

COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF HEALTH

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OFFICE OF RADIOLOGICAL HEALTH  
109 Governor Street, 7<sup>th</sup> Floor, Richmond, Virginia 23219  
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**ENVIRONMENTAL  
RADIATION  
MONITORING  
PROGRAM**

**2024  
Final Report**

COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF HEALTH

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# Sampling Locations

## Sampling Locations for Surry & North Anna Nuclear Power Station



*Surry Power Station*



*North Anna Power Station*

### **Air**

|          |                                           |                                            |
|----------|-------------------------------------------|--------------------------------------------|
| SPS-A-1  | Surry Power Station                       | Beta Air Filter<br>Gamma Charcoal & Filter |
| SPS-A-2  | Jamestown                                 | Beta Air Filter<br>Gamma Charcoal & Filter |
| PSP-A-1  | Pocahontas State Park                     | Beta Air Filter<br>Gamma Charcoal & Filter |
| NAPS-A-1 | Louisa (Outside North Anna Power Station) | Beta Air Filter<br>Gamma Charcoal & Filter |
| NAPS-A-2 | Bumpass                                   | Beta Air Filter<br>Gamma Charcoal & Filter |

### **Water**

|          |                                          |                |
|----------|------------------------------------------|----------------|
| SPS-W-1  | Surry Power Station Discharge Canal      | Gamma, Tritium |
| SPS-W-2  | James River @ Robious Landing            | Gamma, Tritium |
| SPS-W-3  | James River @ Lawnes Creek               | Gamma, Tritium |
| NAPS-W-1 | North Anna Power Station Discharge Canal | Gamma, Tritium |
| NAPS-W-2 | North Anna River @ Rt 651                | Gamma, Tritium |
| NAPS-W-3 | Pleasants Landing                        | Gamma, Tritium |

## Sample Analysis Results for Surry & North Anna Power Stations

| WEEK                         | FREQUENCY | PAGE | COMMENTS |
|------------------------------|-----------|------|----------|
| Week 1: 01/01/24- 01/08/24   | Weekly    | 12   |          |
| Week 2: 01/08/24 - 01/15/24  | Weekly    | 13   |          |
| Week 3: 01/15/24 - 01/22/24  | Weekly    | 14   |          |
| Week 4: 01/22/24 - 01/29/24  | Weekly    | 15   |          |
| Week 5: 01/29/24 - 02/05/24  | Weekly    | 16   |          |
| Week 6: 02/05/24 - 02/12/24  | Weekly    | 17   |          |
| Week 7: 02/12/24 - 02/19/24  | Weekly    | 18   |          |
| Week 8: 02/19/24 - 02/26/24  | Weekly    | 19   |          |
| Week 9: 02/26/24 - 03/04/24  | Weekly    | 20   |          |
| Week 10: 03/04/24 - 03/11/24 | Weekly    | 21   |          |
| Week 11: 03/11/24 - 03/18/24 | Weekly    | 22   |          |
| Week 12: 03/18/24- 03/25/24  | Weekly    | 23   |          |
| Week 13: 03/25/24 - 04/01/24 | Weekly    | 24   |          |
| Week 14: 04/01/24 - 04/08/24 | Weekly    | 25   |          |
| Week 15: 04/08/24 - 04/15/24 | Weekly    | 26   |          |
| Week 16: 04/15/24 - 04/22/24 | Weekly    | 27   |          |
| Week 17: 04/22/24 - 04/29/24 | Weekly    | 28   |          |
| Week 18: 04/29/24 - 05/06/24 | Weekly    | 29   |          |
| Week 19: 05/06/24 - 05/13/24 | Weekly    | 30   |          |
| Week 20: 05/13/24 - 05/20/24 | Weekly    | 31   |          |
| Week 21: 05/20/24- 05/27/24  | Weekly    | 32   |          |
| Week 22: 05/27/24 - 06/03/24 | Weekly    | 33   |          |
| Week 23: 06/03/24 - 06/10/24 | Weekly    | 34   |          |
| Week 24: 06/10/24 - 06/17/24 | Weekly    | 35   |          |
| Week 25: 06/17/24 - 06/24/24 | Weekly    | 36   |          |
| Week 26: 06/24/24 - 07/01/24 | Weekly    | 37   |          |
| Week 27: 07/01/24 - 07/08/24 | Weekly    | 38   |          |
| Week 28: 07/08/24 - 07/15/24 | Weekly    | 39   |          |
| Week 29: 07/15/24- 07/22/24  | Weekly    | 40   |          |
| Week 30: 07/22/24 - 07/29/24 | Weekly    | 41   |          |
| Week 31: 07/29/24 - 08/05/24 | Weekly    | 42   |          |
| Week 32: 08/05/24 - 08/12/24 | Weekly    | 43   |          |
| Week 33: 08/12/24 - 08/19/24 | Weekly    | 44   |          |
| Week 34: 08/19/24 - 08/26/24 | Weekly    | 45   |          |
| Week 35: 08/26/24 - 09/02/24 | Weekly    | 46   |          |
| Week 36: 09/02/24 - 09/09/24 | Weekly    | 47   |          |
| Week 37: 09/09/24 - 09/16/24 | Weekly    | 48   |          |

| WEEK                         | FREQUENCY | PAGE | COMMENTS |
|------------------------------|-----------|------|----------|
| Week 38: 09/16/24 - 09/23/24 | Weekly    | 49   |          |
| Week 39: 09/23/24 - 09/30/24 | Weekly    | 50   |          |
| Week 40: 09/30/24 - 10/07/24 | Weekly    | 51   |          |
| Week 41: 10/07/24 - 10/14/24 | Weekly    | 52   |          |
| Week 42: 10/14/24 - 10/21/24 | Weekly    | 53   |          |
| Week 43: 10/21/24 - 10/28/24 | Weekly    | 54   |          |
| Week 44: 10/28/24 - 11/04/24 | Weekly    | 55   |          |
| Week 45: 11/04/24 - 11/11/24 | Weekly    | 56   |          |
| Week 46: 11/11/24 - 11/18/24 | Weekly    | 57   |          |
| Week 47: 11/18/24 - 11/25/24 | Weekly    | 58   |          |
| Week 48: 11/25/24 - 12/02/24 | Weekly    | 59   |          |
| Week 49: 12/02/24 - 12/09/24 | Weekly    | 60   |          |
| Week 50: 12/09/24 - 12/16/24 | Weekly    | 61   |          |
| Week 51: 12/16/24 - 12/23/24 | Weekly    | 62   |          |
| Week 52: 12/23/24 - 12/30/24 | Weekly    | 63   |          |

## Other Sample Locations

We are currently working with both facilities to determine the sampling frequency moving forward

| SAMPLE                      | LOCATION                            | TYPE          | FREQUENCY | PAGE |
|-----------------------------|-------------------------------------|---------------|-----------|------|
| <b><u>Surface Water</u></b> |                                     |               |           |      |
| NNSB-W-1                    | James River - NNSB-Pier 1           | Surface Water | TBD       | 64   |
| NNSB-W-2                    | James River - NNSB-Shipway 11       | Surface Water | TBD       | 64   |
| NNSY-W-1                    | Elizabeth River - NNSY - Drydock #4 | Surface Water | TBD       | 65   |
| NNSY-W-2                    | Elizabeth River - NNSY - Drydock #8 | Surface Water | TBD       | 66   |
| NNSY-W-3                    | Elizabeth River - NNSY - Drydock #1 | Surface Water | TBD       | 67   |
| <b><u>Silt</u></b>          |                                     |               |           |      |
| NNSB-S-1                    | James River - NNSB - Pier 1         | Silt          | TBD       | 68   |
| NNSB-S-2                    | James River - NNSB-Shipway 11       | Silt          | TBD       | 69   |
| NNSY-S-1                    | Elizabeth River - NNSY - Drydock #4 | Silt          | TBD       | 70   |
| NNSY-S-2                    | Elizabeth River - NNSY - Drydock #8 | Silt          | TBD       | 71   |
| NNSY-S-3                    | Elizabeth River - NNSY - Drydock #1 | Silt          | TBD       | 72   |

## Other Sample Types for Surry & North Anna Power Stations

| Sample            | Location                                   | Description       | Frequency   | Page  |
|-------------------|--------------------------------------------|-------------------|-------------|-------|
| <b>SILT</b>       |                                            |                   |             |       |
| SPS-S-1           | James River – 1 ½ Mile Off Discharge Canal | Silt              | 2x per year | 73    |
| NAPS-S-1          | Waste Treatment Shoreline Soil             | Soil              | 2x per year | 73    |
| <b>FISH</b>       |                                            |                   |             |       |
| NAPS-F-1          | North Anna Lake – Second Cooling Lagoon    | Edible Fish       | 2x per year | 74-75 |
| SPS-F-1           | James River – .5 miles off Discharge Canal | Edible Fish       | 2x per year | 74-75 |
| SPS-R-1           | James River- Various Locations             | Shellfish         | Annually    | 76    |
| <b>MILK</b>       |                                            |                   |             |       |
| SPS-M-1           | Williamsburg - MO Smith Farm               | Raw               | 2x per year | 77-78 |
| <b>VEGETATION</b> |                                            |                   |             |       |
| SPS-V-1           | Surry County – various locations           | Edible Vegetation | 2x per year | 79    |
| NAPS-V-1          | Louisa County – various locations          | Edible Vegetation | 2x per year | 79    |

## Dosimetry Locations for Surry & North Anna Power Stations

| <b>Dosimetry</b>                   | <b>Station</b> | <b>Frequency</b> | <b>Description</b> | <b>Page</b> |
|------------------------------------|----------------|------------------|--------------------|-------------|
| Jamestown – Historical site        | SPS-D-1        | Quarterly        | Gamma in Air       | 80-83       |
| Williamsburg – Airport             | SPS-D-2        | Quarterly        | Gamma in Air       | 80-83       |
| Williamsburg – Busch Gardens       | SPS-D-3        | Quarterly        | Gamma in Air       | 80-83       |
| Newport News - Lee Hall            | SPS-D-4        | Quarterly        | Gamma in Air       | 80-83       |
| Naval Weapons Station – 1          | SPS-D-5        | Quarterly        | Gamma in Air       | 80-83       |
| Newport News – Fort Eustis         | SPS-D-6        | Quarterly        | Gamma in Air       | 80-83       |
| Surry – Route 628                  | SPS-D-7        | Quarterly        | Gamma in Air       | 80-83       |
| Surry – Lawnes Creek               | SPS-D-8        | Quarterly        | Gamma in Air       | 80-83       |
| Surry Power Station                | SPS-D-9        | Quarterly        | Gamma in Air       | 80-83       |
| Surry – Hog Point                  | SPS-D-10       | Quarterly        | Gamma in Air       | 80-83       |
| Surry – Bacon’s Castle             | SPS-D-11       | Quarterly        | Gamma in Air       | 80-83       |
| Surry – Alliance                   | SPS-D-12       | Quarterly        | Gamma in Air       | 80-83       |
| Surry – Scotland Wharf             | SPS-D-13       | Quarterly        | Gamma in Air       | 80-83       |
| Surry – Surry County Courthouse    | SPS-D-14       | Quarterly        | Gamma in Air       | 80-83       |
| Louisa County - Mineral            | NAPS-D-1       | Quarterly        | Gamma in Air       | 80-83       |
| Louisa County – Wares Crossroads   | NAPS-D-2       | Quarterly        | Gamma in Air       | 80-83       |
| Louisa County – Good Hope Church   | NAPS-D-3       | Quarterly        | Gamma in Air       | 80-83       |
| Spotsylvania – Route 713           | NAPS-D-4       | Quarterly        | Gamma in Air       | 80-83       |
| Spotsylvania Route 614             | NAPS-D-5       | Quarterly        | Gamma in Air       | 80-83       |
| Spotsylvania – Levy                | NAPS-D-6       | Quarterly        | Gamma in Air       | 80-83       |
| Louisa County – Bumpass Fire Dept. | NAPS-D-7       | Quarterly        | Gamma in Air       | 80-83       |
| Louisa County – Fred Hall          | NAPS-D-8       | Quarterly        | Gamma in Air       | 80-83       |
| Louisa County – Aspen Hill         | NAPS-D-9       | Quarterly        | Gamma in Air       | 80-83       |
| Louisa County – Route 685          | NAPS-D-10      | Quarterly        | Gamma in Air       | 80-83       |
| Louisa County – Route 700          | NAPS-D-11      | Quarterly        | Gamma in Air       | 80-83       |
| North Anna Power Station           | NAPS-D-12      | Quarterly        | Gamma in Air       | 80-83       |
| Pocahontas State Park (Control)    | PSP-D-1        | Quarterly        | Gamma in Air       | 80-83       |
| Radiological Health                | ORH-D-1        | Quarterly        | Gamma in Air       | 80-83       |
| Radiological Health                | ORH-D-2        | Quarterly        | Gamma in Air       | 80-83       |



## Sampling Locations - Babcock & Wilcox

| SAMPLE                      | LOCATION                                | TYPE            | FREQUENCY | PAGE |
|-----------------------------|-----------------------------------------|-----------------|-----------|------|
| <b><u>AIR</u></b>           |                                         |                 |           |      |
| B&W-A-1                     | Eastern Site<br>Boundary -<br>Ballfield | Air Particulate | Quarterly | 85   |
| <b><u>SOIL</u></b>          |                                         |                 |           |      |
| B&W-S-1                     | Eastern Site<br>Boundary -<br>Ballfield | Soil            | Annually  | 86   |
| B&W-S-2                     | James River<br>Riverside Park           | Soil            | Annually  | 86   |
| <b><u>SURFACE WATER</u></b> |                                         |                 |           |      |
| B&W-W-1                     | Eastern Site<br>Boundary -<br>Ballfield | Surface Water   | Annually  | 86   |
| B&W-W-2                     | James River<br>Riverside Park           | Surface Water   | Annually  | 86   |
| <b><u>VEGETATION</u></b>    |                                         |                 |           |      |
| B&W-V-1                     | Eastern Site<br>Boundary -<br>Ballfield | Grass           | Annually  | 87   |
| B&W-V-2                     | James River<br>Riverside Park           | Grass           | Annually  | 87   |

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# NO DETECTABLE RESULTS "NDR"

In order for a nuclide to be identified in the spectrum and entered into this report, constraints set by the HPGe analysis software need to be satisfied and the results of the confidence index calculation must be greater than the threshold (usually 0.3).

For the maximum confidence index, the following conditions need to be met.

- The nuclide energy peak needs to be within the energy tolerance of the library lines for that nuclide.
- A nuclide with multiple lines, must match the library peaks in the spectrum.
- The number of half-lives that has elapsed, between when the sample was taken and when it was counted, must be less than 10 half-lives or the confidence in the identification is small.

If the confidence index threshold and/or any of the three criteria are not met, then the nuclide is deemed no detectable results, (NDR).

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# Analytical Results

# Virginia Department of Health

## Week 1: 01/01/24 – 01/08/24

### Air

| Site            | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|-----------------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|                 | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| <b>SPS-A-1</b>  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.004                                   |
| <b>SPS-A-2</b>  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.005                                   |
| <b>PSP-A-1</b>  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| <b>NAPS-A-1</b> | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.006                                   |
| <b>NAPS-A-2</b> | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.004                                   |

### Water

| Site            | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|-----------------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|                 | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| <b>SPS-W-1*</b> |                                        |       |       |       |       |       |       |        |        |        |                |
| <b>SPS-W-2</b>  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 0+/-214        |
| <b>SPS-W-3</b>  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 0+/-214        |
| <b>NAPS-W-1</b> | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 8408+/-439     |
| <b>NAPS-W-2</b> | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 0+/-214        |
| <b>NAPS-W-3</b> | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 8934+/-445     |

\*SPS-W-1 not collected due to access issue – canal dredging operation.

**Virginia Department of Health**  
**Week 2: 01/08/24– 01/15/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.003                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.004                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.004                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.004                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.005                                   |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1* |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1201+/-159     |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1051+/-159     |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 9459+/-477     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 826+/-142      |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 8859+/-455     |

\*SPS-W-1 not collected due to access issue – canal dredging operation.

**Virginia Department of Health**  
**Week 3: 01/15/24– 01/22/24\***

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  |                                          |                                           |                                           |                                               |
| SPS-A-2  |                                          |                                           |                                           |                                               |
| PSP-A-1  |                                          |                                           |                                           |                                               |
| NAPS-A-1 |                                          |                                           |                                           |                                               |
| NAPS-A-2 |                                          |                                           |                                           |                                               |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-3  |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-1 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-2 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-3 |                                        |       |       |       |       |       |       |        |        |        |                |

\*No samples collected due to other program activities

# Virginia Department of Health

## Week 4: 01/22/24– 01/29/24

### Air

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.004                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.005                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.004                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.003                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.005                                   |

### Water

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1* |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1577+/-200     |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1426+/-173     |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 9459+/-475     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1201+/-158     |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 8784+/-464     |

\*SPS-W-1 not collected due to access issue – canal dredging operation.

**Virginia Department of Health**  
**Week 5: 01/29/24 – 02/05/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.004                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.005                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.005                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.005                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.004                                   |

**Water**

| Site       | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |       |        |                |
|------------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|-------|--------|----------------|
|            | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 37 | Ba 140 | H3<br>Activity |
| SPS-W-1*   |                                        |       |       |       |       |       |       |        |       |        |                |
| SPS-W-2**  |                                        |       |       |       |       |       |       |        |       |        |                |
| SPS-W-3    | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR   | NDR    | 375+/-100      |
| NAPS-W-1   | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR   | NDR    | 8108+/-442     |
| NAPS-W-2** |                                        |       |       |       |       |       |       |        |       |        |                |
| NAPS-W-3   | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR   | NDR    | 8258+/-442     |

\*SPS-W-1 not collected due to access issue – canal dredging operation.

\*\*SPS-W-2 and NAPS-W-2 not collected due to high water conditions at sampling sites.



**Virginia Department of Health**  
**Week 6: 02/05/24– 02/12/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.005                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.007                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.006                                   |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1* |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 751+/-61       |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 0+/-132        |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 7583+/-179     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 526+/-43       |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 6757+/-169     |

\*SPS-W-1 not collected due to access issue – canal dredging operation.

**Virginia Department of Health**  
**Week 7: 02/12/24– 02/19/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.003                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.004                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.01+/0.003                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.004                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.003                                   |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |       |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|-------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 37 | Ba 140 | H3<br>Activity |
| SPS-W-1* |                                        |       |       |       |       |       |       |        |       |        |                |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR   | NDR    | 1652+/-188     |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR   | NDR    | 1276+/-174     |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR   | NDR    | 11562+/-532    |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR   | NDR    | 751+/-123      |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR   | NDR    | 8784+/-455     |

\*SPS-W-1 not collected due to access issue – canal dredging operation.

**Virginia Department of Health**  
**Week 8: 02/19/24– 02/26/24\***

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  |                                          |                                           |                                           |                                               |
| SPS-A-2  |                                          |                                           |                                           |                                               |
| PSP-A-1  |                                          |                                           |                                           |                                               |
| NAPS-A-1 |                                          |                                           |                                           |                                               |
| NAPS-A-2 |                                          |                                           |                                           |                                               |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-3  |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-1 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-2 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-3 |                                        |       |       |       |       |       |       |        |        |        |                |

\*No samples collected due to other program activities

**Virginia Department of Health**  
**Week 9: 02/26/24 – 03/04/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.003                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.004                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.003                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.002                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.003                                   |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1* |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 751+/-123      |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 676+/-123      |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 8709+/-444     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 300+/-71       |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 8634+/-450     |

\*SPS-W-1 not collected due to access issue – canal dredging operation.

**Virginia Department of Health**  
**Week 10: 03/04/24– 03/11/24\***

**Air**

| Site      | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|-----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|           | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1   |                                          |                                           |                                           |                                               |
| SPS-A-2   |                                          |                                           |                                           |                                               |
| PSP-A-1   |                                          |                                           |                                           |                                               |
| NAPS-A-1* |                                          |                                           |                                           |                                               |
| NAPS-A-2  |                                          |                                           |                                           |                                               |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-3  |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-1 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-2 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-3 |                                        |       |       |       |       |       |       |        |        |        |                |

\*No samples collected due to other program activities

**Virginia Department of Health**  
**Week 11: 03/11/24 – 03/18/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.01+/0.002                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.01+/0.003                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.01+/0.002                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.01+/0.002                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.01+/0.002                                   |

**Water**

| Site     | Gamma and Tritium Activity - pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 150+/-71       |
| SPS-W-2* |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 225+/-71       |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 7057+/-410     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 375+/-101      |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 9835+/-478     |

\*SPS-W-2 not collected due to flooded access site

**Virginia Department of Health**  
**Week 12: 03/18/24 - 03/25/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.005                                   |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 150+/-71       |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 0+/-0          |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 150+/-71       |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 8483+/-457     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 150+/-71       |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 8183+/-457     |

# Virginia Department of Health

## Week 13: 03/25/24– 04/01/24

### Air

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.004                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.005                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.005                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.004                                   |

### Water

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1* | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 121171+/-1658  |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 676+/-123      |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 751+/-142      |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 7883+/-425     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 901+/-142      |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 9309+/-470     |

\*Elevated tritium level due to ongoing release of Liquid Waste Monitoring Tank (LWMT) at time of sample collection. Confirmed by Surry Power Station count room personnel.



**Virginia Department of Health**  
**Week 14: 04/01/24 – 04/08/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.005                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.004                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.003                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.003                                   |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1* |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 225+/-71       |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 75+/-235       |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 6757+/-401     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 0+/-235        |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 7808+/-437     |

\*No sample collected for SPS-W-1 due to access restriction on dock.

**Virginia Department of Health**  
**Week 15: 04/08/24 – 04/15/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.005                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.008                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.007                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.007                                   |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 976+/-142      |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 375+/-100      |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 901+/-142      |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 6381+/-389     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 375+/-100      |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 7432+/-420     |

**Virginia Department of Health**  
**Week 16: 04/15/24 – 04/22/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.007                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.005                                   |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1201+/-159     |
| SPS-W-2* |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 676+/-123      |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 6982+/-409     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 375+/-101      |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 6907+/-409     |

\*No sample collected for SPS-W-2 due to high water levels on the James River.

**Virginia Department of Health**  
**Week 17: 04/22/24 – 04/29/24**

**Air**

| Site            | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|-----------------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|                 | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| <b>SPS-A-1</b>  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.005                                   |
| <b>SPS-A-2</b>  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.005                                   |
| <b>PSP-A-1</b>  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.007                                   |
| <b>NAPS-A-1</b> | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.007                                   |
| <b>NAPS-A-2</b> | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.005                                   |

**Water**

| Site            | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|-----------------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|                 | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| <b>SPS-W-1</b>  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 601+/-124      |
| <b>SPS-W-2</b>  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 526+/-101      |
| <b>SPS-W-3</b>  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 601+/-124      |
| <b>NAPS-W-1</b> | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 6982+/-404     |
| <b>NAPS-W-2</b> | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 300+/-71       |
| <b>NAPS-W-3</b> | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 7357+/-416     |

**Virginia Department of Health**  
**Week 18: 04/29/24 – 05/06/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.008                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1727+/-202     |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1351+/-175     |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1276+/-175     |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 7207+/-416     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 601+/-124      |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 6982+/-416     |

**Virginia Department of Health**  
**Week 19: 05/06/24 – 05/13/24 \***

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  |                                          |                                           |                                           |                                               |
| SPS-A-2  |                                          |                                           |                                           |                                               |
| PSP-A-1  |                                          |                                           |                                           |                                               |
| NAPS-A-1 |                                          |                                           |                                           |                                               |
| NAPS-A-2 |                                          |                                           |                                           |                                               |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-3  |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-1 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-2 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-3 |                                        |       |       |       |       |       |       |        |        |        |                |

\*No samples collected due to other program activities.

# Virginia Department of Health

## Week 20: 05/13/24 - 05/20/24

### Air

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.005                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.005                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.007                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.007                                   |

### Water

| Site     | Gamma and Tritium Activity - pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 901+/-142      |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 225+/-71       |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 601+/-123      |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 5781+/-376     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 225+/-71       |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 5781+/-376     |

**Virginia Department of Health**  
**Week 21: 05/20/24 – 05/27/24\***

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  |                                          |                                           |                                           |                                               |
| SPS-A-2  |                                          |                                           |                                           |                                               |
| PSP-A-1  |                                          |                                           |                                           |                                               |
| NAPS-A-1 |                                          |                                           |                                           |                                               |
| NAPS-A-2 |                                          |                                           |                                           |                                               |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-3  |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-1 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-2 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-3 |                                        |       |       |       |       |       |       |        |        |        |                |

\*No samples collected due to other program activities.



**Virginia Department of Health**  
**Week 22: 05/27/24 – 06/03/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.007                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.006                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.06+/0.008                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.007                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 5856+/-363     |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 751+/-142      |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1802+/-201     |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 5556+/-369     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1051+/-159     |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 6006+/-376     |

# Virginia Department of Health

## Week 23: 06/03/24 - 06/10/24

### Air

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.06+/0.009                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.06+/0.009                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.008                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.008                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.008                                   |

### Water

| Site     | Gamma and Tritium Activity - pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1* | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 14039+/-570    |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 450+/-100      |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1426+/-173     |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 6306+/-387     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1351+/-173     |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 8108+/-430     |

\*Elevated SPS-W-1 tritium level due to release of Liquid Waste Monitoring Tank at time of sample collection, confirmed by SPS Count Room personnel.

# Virginia Department of Health

## Week 24: 06/10/24 – 06/17/24

### Air

| Site      | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|-----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|           | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1   | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.007                                   |
| SPS-A-2   | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.007                                   |
| PSP-A-1   | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.007                                   |
| NAPS-A-1* |                                          |                                           |                                           |                                               |
| NAPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.06+/0.009                                   |

### Water

| Site      | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|-----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|           | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1   | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1727+/-200     |
| SPS-W-2** |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-3   | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1502+/-188     |
| NAPS-W-1  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 6231+/-388     |
| NAPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1351+/-174     |
| NAPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 6532+/-395     |

\*NAPS-A-1 not analyzed due to power failure

\*\*SPS-W-2 not collected due to access restrictions at sample site.

**Virginia Department of Health**  
**Week 25: 06/17/24 – 06/24/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.008                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.008                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.06+/0.008                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.06+/0.009                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.06+/0.009                                   |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 901+/-142      |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1126+/-159     |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1802+/-201     |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 8333+/-444     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1802+/-201     |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 10511+/-493    |

**Virginia Department of Health**  
**Week 26: 06/24/24 - 07/01/24\***

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  |                                          |                                           |                                           |                                               |
| SPS-A-2  |                                          |                                           |                                           |                                               |
| PSP-A-1  |                                          |                                           |                                           |                                               |
| NAPS-A-1 |                                          |                                           |                                           |                                               |
| NAPS-A-2 |                                          |                                           |                                           |                                               |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-3  |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-1 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-2 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-3 |                                        |       |       |       |       |       |       |        |        |        |                |

\*No samples collected due to other program activities.

**Virginia Department of Health**  
**Week 27: 07/01/24 – 07/08/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.004                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.003                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.005                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.004                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.003                                   |

**Water**

| Site     | Gamma and Tritium Activity - pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 300+/-71       |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 225+/-71       |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 450+/-101      |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 5781+/-370     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 225+/-71       |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 6381+/-390     |

**Virginia Department of Health**  
**Week 28: 07/08/24 – 07/15/24\***

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  |                                          |                                           |                                           |                                               |
| SPS-A-2  |                                          |                                           |                                           |                                               |
| PSP-A-1  |                                          |                                           |                                           |                                               |
| NAPS-A-1 |                                          |                                           |                                           |                                               |
| NAPS-A-2 |                                          |                                           |                                           |                                               |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-3  |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-1 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-2 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-3 |                                        |       |       |       |       |       |       |        |        |        |                |

\*No samples collected due to staff training for annual nuclear power plant exercise.

# Virginia Department of Health

## Week 29: 07/15/24 – 07/22/24\*

### Air

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  |                                          |                                           |                                           |                                               |
| SPS-A-2  |                                          |                                           |                                           |                                               |
| PSP-A-1  |                                          |                                           |                                           |                                               |
| NAPS-A-1 |                                          |                                           |                                           |                                               |
| NAPS-A-2 |                                          |                                           |                                           |                                               |

### Water

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-3  |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-1 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-2 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-3 |                                        |       |       |       |       |       |       |        |        |        |                |

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\*No samples collected due to staff participation in annual nuclear power plant exercise.



**Virginia Department of Health**  
**Week 30: 07/22/24 – 07/29/24\***

## Air

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  |                                          |                                           |                                           |                                               |
| SPS-A-2  |                                          |                                           |                                           |                                               |
| PSP-A-1  |                                          |                                           |                                           |                                               |
| NAPS-A-1 |                                          |                                           |                                           |                                               |
| NAPS-A-2 |                                          |                                           |                                           |                                               |

## Water

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-3  |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-1 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-2 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-3 |                                        |       |       |       |       |       |       |        |        |        |                |

\*No samples collected due to staff participation in radiological training event.

**Virginia Department of Health**  
**Week 31: 07/29/24 – 08/05/24\***

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  |                                          |                                           |                                           |                                               |
| SPS-A-2  |                                          |                                           |                                           |                                               |
| PSP-A-1  |                                          |                                           |                                           |                                               |
| NAPS-A-1 |                                          |                                           |                                           |                                               |
| NAPS-A-2 |                                          |                                           |                                           |                                               |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-3  |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-1 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-2 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-3 |                                        |       |       |       |       |       |       |        |        |        |                |

\*No samples collected due to staff participation in radiological training event.

# Virginia Department of Health

## Week 32: 08/05/24 – 08/12/24

### Air\*

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  |                                          |                                           |                                           |                                               |
| SPS-A-2  |                                          |                                           |                                           |                                               |
| PSP-A-1  |                                          |                                           |                                           |                                               |
| NAPS-A-1 |                                          |                                           |                                           |                                               |
| NAPS-A-2 |                                          |                                           |                                           |                                               |

### Water

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 300+/-100      |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 0+/-236        |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 0+/-236        |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 5330+/-355     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 0+/-236        |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 5105+/-348     |

\*No sample analysis completed for gross beta and gamma due to air samplers not in service week prior.

# Virginia Department of Health

## Week 33: 08/12/24 – 08/19/24

### Air

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.005                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.08+/0.011                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.007                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.007                                   |

### Water

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1351+/-175     |
| SPS-W-2* |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1201+/-175     |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 6006+/-378     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 5781+/-371     |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 6006+/-378     |

\*No sample collected for SPS-W-2 due to debris cleanup from Tropical Storm Debby at sample site.

**Virginia Department of Health**  
**Week 34: 08/19/24 – 08/26/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.005                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.005                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.007                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.005                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.005                                   |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 526+/-101      |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 526+/-101      |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 225+/-71       |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 5556+/-370     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 300+/-71       |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 4955+/-356     |

**Virginia Department of Health**  
**Week 35: 08/26/24 - 09/02/24\***

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  |                                          |                                           |                                           |                                               |
| SPS-A-2  |                                          |                                           |                                           |                                               |
| PSP-A-1  |                                          |                                           |                                           |                                               |
| NAPS-A-1 |                                          |                                           |                                           |                                               |
| NAPS-A-2 |                                          |                                           |                                           |                                               |

**Water**

| Site     | Gamma and Tritium Activity - pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-3  |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-1 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-2 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-3 |                                        |       |       |       |       |       |       |        |        |        |                |

\*No samples collected due to scheduled MICL maintenance.

**Virginia Department of Health**  
**Week 36: 09/02/24 – 09/09/24**

**Air**

| Site            | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|-----------------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|                 | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| <b>SPS-A-1</b>  | NDR                                      | NDR                                       | NDR                                       | 0.00+/0.001                                   |
| <b>SPS-A-2</b>  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.004                                   |
| <b>PSP-A-1</b>  | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.006                                   |
| <b>NAPS-A-1</b> | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.005                                   |
| <b>NAPS-A-2</b> | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.004                                   |

**Water**

| Site            | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|-----------------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|                 | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| <b>SPS-W-1</b>  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 0+/-0          |
| <b>SPS-W-2</b>  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 150+/-71       |
| <b>SPS-W-3*</b> |                                        |       |       |       |       |       |       |        |        |        |                |
| <b>NAPS-W-1</b> | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 5150+/-350     |
| <b>NAPS-W-2</b> | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 225+/-71       |
| <b>NAPS-W-3</b> | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 5330+/-350     |

\*No sample collected at SPS-W-3 due to road closure.

**Virginia Department of Health**  
**Week 37: 09/09/24 – 09/16/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.08+/0.011                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.06+/0.009                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.11+/0.014                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.07+/0.010                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.09+/0.012                                   |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 375+/-101      |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 0+/-213        |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 225+/-71       |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 5030+/-349     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 0+/-213        |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 5105+/-349     |



**Virginia Department of Health**  
**Week 38: 09/16/24 – 09/23/24\***

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  |                                          |                                           |                                           |                                               |
| SPS-A-2  |                                          |                                           |                                           |                                               |
| PSP-A-1  |                                          |                                           |                                           |                                               |
| NAPS-A-1 |                                          |                                           |                                           |                                               |
| NAPS-A-2 |                                          |                                           |                                           |                                               |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-3  |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-1 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-2 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-3 |                                        |       |       |       |       |       |       |        |        |        |                |

\*No samples collected due to staff participation in radiological training event with MRC.

**Virginia Department of Health**  
**Week 39: 09/23/24 – 09/30/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.003                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.003                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.005                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.003                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.003                                   |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1* |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1201+/-174     |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 526+/-123      |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 5480+/-362     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 450+/-100      |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 5030+/-348     |

\*No sample collected for SPS-W-1 due to dock repairs at sample collection site.

**Virginia Department of Health**  
**Week 40: 09/30/24 – 10/07/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.004                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.005                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.005                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.02+/0.004                                   |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 0+/-236        |
| SPS-W-2* |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 375+/-101      |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 4354+/-319     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 0+/-236        |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 4580+/-334     |

\*No sample collected for SPS-W-2 due to high river level closure at sample site.

**Virginia Department of Health**  
**Week 41: 10/07/24 – 10/14/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.005                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.007                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.06+/0.009                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.007                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.007                                   |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 375+/-101      |
| SPS-W-2* |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 225+/-71       |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 4505+/-326     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 225+/-71       |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 4730+/-334     |

\*No sample collected for SPS-W-2 due to high river level closure at sample site.

**Virginia Department of Health**  
**Week 42: 10/14/24 – 10/21/24 \***

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  |                                          |                                           |                                           |                                               |
| SPS-A-2  |                                          |                                           |                                           |                                               |
| PSP-A-1  |                                          |                                           |                                           |                                               |
| NAPS-A-1 |                                          |                                           |                                           |                                               |
| NAPS-A-2 |                                          |                                           |                                           |                                               |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-3  |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-1 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-2 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-3 |                                        |       |       |       |       |       |       |        |        |        |                |

\*No samples collected due to state holiday on 10/14/24.

**Virginia Department of Health**  
**Week 43: 10/21/24 – 10/28/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.007                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.008                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.06+/0.008                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.007                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.07+/0.009                                   |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 976+/-142      |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 526+/-100      |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 601+/-123      |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 4880+/-339     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 601+/-123      |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 4880+/-339     |

**Virginia Department of Health**  
**Week 44: 10/28/24 – 11/04/24**

**Air**

| Site            | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|-----------------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|                 | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| <b>SPS-A-1</b>  | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.007                                   |
| <b>SPS-A-2</b>  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| <b>PSP-A-1</b>  | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.007                                   |
| <b>NAPS-A-1</b> | NDR                                      | NDR                                       | NDR                                       | 0.07+/0.010                                   |
| <b>NAPS-A-2</b> | NDR                                      | NDR                                       | NDR                                       | 0.10+/0.014                                   |

**Water**

| Site            | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|-----------------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|                 | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| <b>SPS-W-1</b>  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 751+/-124      |
| <b>SPS-W-2</b>  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 300+/-71       |
| <b>SPS-W-3</b>  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 676+/-124      |
| <b>NAPS-W-1</b> | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 5030+/-342     |
| <b>NAPS-W-2</b> | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1351+/-175     |
| <b>NAPS-W-3</b> | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 5480+/-357     |

**Virginia Department of Health**  
**Week 45: 11/04/24 – 11/11/24**

**Air**

| Site            | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|-----------------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|                 | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| <b>SPS-A-1*</b> |                                          |                                           |                                           |                                               |
| <b>SPS-A-2</b>  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.004                                   |
| <b>PSP-A-1</b>  | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.008                                   |
| <b>NAPS-A-1</b> | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.008                                   |
| <b>NAPS-A-2</b> | NDR                                      | NDR                                       | NDR                                       | 0.06+/0.008                                   |

**Water**

| Site            | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|-----------------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|                 | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| <b>SPS-W-1</b>  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 375+/-100      |
| <b>SPS-W-2</b>  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 375+/-100      |
| <b>SPS-W-3</b>  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 300+/-71       |
| <b>NAPS-W-1</b> | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 4429+/-317     |
| <b>NAPS-W-2</b> | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 0+/-224        |
| <b>NAPS-W-3</b> | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 4655+/-325     |

\*Note: No sample analysis completed for SPS-A-1 due to equipment malfunction.



**Virginia Department of Health**  
**Week 46: 11/11/24 – 11/18/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.07+/0.010                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.06+/0.009                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |

**Water**

| Site     | Gamma and Tritium Activity - pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 601+/-123      |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 526+/-101      |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 526+/-123      |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 4955+/-342     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 300+/-71       |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 4505+/-326     |

**Virginia Department of Health**  
**Week 47: 11/18/24 – 11/25/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.006                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.007                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.10+/0.014                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.10+/0.014                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.06+/0.009                                   |

**Water**

| Site     | Gamma and Tritium Activity - pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1727+/-201     |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1126+/-159     |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 901+/-142      |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 4880+/-341     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 0+/-213        |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 4655+/-333     |

**Virginia Department of Health**  
**Week 48: 11/25/24 – 12/02/24\***

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  |                                          |                                           |                                           |                                               |
| SPS-A-2  |                                          |                                           |                                           |                                               |
| PSP-A-1  |                                          |                                           |                                           |                                               |
| NAPS-A-1 |                                          |                                           |                                           |                                               |
| NAPS-A-2 |                                          |                                           |                                           |                                               |

**Water**

| Site     | Gamma and Tritium Activity - pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-3  |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-1 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-2 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-3 |                                        |       |       |       |       |       |       |        |        |        |                |

Note: No samples collected due to state holiday.

**Virginia Department of Health**  
**Week 49: 12/02/24 – 12/09/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.004                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.004                                   |
| PSP-A-1* |                                          |                                           |                                           |                                               |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.006                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.006                                   |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 450+/-100      |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 826+/-142      |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 225+/-71       |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 4129+/-309     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 225+/-71       |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 4655+/-325     |

\*Note: PSP-A-1 sample not collected due to restricted access to Pocahontas State Park.

**Virginia Department of Health**  
**Week 50: 12/09/24 – 12/16/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.008                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.008                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.005                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.06+/0.009                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.007                                   |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1201+/-158     |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 1051+/-158     |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 4580+/-325     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 225+/-71       |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 4580+/-325     |

\*Note: sample not collected for SPS-W-1 due to dredging operation at sample site.

**Virginia Department of Health**  
**Week 51: 12/16/24 - 12/23/24**

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.005                                   |
| SPS-A-2  | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.004                                   |
| PSP-A-1  | NDR                                      | NDR                                       | NDR                                       | 0.05+/0.007                                   |
| NAPS-A-1 | NDR                                      | NDR                                       | NDR                                       | 0.04+/0.007                                   |
| NAPS-A-2 | NDR                                      | NDR                                       | NDR                                       | 0.03+/0.004                                   |

**Water**

| Site     | Gamma and Tritium Activity - pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 375+/-101      |
| SPS-W-3  | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 526+/-101      |
| NAPS-W-1 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 4279+/-319     |
| NAPS-W-2 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 375+/-101      |
| NAPS-W-3 | NDR                                    | NDR   | NDR   | NDR   | NDR   | NDR   | NDR   | NDR    | NDR    | NDR    | 4279+/-319     |

\*Note: sample not collected for SPS-W-1 due to dredging operation at sample site.

**Virginia Department of Health**  
**Week 52: 12/23/24 – 12/30/24\***

**Air**

| Site     | Gamma & Radiogas in Air                  |                                           |                                           | Air Particulate                               |
|----------|------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
|          | I-131 Activity<br>pCi/meter <sup>3</sup> | Cs-134 Activity<br>pCi/meter <sup>3</sup> | Cs-137 Activity<br>pCi/meter <sup>3</sup> | Gross Beta Activity<br>pCi/meter <sup>3</sup> |
| SPS-A-1  |                                          |                                           |                                           |                                               |
| SPS-A-2  |                                          |                                           |                                           |                                               |
| PSP-A-1  |                                          |                                           |                                           |                                               |
| NAPS-A-1 |                                          |                                           |                                           |                                               |
| NAPS-A-2 |                                          |                                           |                                           |                                               |

**Water**

| Site     | Gamma and Tritium Activity – pCi/Liter |       |       |       |       |       |       |        |        |        |                |
|----------|----------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|----------------|
|          | Mn 54                                  | Co 58 | Fe 59 | Co 60 | Zn 65 | Zr 95 | I 131 | Cs 134 | Cs 137 | Ba 140 | H3<br>Activity |
| SPS-W-1  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-2  |                                        |       |       |       |       |       |       |        |        |        |                |
| SPS-W-3  |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-1 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-2 |                                        |       |       |       |       |       |       |        |        |        |                |
| NAPS-W-3 |                                        |       |       |       |       |       |       |        |        |        |                |

Note: No samples collected due to state holiday.

**Virginia Department of Health**  
**SURFACE WATER**

January 1, 2024 through December 31, 2024

James River – Pier #1  
NNSB-W-1

| Qtr. | Date<br>collected | Gamma Activity – pCi/liter |        |       |       |       |           |
|------|-------------------|----------------------------|--------|-------|-------|-------|-----------|
|      |                   | Ba-140                     | Cs-137 | I-131 | Mn-54 | Zn-65 | Zr95/Nb95 |
| 1st  |                   |                            |        |       |       |       |           |
|      |                   |                            |        |       |       |       |           |
| 2nd  |                   |                            |        |       |       |       |           |
|      |                   |                            |        |       |       |       |           |
| 3rd  |                   |                            |        |       |       |       |           |
|      |                   |                            |        |       |       |       |           |
| 4th  |                   |                            |        |       |       |       |           |
|      |                   |                            |        |       |       |       |           |

James River – Shipway #11  
NNSB-W-2

| Qtr. | Date collected | Gamma Activity – pCi/liter |        |       |       |       |           |
|------|----------------|----------------------------|--------|-------|-------|-------|-----------|
|      |                | Ba-140                     | Cs-137 | I-131 | Mn-54 | Zn-65 | Zr95/Nb95 |
| 1st  |                |                            |        |       |       |       |           |
| 2nd  |                |                            |        |       |       |       |           |
| 3rd  |                |                            |        |       |       |       |           |
| 4th  |                |                            |        |       |       |       |           |



# Virginia Department of Health

## SURFACE WATER

January 1, 2024 through December 31, 2024

### Norfolk Naval Shipyard

Elizabeth River – Dry Dock #4  
Norfolk Naval Shipyard NNSY-W-1

| Qtr. | Date collected | Gamma Activity – pCi/liter |        |       |       |           |
|------|----------------|----------------------------|--------|-------|-------|-----------|
| 1st  |                | Ba-140                     | Cs-137 | I-131 | Mn-54 | Zn-65     |
|      |                |                            |        |       |       | Zr95/Nb95 |
| 2nd  |                | Ba-140                     | Cs-137 | I-131 | Mn-54 | Zn-65     |
|      |                |                            |        |       |       | Zr95/Nb95 |
|      | 04/16/2024     | NDR                        | NDR    | NDR   | NDR   | NDR       |
| 3rd  |                | Ba-140                     | Cs-137 | I-131 | Mn-54 | Zn-65     |
|      |                |                            |        |       |       | Zr95/Nb95 |
| 4th  |                | Ba-140                     | Cs-137 | I-131 | Mn-54 | Zn-65     |
|      |                |                            |        |       |       | Zr95/Nb95 |

# Virginia Department of Health

## SURFACE WATER

January 1, 2024 through December 31, 2024

### Norfolk Naval Shipyard

Elizabeth River – Dry Dock #8  
Norfolk Naval Shipyard NNSY-W-2

| Qtr. | Date collected | Gamma Activity – pCi/liter |        |       |       |       |           |
|------|----------------|----------------------------|--------|-------|-------|-------|-----------|
| 1st  |                | Ba-140                     | Cs-137 | I-131 | Mn-54 | Zn-65 | Zr95/Nb95 |
|      |                |                            |        |       |       |       |           |
| 2nd  |                | Ba-140                     | Cs-137 | I-131 | Mn-54 | Zn-65 | Zr95/Nb95 |
|      | 04/16/2024     | NDR                        | NDR    | NDR   | NDR   | NDR   | NDR       |
| 3rd  |                | Ba-140                     | Cs-137 | I-131 | Mn-54 | Zn-65 | Zr95/Nb95 |
|      |                |                            |        |       |       |       |           |
| 4th  |                | Ba-140                     | Cs-137 | I-131 | Mn-54 | Zn-65 | Zr95/Nb95 |
|      |                |                            |        |       |       |       |           |

# Virginia Department of Health

## SURFACE WATER

January 1, 2024 through December 31, 2024

### Norfolk Naval Shipyard

Elizabeth River – Drydock #1  
Norfolk Naval Shipyard NNSY-W-3

| Qtr. | Date collected | Gamma Activity – pCi/liter |        |       |       |       |           |
|------|----------------|----------------------------|--------|-------|-------|-------|-----------|
| 1st  |                | Ba-140                     | Cs-137 | I-131 | Mn-54 | Zn-65 | Zr95/Nb95 |
|      |                |                            |        |       |       |       |           |
| 2nd  | 04/16/2024     | NDR                        | NDR    | NDR   | NDR   | NDR   | NDR       |
|      |                |                            |        |       |       |       |           |
| 3rd  |                | Ba-140                     | Cs-137 | I-131 | Mn-54 | Zn-65 | Zr95/Nb95 |
|      |                |                            |        |       |       |       |           |
| 4rd  |                | Ba-140                     | Cs-137 | I-131 | Mn-54 | Zn-65 | Zr95/Nb95 |
|      |                |                            |        |       |       |       |           |

# Virginia Department of Health SILT

January 1, 2024 through December 31, 2024

## Newport News Shipbuilder

| Location                                | Date Collected | Gamma Activity<br>pCi/gram |        |       |       |
|-----------------------------------------|----------------|----------------------------|--------|-------|-------|
| James River –<br>Pier 1<br><br>NNSB-S-1 |                | Cs-134                     | Cs-137 | Co-58 | Co-60 |
| James River –<br>Pier 1<br><br>NNSB-S-1 |                | Cs-134                     | Cs-137 | Co-58 | Co-60 |
| James River –<br>Pier 1<br><br>NNSB-S-1 |                | Cs-134                     | Cs-137 | Co-58 | Co-60 |
| James River –<br>Pier 1<br><br>NNSB-S-1 |                | Cs-134                     | Cs-137 | Co-58 | Co-60 |

Virginia Department of Health  
SILT

January 1, 2024 through December 31, 2024

Newport News Shipbuilder

| Location                                    | Date<br>Collected | Gamma<br>Activity<br>pCi/gram |        |       |       |
|---------------------------------------------|-------------------|-------------------------------|--------|-------|-------|
| James River –<br>Shipway 11<br><br>NNSB-S-2 |                   | Cs-134                        | Cs-137 | Co-58 | Co-60 |
| James River –<br>Shipway 11<br><br>NNSB-S-2 |                   | Cs-134                        | Cs-137 | Co-58 | Co-60 |
| James River –<br>Shipway 11<br><br>NNSB-S-2 |                   | Cs-134                        | Cs-137 | Co-58 | Co-60 |
| James River –<br>Shipway 11<br><br>NNSB-S-2 |                   | Cs-134                        | Cs-137 | Co-58 | Co-60 |

# Virginia Department of Health SILT

January 1, 2024 through December 31, 2024

## Norfolk Naval Shipyard

| Location                      | Date Collected | Gamma Activity<br>pCi/gram |      |      |  |
|-------------------------------|----------------|----------------------------|------|------|--|
| Elizabeth River<br>Drydock #4 | 04/16/2024     |                            |      |      |  |
| NNSY-S-1                      | Cs134          | Cs137                      | Co58 | Co60 |  |
|                               | NDR            | NDR                        | NDR  | NDR  |  |
| Elizabeth River<br>Drydock #4 |                |                            |      |      |  |
| NNSY-S-1                      | Cs134          | Cs137                      | Co58 | Co60 |  |
| Elizabeth River<br>Drydock #4 |                |                            |      |      |  |
| NNSY-S-1                      | Cs134          | Cs137                      | Co58 | Co60 |  |
| Elizabeth River<br>Drydock #4 |                |                            |      |      |  |
| NNSY-S-1                      | Cs134          | Cs137                      | Co58 | Co60 |  |

# Virginia Department of Health SILT

January 1, 2024 through December 31, 2024

## Norfolk Naval Shipyard

| Location                      | Date       | Gamma Activity |       |       |      |
|-------------------------------|------------|----------------|-------|-------|------|
|                               | Collected  | pCi/gram       |       |       |      |
| Elizabeth River<br>Drydock #8 | 04/16/2024 |                |       |       |      |
|                               |            | NNSY-S-2       | Cs134 | Cs137 | Co58 |
|                               |            |                |       |       | Co60 |
|                               |            | NDR            | NDR   | NDR   | NDR  |
| Elizabeth River<br>Drydock #8 |            |                |       |       |      |
|                               |            | NNSY-S-2       | Cs134 | Cs137 | Co58 |
|                               |            |                |       |       | Co60 |
| Elizabeth River<br>Drydock #8 | 09/20/20   |                |       |       |      |
|                               |            | NNSY-S-2       | Cs134 | Cs137 | Co58 |
|                               |            |                |       |       | Co60 |
| Elizabeth River<br>Drydock #8 |            |                |       |       |      |
|                               |            | NNSY-S-2       | Cs134 | Cs137 | Co58 |
|                               |            |                |       |       | Co60 |

# Virginia Department of Health

## SILT

January 1, 2024 through December 31, 2024

| Location                      | Date Collected | Gamma Activity |      |      |  |
|-------------------------------|----------------|----------------|------|------|--|
|                               |                | pCi/gram       |      |      |  |
| Elizabeth River<br>Drydock #1 | 04/16/2024     |                |      |      |  |
| NNSY-S-3                      | Cs134          | Cs137          | Co58 | Co60 |  |
|                               | NDR            | NDR            | NDR  | NDR  |  |
| Elizabeth River<br>Drydock #1 |                |                |      |      |  |
| NNSY-S-3                      | Cs134          | Cs137          | Co58 | Co60 |  |
| Elizabeth River<br>Drydock #1 |                |                |      |      |  |
| NNSY-S-3                      | Cs134          | Cs137          | Co58 | Co60 |  |
| Elizabeth River<br>Drydock #1 |                |                |      |      |  |
| NNSY-S-3                      | Cs134          | Cs137          | Co58 | Co60 |  |



# Virginia Department of Health

## SILT

January 1, 2024 through December 31, 2024

### North Anna Power Station Discharge Canal, North Anna River – NAPS-S-1

| Date Collected | Gamma Activity<br>pCi/gram |        |       |       |
|----------------|----------------------------|--------|-------|-------|
|                | Cs-134                     | Cs-137 | Co-58 | Co-60 |
| 04/18/2024     | NDR                        | NDR    | NDR   | NDR   |
| Date Collected | Gamma Activity<br>pCi/gram |        |       |       |
|                | Cs-134                     | Cs-137 | Co-58 | Co-60 |
| 10/03/2024     | NDR                        | NDR    | NDR   | NDR   |

### Surry Power Station Discharge Canal SPS-S-1

| Date Collected | Gamma Activity<br>pCi/gram |        |       |       |
|----------------|----------------------------|--------|-------|-------|
|                | Cs-134                     | Cs-137 | Co-58 | Co-60 |
| 2/13/24        | NDR                        | NDR    | NDR   | NDR   |
| Date Collected | Gamma Activity<br>pCi/gram |        |       |       |
|                | Cs-134                     | Cs-137 | Co-58 | Co-60 |
| 9/4/24         | NDR                        | NDR    | NDR   | NDR   |

Note: Silt samples are collected bi-annually.

# Virginia Department of Health

## FISH

January 1, 2024 through December 31, 2024

### Dominion Nuclear Power Station

| Location<br>Type of fish  | Date<br>Collected | Isotope | pCi/gram |
|---------------------------|-------------------|---------|----------|
| North Anna Cooling Lagoon | 1/18              | Ba-140  | <0.097   |
|                           |                   | Cs-134  | <0.019   |
|                           |                   | Cs-137  | <0.022   |
|                           |                   | Co-58   | <0.021   |
|                           |                   | Co-60   | <0.021   |
|                           |                   | I-131   | <0.033   |
|                           |                   | Fe-59   | <0.044   |
|                           |                   | Mn-54   | <0.019   |
|                           |                   | Ru-106  | <0.174   |
|                           |                   | Ag-110M | <0.019   |
| NAPS- F-1<br>(Fish)       | 10/03/2024        | Zn-65   | <0.045   |
|                           |                   | Nb-95   | <0.035   |
|                           |                   |         |          |
|                           |                   |         |          |
|                           |                   |         |          |
|                           |                   |         |          |
|                           |                   |         |          |
|                           |                   |         |          |
|                           |                   |         |          |
|                           |                   |         |          |
| Surry Discharge Canal     |                   | Ba-140  | <0.229   |
|                           |                   | Cs-134  | <0.018   |
|                           |                   | Cs-137  | <0.017   |
|                           |                   | Co-58   | <0.021   |
|                           |                   | Co-60   | <0.017   |
|                           |                   | I-131   | <0.134   |
|                           |                   | Fe-59   | <0.045   |
|                           |                   | Mn-54   | <0.016   |
|                           |                   | Ru-106  | <0.154   |
|                           |                   | Ag-110M | <0.020   |
| SPS-F-1<br>(Fish)         | 4-22-2024         | Zn-65   | <0.035   |
|                           |                   | Nb-95   | <0.035   |
|                           |                   |         |          |
|                           |                   |         |          |

Note: Fish samples collected bi-annually

# Virginia Department of Health FISH

January 1, 2024 through December 31, 2024

## Dominion Nuclear Power Station

| Location<br>Type of fish  | Date<br>Collected | Isotope | pCi/gram |
|---------------------------|-------------------|---------|----------|
| North Anna Cooling Lagoon |                   | Ba-140  |          |
|                           |                   | Cs-134  |          |
|                           |                   | Cs-137  |          |
|                           |                   | Co-58   |          |
|                           |                   | Co-60   |          |
|                           |                   | I-131   |          |
|                           |                   | Fe-59   |          |
|                           |                   | Mn-54   |          |
|                           |                   | Ru-106  |          |
|                           |                   | Ag-110  |          |
| NAPS- F-2<br>(Fish)       |                   | Zn-65   |          |
|                           |                   | Nb-95   |          |
|                           |                   |         |          |
|                           |                   |         |          |
|                           |                   |         |          |
|                           |                   |         |          |
|                           |                   |         |          |
|                           |                   |         |          |
|                           |                   |         |          |
|                           |                   |         |          |
| Surry Discharge Canal     |                   | Ba-140  | <0.064   |
|                           |                   | Cs-134  | <0.007   |
|                           |                   | Cs-137  | <0.010   |
|                           |                   | Co-58   | <0.009   |
|                           |                   | Co-60   | <0.008   |
|                           |                   | I-131   | <0.032   |
|                           |                   | Fe-59   | <0.020   |
|                           |                   | Mn-54   | <0.010   |
|                           |                   | Ru-106  | <0.079   |
|                           |                   | Ag-110  | <0.088   |
| SPS-F-2<br>(Fish)         | 10/28/2024        | Zn-65   | <0.017   |
|                           |                   | Nb-95   | <0.018   |
|                           |                   |         |          |
|                           |                   |         |          |

Note: Fish samples collected bi-annually

# Virginia Department of Health

## SHELLFISH

January 1, 2024 through December 31, 2024

### Dominion Nuclear Power Station

| Location<br>Type of fish | Date<br>Collected | Isotope | pCi/gram |
|--------------------------|-------------------|---------|----------|
| Surry Power Station      | 04/10/2024        | Ba-140  | <1390    |
|                          |                   | Cs-134  | <17.1    |
|                          |                   | Cs-137  | <18.7    |
|                          |                   | Co-58   | <22.2    |
|                          |                   | Co-60   | <16.1    |
| SPS-R-1                  |                   | I-131   | <2560    |
| (Clams and Oysters)      |                   | Fe-59   | <59.4    |
|                          |                   | Mn-54   | <16.6    |
|                          |                   | Ru-106  | <164     |
|                          |                   | Ag-110M | <23.6    |
|                          |                   | Zn-65   | <34.2    |
|                          |                   | Nb-95   | <38.0    |

Note: Shellfish are collected annually when available.

# Virginia Department of Health

## Milk

January 1, 2024 through December 31, 2024

| Williamsburg MO Smith Farm<br>SPS-M-1<br>1st Quarter Date: No sample collected this quarter |                     |
|---------------------------------------------------------------------------------------------|---------------------|
| Isotope                                                                                     | Results - pCi/liter |
| Ba-140                                                                                      |                     |
| Cs-134                                                                                      |                     |
| Cs-137                                                                                      |                     |
| K-40                                                                                        |                     |
| I-131                                                                                       |                     |
| Sr-89                                                                                       |                     |
| Sr-90                                                                                       |                     |
| Williamsburg MO Smith Farm<br>SPS-M-1<br>2nd Quarter Date:                                  |                     |
| Isotope                                                                                     | Results - pCi/liter |
| Ba-140                                                                                      |                     |
| Cs-134                                                                                      |                     |
| Cs-137                                                                                      |                     |
| K-40                                                                                        |                     |
| I-131                                                                                       |                     |
| Sr-89                                                                                       |                     |
| Sr-90                                                                                       |                     |
| Williamsburg MO Smith Farm<br>SPS-M-1<br>3rd Quarter Date:                                  |                     |
| Isotope                                                                                     | Results - pCi/liter |
| Ba-140                                                                                      |                     |
| Cs-134                                                                                      |                     |
| Cs-137                                                                                      |                     |
| K-40                                                                                        |                     |
| I-131                                                                                       |                     |
| Sr-89                                                                                       |                     |
| Sr-90                                                                                       |                     |

**Virginia Department of Health**  
**Milk**

January 1, 2024 through December 31, 2024

| Williamsburg MO Smith Farm |                     |  |
|----------------------------|---------------------|--|
| SPS-M-1                    |                     |  |
| 4th Quarter Date:          |                     |  |
| Isotope                    | Results - pCi/liter |  |
| Ba-140                     |                     |  |
| Cs-134                     |                     |  |
| Cs-137                     |                     |  |
| K-40                       |                     |  |
| I-131                      |                     |  |
| Sr-89                      |                     |  |
| Sr-90                      |                     |  |

# Virginia Department of Health

## VEGETATION

January 1, 2024 through December 31, 2024

| Location                                                   | Date collected | Type         | Isotope | Results<br>pCi/Gram (wet weight) |
|------------------------------------------------------------|----------------|--------------|---------|----------------------------------|
| Various locations within<br>the 10 mile EPZ                | 09/10/2024     | Mixed Greens | I-131   | NDR                              |
| SPS-V-1                                                    |                |              | Cs-134  | NDR                              |
|                                                            |                |              | Cs-137  | NDR                              |
| Various locations within<br>the 10 mile EPZ                | 09/10/2024     | Mixed Greens | I-131   | NDR                              |
| NAPS-V-1                                                   |                |              | Cs-134  | NDR                              |
|                                                            |                |              | Cs-137  | NDR                              |
| Surry Count Various<br>locations within the 10<br>mile EPZ |                | Mixed Greens | I-131   |                                  |
| SPS-V-1                                                    |                |              | Cs-134  |                                  |
|                                                            |                |              | Cs-137  |                                  |
| Various locations within<br>the 10 mile EPZ                |                | Mixed Greens | I-131   |                                  |
| NAPS-V-1                                                   |                |              | Cs-134  |                                  |
|                                                            |                |              | Cs-137  |                                  |

Note: Vegetation is collected bi-annually when available.

# Virginia Department of Health

## AMBIENT GAMMA EXPOSURE

### FIRST QUARTER

| Location                         | Station   | Net Exposure Rate<br>mR/Std Qtr +/- 2S.D. |     |       |
|----------------------------------|-----------|-------------------------------------------|-----|-------|
| Jamestown – Historical site      | SPS-D-1   | 21.35                                     | +/- | 9.24  |
| Williamsburg – Airport           | SPS-D-2   | 22.54                                     | +/- | 9.49  |
| Williamsburg – Busch Gardens     | SPS-D-3   | 22.91                                     | +/- | 9.57  |
| Newport News - Lee Hall          | SPS-D-4   | 27.07                                     | +/- | 10.41 |
| Naval Weapons Station – 1        | SPS-D-5   | 19.20                                     | +/- | 8.76  |
| Newport News – Fort Eustis       | SPS-D-6   | 21.50                                     | +/- | 9.27  |
| Surry – Route 628                | SPS-D-7   | 20.71                                     | +/- | 9.10  |
| Surry – Lawnes Creek             | SPS-D-8   | 26.32                                     | +/- | 10.26 |
| Surry Power Station              | SPS-D-9   | 24.26                                     | +/- | 9.85  |
| Surry – Hog Point                | SPS-D-10  | 22.33                                     | +/- | 9.45  |
| Surry – Bacon's Castle           | SPS-D-11  | 22.96                                     | +/- | 9.58  |
| Surry – Alliance                 | SPS-D-12  | 18.27                                     | +/- | 8.55  |
| Surry – Scotland Wharf           | SPS-D-13  | 23.52                                     | +/- | 9.70  |
| Surry – Lebanon Baptist Church   | SPS-D-14  | 26.70                                     | +/- | 10.33 |
| Louisa County - Mineral          | NAPS-D-1  | 26.99                                     | +/- | 10.39 |
| Louisa County – Wares Crossroads | NAPS-D-2  | 21.27                                     | +/- | 9.22  |
| Spotsylvania – Good Hope Church  | NAPS-D-3  | 30.15                                     | +/- | 10.98 |
| Spotsylvania – Route 713         | NAPS-D-4  | 22.77                                     | +/- | 9.54  |
| Spotsylvania Route 614           | NAPS-D-5  | 23.21                                     | +/- | 9.64  |
| Spotsylvania – Levy              | NAPS-D-6  | 24.26                                     | +/- | 9.85  |
| Louisa County – Bumpass Fire     | NAPS-D-7  | 29.45                                     | +/- | 10.85 |
| Louisa County – Fred Hall        | NAPS-D-8  | 27.63                                     | +/- | 10.51 |
| Louisa County – Aspen Hill       | NAPS-D-9  | 32.69                                     | +/- | 11.43 |
| Louisa County – Route 685        | NAPS-D-10 | 26.24                                     | +/- | 10.24 |
| Louisa County – Route 700        | NAPS-D-11 | 29.01                                     | +/- | 10.77 |
| North Anna Power Station         | NAPS-D-12 | 21.61                                     | +/- | 9.30  |
| Pocahontas State Park (Control)  | PSP-D-1   | 29.92                                     | +/- | 10.94 |
| Radiological Health              | ORH-D-1   | 13.90                                     | +/- | 7.46  |
| Radiological Health              | ORH-D-2   | 12.67                                     | +/- | 7.12  |



# Virginia Department of Health

## AMBIENT GAMMA EXPOSURE

### SECOND QUARTER

| Location                         | Station   | Net Exposure Rate<br>mR/Std Qtr +/- 2S.D. |     |       |
|----------------------------------|-----------|-------------------------------------------|-----|-------|
| Jamestown – Historical site      | SPS-D-1   | 21.37                                     | +/- | 9.25  |
| Williamsburg – Airport           | SPS-D-2   | 19.48                                     | +/- | 8.83  |
| Williamsburg – Busch Gardens     | SPS-D-3   | 23.40                                     | +/- | 9.67  |
| Newport News - Lee Hall          | SPS-D-4   | 26.82                                     | +/- | 10.36 |
| Naval Weapons Station – 1        | SPS-D-5   | 20.16                                     | +/- | 8.98  |
| Newport News – Fort Eustis       | SPS-D-6   | 21.53                                     | +/- | 9.28  |
| Surry – Route 628                | SPS-D-7   | 21.90                                     | +/- | 9.36  |
| Surry – Lawnes Creek             | SPS-D-8   | 28.38                                     | +/- | 10.65 |
| Surry Power Station              | SPS-D-9   | 25.30                                     | +/- | 10.06 |
| Surry – Hog Point                | SPS-D-10  | 26.16                                     | +/- | 10.23 |
| Surry – Bacon's Castle           | SPS-D-11  | 22.25                                     | +/- | 9.43  |
| Surry – Alliance                 | SPS-D-12  | 18.41                                     | +/- | 8.58  |
| Surry – Scotland Wharf           | SPS-D-13  | 23.00                                     | +/- | 9.59  |
| Surry – Lebanon Baptist Church   | SPS-D-14  | 26.31                                     | +/- | 10.26 |
| Louisa County - Mineral          | NAPS-D-1  | 25.19                                     | +/- | 10.04 |
| Louisa County – Wares Crossroads | NAPS-D-2  | 22.89                                     | +/- | 9.57  |
| Louisa County – Good Hope Church | NAPS-D-3  | 28.11                                     | +/- | 10.60 |
| Spotsylvania – Route 713         | NAPS-D-4  | 21.52                                     | +/- | 9.28  |
| Spotsylvania Route 614           | NAPS-D-5  | 21.19                                     | +/- | 9.21  |
| Spotsylvania – Levy              | NAPS-D-6  | 25.21                                     | +/- | 10.04 |
| Louisa County – Bumpass Fire Dep | NAPS-D-7  | 29.67                                     | +/- | 10.89 |
| Louisa County – Fred Hall        | NAPS-D-8  | 26.15                                     | +/- | 10.23 |
| Louisa County – Aspen Hill       | NAPS-D-9  | 30.71                                     | +/- | 11.08 |
| Louisa County – Route 685        | NAPS-D-10 | 22.75                                     | +/- | 9.54  |
| Louisa County – Route 700        | NAPS-D-11 | 25.90                                     | +/- | 10.18 |
| North Anna Power Station         | NAPS-D-12 | 28.66                                     | +/- | 10.71 |
| Pocahontas State Park (Control)  | PSP-D-1   | 29.92                                     | +/- | 10.94 |
| Radiological Health              | ORH-D-1   | 15.16                                     | +/- | 7.79  |
| Radiological Health              | ORH-D-2   | 11.68                                     | +/- | 6.84  |

# Virginia Department of Health

## AMBIENT GAMMA EXPOSURE

### THIRD QUARTER

| Location                           | Station   | Net Exposure Rate |     |       |
|------------------------------------|-----------|-------------------|-----|-------|
|                                    |           | mR/Std Qtr        | +/- | 2S.D. |
| Jamestown – Historical site        | SPS-D-1   | 24.41             | +/- | 9.88  |
| Williamsburg – Airport             | SPS-D-2   | 23.72             | +/- | 9.74  |
| Williamsburg – Busch Gardens       | SPS-D-3   | 23.80             | +/- | 9.76  |
| Newport News - Lee Hall            | SPS-D-4   | 30.09             | +/- | 10.97 |
| Naval Weapons Station – 1          | SPS-D-5   | 23.07             | +/- | 9.61  |
| Newport News – Fort Eustis         | SPS-D-6   | 24.19             | +/- | 9.84  |
| Surry – Route 628                  | SPS-D-7   | 24.33             | +/- | 9.86  |
| Surry – Lawnes Creek               | SPS-D-8   | 30.73             | +/- | 11.09 |
| Surry Power Station                | SPS-D-9   | 23.89             | +/- | 9.77  |
| Surry – Hog Point                  | SPS-D-10  | 23.36             | +/- | 9.67  |
| Surry – Bacon’s Castle             | SPS-D-11  | 24.98             | +/- | 10.00 |
| Surry – Alliance                   | SPS-D-12  | 21.11             | +/- | 9.19  |
| Surry – Scotland Wharf             | SPS-D-13  | 27.85             | +/- | 10.55 |
| Surry – Lebanon Baptist Church     | SPS-D-14  | 31.16             | +/- | 11.16 |
| Louisa County - Mineral            | NAPS-D-1  | 28.26             | +/- | 10.63 |
| Louisa County – Wares Crossroads   | NAPS-D-2  | 23.55             | +/- | 9.70  |
| Louisa County – Good Hope Church   | NAPS-D-3  | 33.12             | +/- | 11.51 |
| Spotsylvania – Route 713           | NAPS-D-4  | 26.54             | +/- | 10.30 |
| Spotsylvania Route 614             | NAPS-D-5  | 29.51             | +/- | 10.86 |
| Spotsylvania – Levy                | NAPS-D-6  | 26.45             | +/- | 10.29 |
| Louisa County – Bumpass Fire Dept. | NAPS-D-7  | 31.36             | +/- | 11.20 |
| Louisa County – Fred Hall          | NAPS-D-8  | 30.34             | +/- | 11.02 |
| Louisa County – Aspen Hill         | NAPS-D-9  | 38.81             | +/- | 12.46 |
| Louisa County – Route 685          | NAPS-D-10 | 28.13             | +/- | 10.61 |
| Louisa County – Route 700          | NAPS-D-11 | 32.38             | +/- | 11.38 |
| North Anna Power Station           | NAPS-D-12 | 25.00             | +/- | 10.00 |
| Pocahontas State Park (Control)    | PSP-D-1   | 31.33             | +/- | 11.20 |
| Radiological Health                | ORH-D-1   | 14.56             | +/- | 7.63  |
| Radiological Health                | ORH-D-2   | 12.70             | +/- | 7.13  |

# Virginia Department of Health

## AMBIENT GAMMA EXPOSURE

### FOURTH QUARTER

| Location                           | Station   | Net Exposure Rate<br>mR/Std Qtr +/- 2S.D. |     |       |
|------------------------------------|-----------|-------------------------------------------|-----|-------|
| Jamestown – Historical site        | SPS-D-1   | 25.36                                     | +/- | 10.07 |
| Williamsburg – Airport             | SPS-D-2   | 24.86                                     | +/- | 9.97  |
| Williamsburg – Busch Gardens       | SPS-D-3   | 23.83                                     | +/- | 9.76  |
| Newport News - Lee Hall            | SPS-D-4   | 27.65                                     | +/- | 10.52 |
| Naval Weapons Station – 1          | SPS-D-5   | 21.96                                     | +/- | 9.37  |
| Newport News – Fort Eustis         | SPS-D-6   | 23.71                                     | +/- | 9.74  |
| Surry – Route 628                  | SPS-D-7   | 24.48                                     | +/- | 9.90  |
| Surry – Lawnes Creek               | SPS-D-8   | 29.17                                     | +/- | 10.80 |
| Surry Power Station                | SPS-D-9   | 25.74                                     | +/- | 10.15 |
| Surry – Hog Point                  | SPS-D-10  | 27.03                                     | +/- | 10.40 |
| Surry – Bacon’s Castle             | SPS-D-11  | 23.85                                     | +/- | 9.77  |
| Surry – Alliance                   | SPS-D-12  | 22.50                                     | +/- | 9.49  |
| Surry – Scotland Wharf             | SPS-D-13  | 21.98                                     | +/- | 9.38  |
| Surry – Lebanon Baptist Church     | SPS-D-14  | 27.75                                     | +/- | 10.54 |
| Louisa County - Mineral            | NAPS-D-1  | 28.96                                     | +/- | 10.76 |
| Louisa County – Wares Crossroads   | NAPS-D-2  | 23.25                                     | +/- | 9.64  |
| Louisa County – Good Hope Church   | NAPS-D-3  | 33.52                                     | +/- | 11.58 |
| Spotsylvania – Route 713           | NAPS-D-4  | 24.26                                     | +/- | 9.85  |
| Spotsylvania Route 614             | NAPS-D-5  | 24.32                                     | +/- | 9.86  |
| Spotsylvania – Levy                | NAPS-D-6  | 29.50                                     | +/- | 10.86 |
| Louisa County – Bumpass Fire Dept. | NAPS-D-7  | 30.95                                     | +/- | 11.13 |
| Louisa County – Fred Hall          | NAPS-D-8  | 28.56                                     | +/- | 10.69 |
| Louisa County – Aspen Hill         | NAPS-D-9  | 27.67                                     | +/- | 10.52 |
| Louisa County – Route 685          | NAPS-D-10 | 25.63                                     | +/- | 10.13 |
| Louisa County – Route 700          | NAPS-D-11 | 28.54                                     | +/- | 10.69 |
| North Anna Power Station           | NAPS-D-12 | 30.34                                     | +/- | 11.02 |
| Pocahontas State Park (Control)    | PSP-D-1   | 34.95                                     | +/- | 11.82 |
| Radiological Health                | ORH-D-1   | 15.28                                     | +/- | 7.82  |
| Radiological Health                | ORH-D-2   | 11.80                                     | +/- | 6.87  |

# COMMONWEALTH OF VIRGINIA

## DEPARTMENT OF HEALTH

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### OFFICE OF RADIOLOGICAL HEALTH

109 Governor Street, 7<sup>th</sup> Floor, Richmond, Virginia 23218-2448

Office (804) 864-8150

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# BABCOCK & WILCOX

# Virginia Department of Health

## AIR PARTICULATE COMPOSITE SAMPLES

January 1, 2024 through December 31, 2024

Eastern Site Boundary – Ball field

### FIRST QUARTER REPORT

|                    | Start     | Date | Stop      | Gross Alpha Activity<br>pCi/meter <sup>3</sup> |
|--------------------|-----------|------|-----------|------------------------------------------------|
| <b>B&amp;W-A-1</b> |           |      |           |                                                |
| <b>1st</b>         | 1-10-2024 | -    | 1-16-2024 | 0.001 +/- 0.0006                               |
|                    |           |      |           |                                                |

### SECOND QUARTER REPORT

|                    | Start    | Date | Stop     | Gross Alpha Activity<br>pCi/meter <sup>3</sup> |
|--------------------|----------|------|----------|------------------------------------------------|
| <b>B&amp;W-A-1</b> |          |      |          |                                                |
| <b>2nd</b>         | 4-3-2024 | -    | 4-9-2024 | 0.001 +/- 0.0006                               |
|                    |          |      |          |                                                |

### THIRD QUARTER REPORT

|                    | Start    | Date | Stop     | Gross Alpha Activity<br>pCi/meter <sup>3</sup> |
|--------------------|----------|------|----------|------------------------------------------------|
| <b>B&amp;W-A-1</b> |          |      |          |                                                |
| <b>3rd</b>         | 7-3-2024 |      | 7-9-2024 | 0.001 +/- 0.0006                               |
|                    |          |      |          |                                                |

### FOURTH QUARTER REPORT

|                    | Start     | Date | Stop       | Gross Alpha Activity<br>pCi/meter <sup>3</sup> |
|--------------------|-----------|------|------------|------------------------------------------------|
| <b>B&amp;W-A-1</b> |           |      |            |                                                |
| <b>4th</b>         | 10-9-2024 |      | 10-15-2024 | 0.001 +/- 0.0006                               |
|                    |           |      |            |                                                |

# Virginia Department of Health

## SOIL

January 1, 2024 through December 31, 2024

| Location                                                              | Date | Distance & Direction | Type | Alpha Activity Ppm |
|-----------------------------------------------------------------------|------|----------------------|------|--------------------|
| Eastern Site Boundary<br>Ball field<br>B&W-S-1                        |      | Site Boundary        | Soil |                    |
| James River Shoreline<br>Near Six Mile Bridge<br>"control"<br>B&W-S-2 |      | 1.5 miles SW         | Soil |                    |

Soil samples collected annually.

Note: Uranium separation followed by alpha counting.

## SURFACE WATER

January 1, 2024 through December 31, 2024

| Location                                                                        | Date | Distance & Direction             | Alpha Activity Ppb |
|---------------------------------------------------------------------------------|------|----------------------------------|--------------------|
| James River Shoreline<br>Near Ball field at<br>eastern site boundary<br>B&W-W-1 |      | Approx.<br>3 miles<br>downstream |                    |
| James River Shoreline<br>Near Six Mile Bridge<br>"control"<br>B&W-W-2           |      | Approx.<br>1.5 miles<br>upstream |                    |

Surface water samples collected annually.

Note: Uranium separation followed by alpha counting.

# Virginia Department of Health

## VEGETATION

January 1, 2024 through June 30, 2024

Eastern Site Boundary / James River Shoreline

| Location                                                     | Date | Distance<br>&<br>Direction       | Alpha Activity<br>ppm |
|--------------------------------------------------------------|------|----------------------------------|-----------------------|
| Eastern site boundary<br>Ball field<br>B&W-V-1               |      | Approx.<br>3 miles<br>downstream |                       |
| James River<br>Shoreline off Rt. 460<br>"control"<br>B&W-V-2 |      | Approx. 4.5<br>Miles<br>SW       |                       |

Vegetation collected annually.

Note: Uranium separation followed by alpha counting.

COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF HEALTH

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OFFICE OF RADIOLOGICAL HEALTH  
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# EMERGENCY PREPAREDNESS



## EMERGENCY PREPAREDNESS

The Office of Radiological Health (ORH) located within the Virginia Department of Health (VDH) is one of the lead response agencies for emergencies involving the potential or actual release of radioactive materials. Overall, state level emergency response is described in the Commonwealth of Virginia Radiological Emergency Response Plan (COVERERP), which is developed and maintained by the Virginia Department of Emergency Management (VDEM). In addition to generic guidelines for responding to any major radiological emergency, the response procedures contain segments addressing response to several specific types of radiological incidents. This includes sections which provide information needed for response to Licensee and Transportation accidents. Other sections contain background information and response guidance for accidents at fixed nuclear facilities. Plans are also being developed to respond to possible radiological terrorist attacks, which may include detonation of a radiological dispersion device (RDD aka “dirty bomb”), an improvised nuclear device (IND), or a military grade nuclear warhead.

When responding to any radiological emergency, the primary tasks of the Office of Radiological Health are to locate, identify, and predict the impact of any radioactive materials released to the environment. Based on the predicted or known impact, ORH then recommends appropriate measures to protect the public. ORH would also be tasked with helping to supervise the cleanup of radiological contamination and ensuring the proper disposal of radioactive waste. An ORH duty officer maintains 24-hour coverage to provide initial assessment/assistance for local responders and may also initiate the mobilization/deployment of other trained staff to respond to a radiological emergency when needed.

Under the provisions of current Federal Emergency Management Agency (FEMA) regulations, ORH conducts or participates in periodic drills that are designed to provide team training and to test emergency plans and procedures. The scope of these drills ranges from receiving and acknowledging simulated emergency communications to full-scale team deployment.

Federal regulations for commercial nuclear power generating facilities stipulate that a full-scale exercise involving appropriate local government participation and testing all significant response elements must be conducted and evaluated every other year. Because there are two such facilities, Surry and North Anna Nuclear Power Stations, Commonwealth of Virginia agencies will perform exercise activities on a yearly basis, alternating between the sites each year.