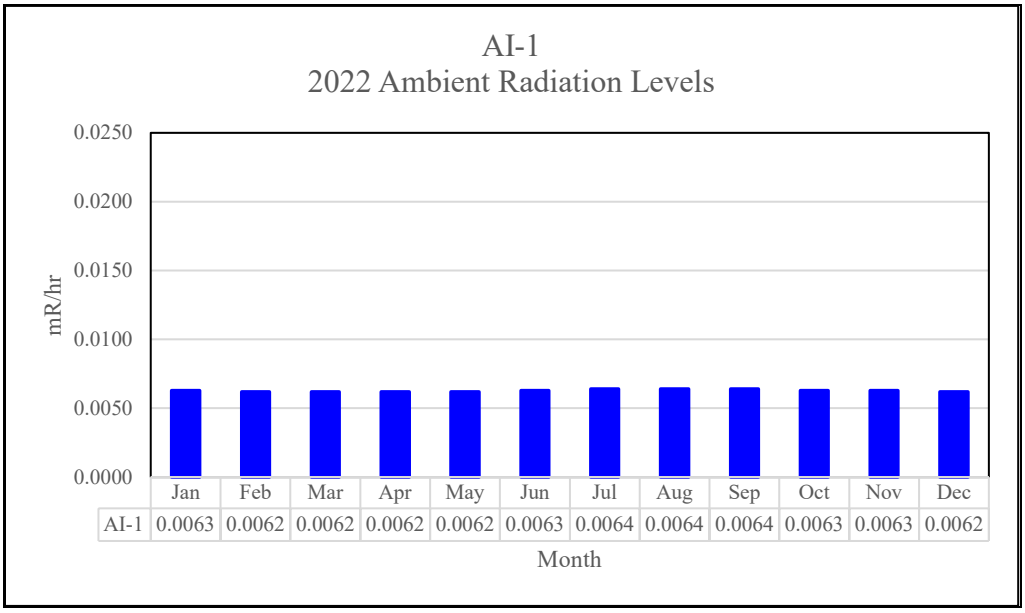
Oyster Creek
Continuous Radiological Environmental Surveillance Telemetry (CREST) Data

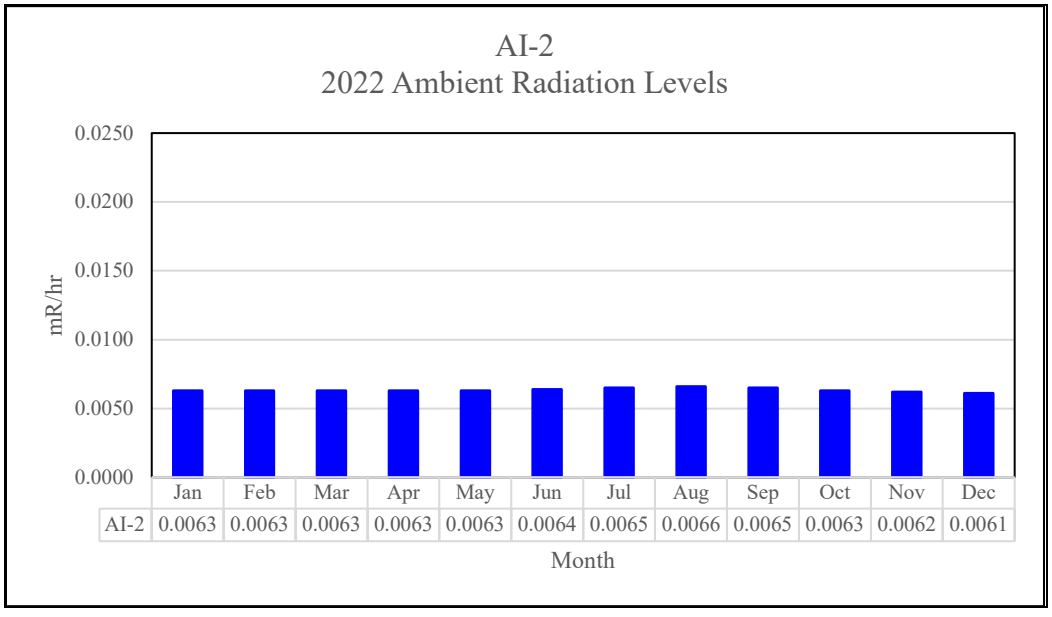




New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

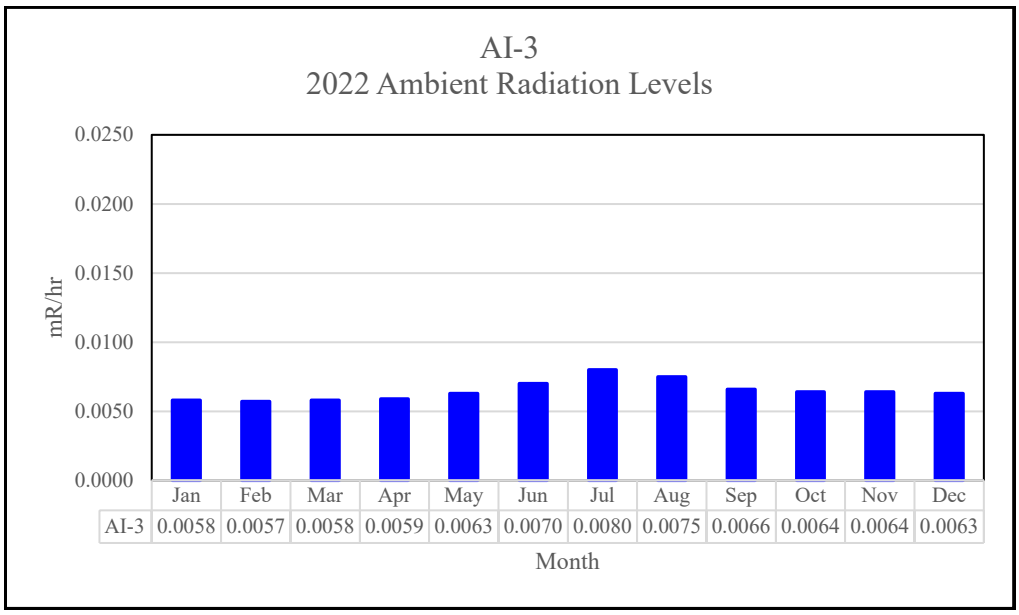
Salem/Hope Creek
Continuous Radiological Environmental Surveillance Telemetry (CREST) Data

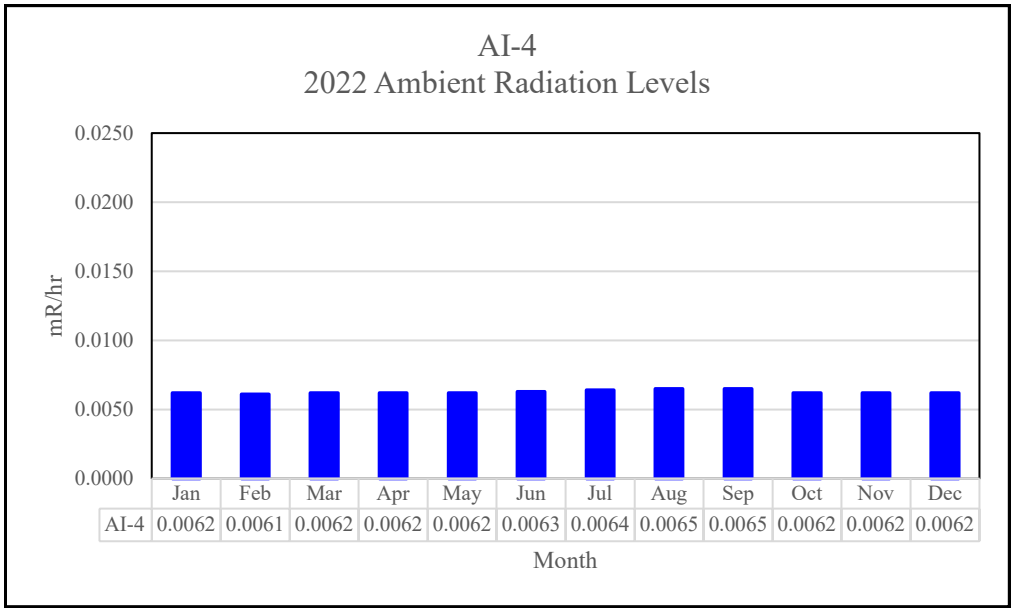




New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

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





New Jersey Department of Environmental Protection
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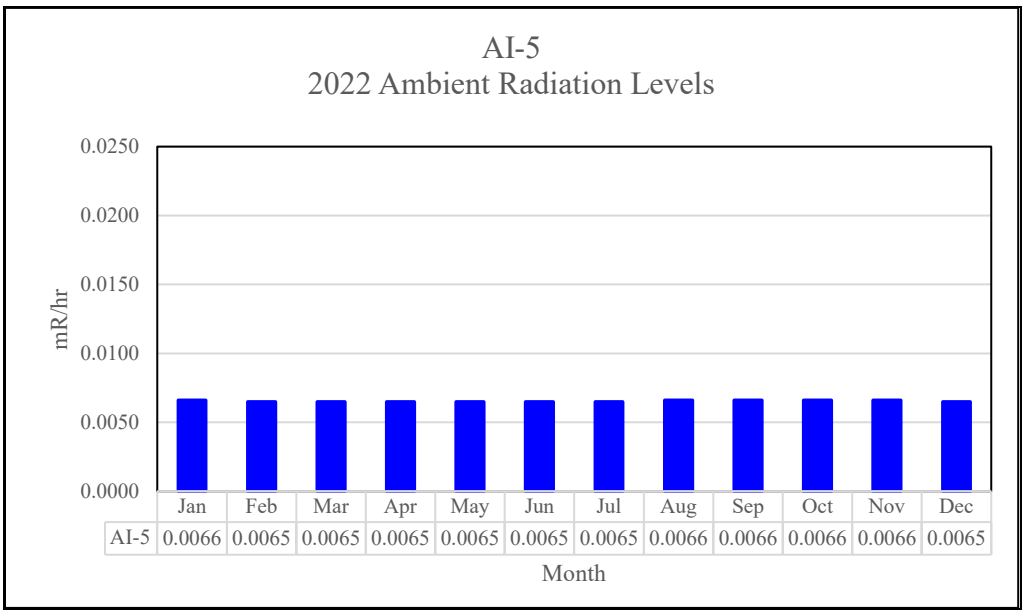
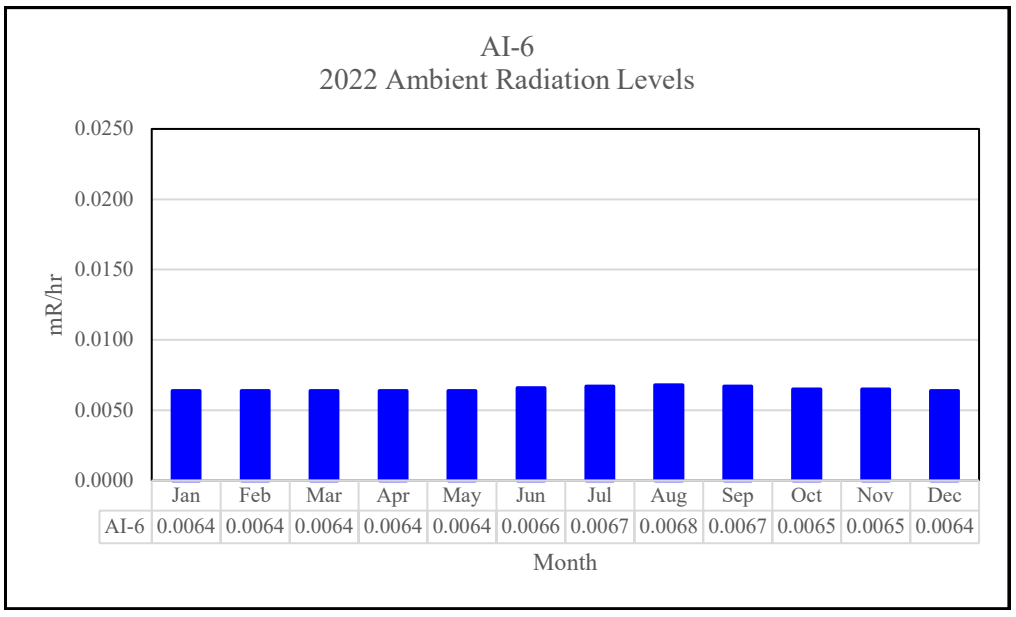
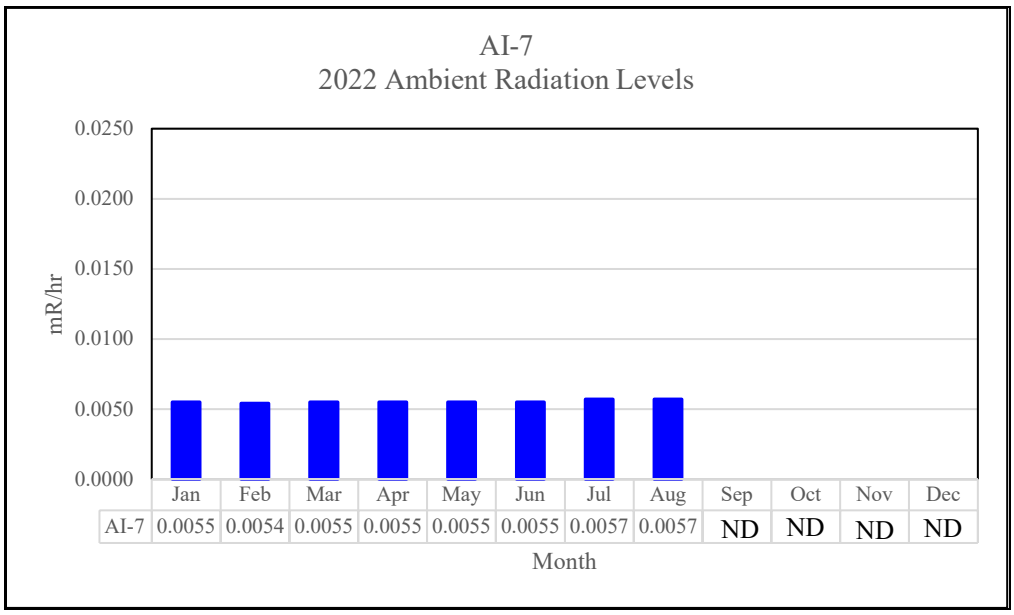
Salem/Hope Creek
Continuous Radiological Environmental Surveillance Telemetry (CREST) Data



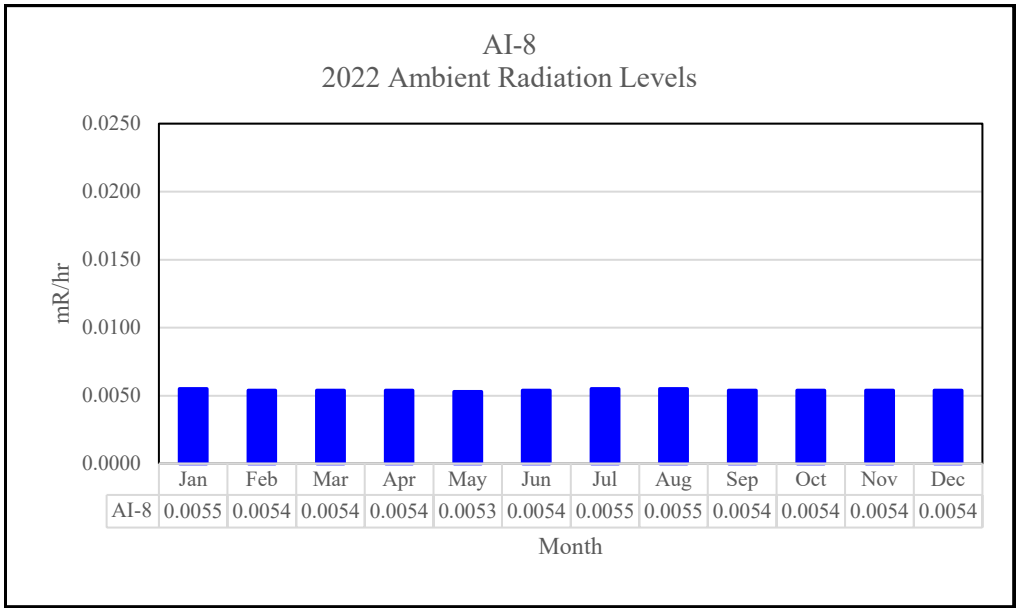


New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

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



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AI-7	0.0055	0.0054	0.0055	0.0055	0.0055	0.0055	0.0057	0.0057	ND	ND	ND	ND

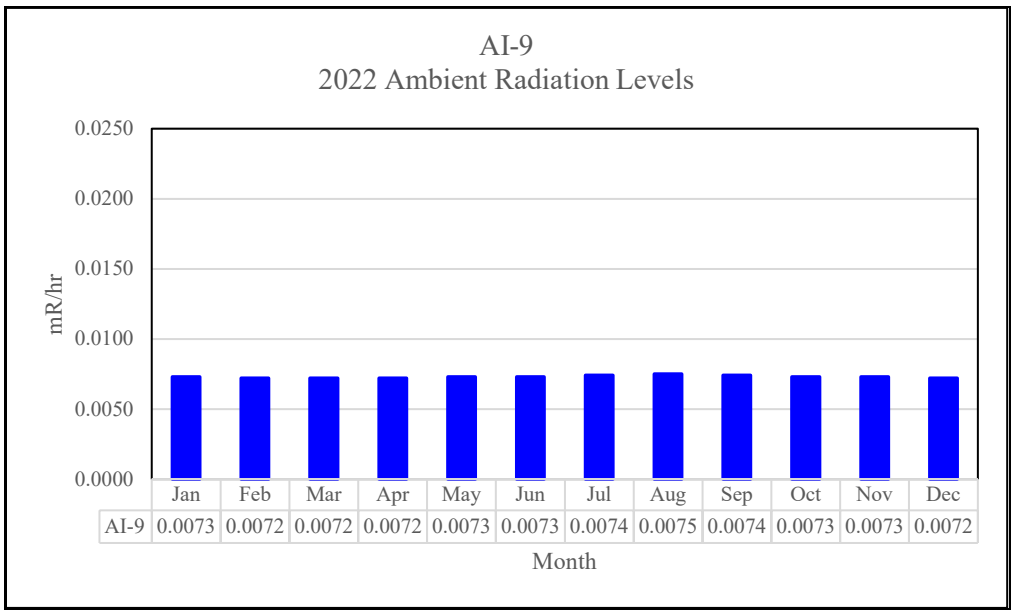


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AI-8	0.0055	0.0054	0.0054	0.0054	0.0053	0.0054	0.0055	0.0055	0.0054	0.0054	0.0054	0.0054

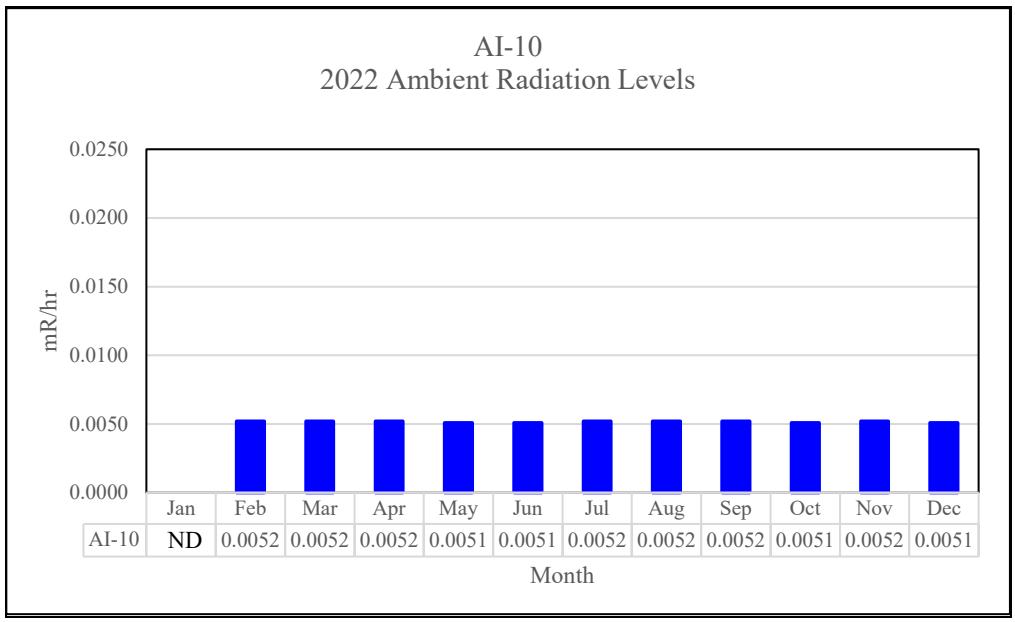
ND indicates 'No Data'

New Jersey Department of Environmental Protection
Bureau of Nuclear Engineering
2022 Radiological Environmental Monitoring Program

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



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AI-9	0.0073	0.0072	0.0072	0.0072	0.0073	0.0073	0.0074	0.0075	0.0074	0.0073	0.0073	0.0072



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AI-10	ND	0.0052	0.0052	0.0052	0.0051	0.0051	0.0052	0.0052	0.0052	0.0051	0.0052	0.0051

ND indicates 'No Data'