

**From:** [Kellner, Bob](#)  
**To:** [BRUCE BENNETT](#)  
**Cc:** [WILLIAM KIRKLAND](#)  
**Subject:** VC Summer Radiation Safety Inspection -August 2021  
**Date:** Monday, May 24, 2021 3:49:00 PM  
**Attachments:** [Summer 2021003 Radiation Safety Inspection Document Request.pdf](#)

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Bruce,

Thank you for confirming that you will be the VC Summer licensing point of contact for the upcoming Radiation Safety Inspection scheduled for August 2021.

Attached is the Initial Information Request and Document Request List for the inspection. The request includes a list of the documents we routinely request for Inspection Procedures (IPs) 71124.06 (Gaseous and Liquid Effluent), 71124.07 (REMP), 71124.08 (Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation), and 71151 (Performance Indicator Verification).

If you plan to upload the requested documents to CERTREC, using software to 'zip' the numerous files into a single file prior to upload has proven to be very efficient. Also, keeping the directory and file names short but discernable makes the zip and unzip process work well.

The current plan is to have two inspectors on site the week of August 2-6, 2021. The inspectors will be myself and Adam Nielsen.

Depending on how things evolve, and if work and travel limitations are effected by COVID-19, we may have to pursue some combination of partial, remote, or reduced on-site inspection time to complete the inspection activities. Please update me if Dominion or Summer decides to modify, reduce, or limit onsite access. I will let you know if I receive any information regarding changes in inspection travel from NRC management.

Please confirm your receipt of this email and the attached information request, and let me know if you have any questions.

Regards,

Bob

***Robert Kellner***

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VC Summer Nuclear Station  
Radiation Safety Baseline Inspection  
Initial Information Request  
Inspection Report: 2021003

During the week of August 2-6, 2021, the NRC will perform a baseline Radiation Safety Inspection at the VC Summer Nuclear Station (NRC Inspection Procedures 71124.06, 71124.07, 71124.08, and 71151).

Experience has shown that this inspection is resource-intensive for both the NRC inspectors and your staff. In order to minimize the impact to your onsite resources and to ensure a productive inspection, we are requesting in advance documents needed for this activity. It is important that all of these documents are up-to-date, and complete, thereby minimizing the number of additional documents requested during the preparation, and/or the onsite portions of the inspection. The NRC requests that these documents be provided to the inspectors no later than July 16, 2021.

If there are any questions about this inspection or the material requested, please contact the lead inspector, Robert Kellner at [Robert.Kellner@nrc.gov](mailto:Robert.Kellner@nrc.gov), or 404-997-4508, or the Engineering Branch 3 Chief, Binoy Desai at 404-997-4519.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390, "Public inspections, exemptions, requests for withholding," a copy of this document will be available electronically for public inspection in the NRC Public Document Room, or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS); accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>

PAPERWORK REDUCTION ACT STATEMENT

This document does not contain new or amended information collection requirements subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing information collection requirements were approved by the Office of Management and Budget under control numbers 3150-0008, 3150-0011, 3150-0014, 3150-0044, and 3150-0135.

PUBLIC PROTECTION NOTIFICATION

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement, unless the requesting document displays a currently valid Office of Management and Budget control number.

### Document Request List

#### Occupational and Public Radiation Safety Cornerstone

Licensee: **VC Summer Nuclear Station**  
Docket Number: **05000395**  
Inspection Dates: **August 2 - 6, 2021**  
Documents Due to Region II by: **July 16, 2021**

Inspection Procedures: IP 71124.06 Gaseous and Liquid Effluent  
IP 71124.07 REMP  
IP 71124.08 Radioactive Solid Waste Processing and  
Radioactive Material Handling, Storage, and  
Transportation  
IP 71151 Performance Indicator Verification

Lead Inspector: Robert Kellner  
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**Note:** The current version of these documents is expected unless specified otherwise. Secure file server access (Certrec, SharePoint, etc.), or electronic media (CD/DVD), is preferred. To the extent possible, please organize the information as it is arranged below. Experience has shown that poorly organized files can lead to a less efficient inspection and places additional burden on licensee staff. During the inspection, the inspectors may request additional documents. If there are questions regarding the documents requested, or if the documents cannot be provided by the due date, please do not hesitate to contact the lead inspector. To the extent possible, please organize the information as it is arranged below. Pay attention to the date ranges for the items requested as they may change from item to item. If there are questions regarding the documents requested, or if the documents cannot be provided by the due date, please do not hesitate to contact the lead inspector.

Documentation for these inspection procedures, are requested from July 1, 2019 to present, unless otherwise specified. Pay attention to the date ranges for the items requested as they may change from item to item. For those items requesting a list of documents/areas, the inspector will select documents/areas from the list for on-site review. The NRC requests that these documents be provided to the inspectors no later than July 16, 2021.

#### Miscellaneous

1. Plant Management, Radiation Protection, and Chemistry organizational charts with contact telephone numbers
2. List of primary contacts for each inspection area w/phone numbers
3. Corrective Action Program (CAP) procedure(s)

4. List of radiation protection procedures including title and number
5. Schedule of routine effluent and REMP sampling activities during the week of inspection (e.g., main stacks sampled on Monday, REMP run Tuesday, etc.).
6. Schedule of planned maintenance and work activities involving work in radiological areas during the week of inspection.

71124.06 - Radioactive Gaseous and Liquid Effluent Treatment  
(Last Inspected August 2019)

1. Procedures for sampling and controlling radioactive gaseous and liquid effluents to include: collection, analysis, release, alarm setpoints, offsite dose calculation and evaluation.
2. Provide a list of changes made to the Offsite Dose Calculation Manual (ODCM), meteorological dispersion or deposition factors, and radioactive effluent processing/discharge systems since July 1, 2019.
3. List of permitted effluent release points, including release points from on-site surface water bodies (as applicable).
4. List of "out of service" (OOS) effluent monitors and duration since July 1, 2019. Include any special reports submitted to the NRC as a result of effluent monitor operability
5. Two most recent 10 CFR, Part 61 QA data evaluation(s)/review(s) (e.g. in-house vs. vendor lab comparisons, current results vs. database, etc.)
6. List of unmonitored spills, leaks, or unexpected liquid/gaseous discharges since July 1, 2019.
7. Material condition surveillance records for effluent treatment system components not readily accessible for any reason (e.g. in-service & spent resin tanks, waste gas hold-up tanks, etc.).
8. List of any changes to the effluent release points or effluent treatment systems, and associated 10 CFR 50.59 documentation, since July 1, 2019.
9. The last two inter-laboratory comparison program results (for the onsite counting/analysis lab).
10. Most recent audit, self-assessment, and/or review of the radioactive effluent sampling and monitoring program
11. Provide a schedule of expected or planned routine effluent sampling activities (e.g. weekly main vent stack, groundwater sampling, etc.) during the planned inspection week.
12. List of CAP documents generated since July 1, 2019, as a result of gaseous and liquid effluent processing and/or ODCM related activities. *This should be a list of documents containing a CAP document number and a brief description, not complete documents.*

71124.07 - Radiological Environmental Monitoring Program  
(Last Inspected August 2019)

1. Site and corporate procedures associated with radiological environmental monitoring, including:
  - Collection, preparation, and analysis of environmental samples including air, Thermoluminescent Dosimeter (TLD) stations, ground and surface water, sediment, vegetation, milk, fish, etc.
  - Calibration and maintenance of air and water sampling equipment.
  - Land use census
  - Calibration and quality control (QC) activities for sample counting instruments.
  - Calibration, operation, maintenance, and routine surveillances of meteorological monitoring instruments (wind speed & direction, air temperature, etc.).
2. Site and corporate procedures associated with implementing the ground water monitoring

program and the voluntary ground water protection initiative. Procedures should include those that address:

- Groundwater monitoring and reporting of spills/leaks
  - Buried piping
  - Sampling and monitoring program to detect leaks from contaminated, or potentially contaminated, systems, structures, or components (SSCs).
3. List of SSCs that contain, or could contain, licensed material for which there is a credible mechanism for the radioactive material (RAM) to reach ground water (e.g. SSC risk ranking matrix).
  4. Summary of any leaks and/or spills that have occurred since July 1, 2019, (i.e. additions to the 10 CFR 50.75(g) file).
  5. List of changes to the REMP (sample locations, sample frequency, type of samples, etc.) since July 1, 2019.
  6. Calibration and maintenance records for REMP air and composite water samplers since July 1, 2019.
  7. Inter-laboratory comparison program results since July 1, 2019 (in-house and vendor laboratory).
  8. Two most recent calibration/surveillance/maintenance records for the meteorological monitoring instruments (wind speed, wind direction, and air temperature).
  9. Data recovery reports for meteorological monitoring instruments since July 1, 2019.
  10. Land use census reports for 2019 and 2020.
  11. Groundwater monitoring results since July 1, 2019.
  12. Results of environmental TLD monitoring since July 1, 2019.
  13. List of changes to the written groundwater monitoring program for identifying/controlling contaminated spills/leaks since July 1, 2019.
  14. List of onsite surface water bodies (e.g., ponds, retention basins, lakes) that contain or potentially contain radioactivity.
  15. Audit and self-assessment documents generated since July 1, 2019, related to REMP. The data should include any reviews conducted of vendor activities and their facilities (e.g., environmental lab).
  16. List of CAP documents (CRs, NCRs, PIPs, etc.) generated since July 1, 2019, related to REMP. The data should include any reviews conducted of vendor activities and their facilities (e.g., environmental lab, out of service air sampler, missing environmental TLD, etc.). *This should be a list of corrective action documents containing a CR number and brief description, not full CRs.*

71124.08 - Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation  
(Last Inspected August 2019)

1. Provide procedures/guidance documents describing licensee compliance with 10 CFR 20, 61, and 71, and 49 CFR 170-189. Procedures/manuals should include:
  - Solid and liquid radioactive waste (radwaste) processing procedures
  - Procedure(s) for transferring radwaste resin and sludge discharges into shipping/disposal containers
  - Waste stream mixing and/or sampling procedures, including:
    - a. waste concentration averaging
    - b. use of scaling factors and calculations used to account for difficult-to-measure radionuclides

- c. ensuring waste stream composition data accounts for changing operational parameters
  - Shipping/transportation procedures
  - Cask loading and closure procedures (licensee and vendor) applicable to last three cask transports
  - Monitoring impact of long-term storage of RAM
  - Process Control Program (PCP)
- 2. Site specific and corporate procedures related to 10 CFR Part 37 compliance (storage of RAM, 10 CFR Part 37 Security Plan, radiation protection and security procedures that identify radiation protection interaction with security, or requirements related to 10 CFR Part 37 compliance, etc.)
- 3. List of locations of Category 1 and 2 material.
- 4. Supporting calculations for determination of whether an aggregation of RAM meets the definition of Category 1 or Category 2 (e.g., warehouse calculation).
- 5. List of Nationally Tracked Sources, and copies of any National Source Tracking System (NSTS) transaction documentation (e.g., annual reconciliation).
- 6. Copies of the two most recent sealed source inventory records.
- 7. Most recent radio-chemical sample analysis results (i.e., "10 CFR Part 61" analysis) for each of the radwaste streams (e.g., dry active waste (DAW), ion exchange resins, mechanical filters, and sludges and activated materials).
- 8. List and documentation of any changes made to the radwaste processing systems (liquid and solid) and/or the PCP since July 1, 2019, and associated 10 CFR 50.59 documentation, as appropriate
- 9. Copies of applicable transport cask Certificate of Compliance for the last three transport cask shipments
- 10. List of RAM storage areas, including satellite radiological controlled areas (RCAs)
- 11. Log of RAM shipments (LSA I, II, III; SCO I, II, Type A, or Type B) since July 1, 2019. (The inspectors will select three to five packages to review in detail.)
- 12. Most recent self-assessment or audit of Shipping/radwaste processing and RAM storage programs
- 13. List of CAP documents (AR, CR, NCR, etc.) related to involving radwaste and RAM processing and/or transportation (e.g., keyword searches for RAM, shipping, radwaste, 10 CFR Part 61, etc.) issued since July 1, 2019. *This should be a list of corrective action documents containing an (AR, CR, NCR, etc.) number and brief description, not full documents.*
- 14. Available for onsite review during the inspection
  - Site drawing(s) showing the location of stored RAM and stored radwaste
  - Plant drawings sufficient to permit the inspector to walkdown the liquid and solid radwaste processing systems, to verify current system configuration/ operation agree with the descriptions contained in the Updated Final Safety Analysis Report and in the PCP
  - Training and qualification records for personnel responsible for radwaste processing, packaging, and making shipments of radioactive material (RAM) and radwaste.
  - Training and qualification records for personnel responsible for implementation of the 10 CFR Part 37 security plan (e.g., security staff and health physics staff)

- Documentation describing the status of any radwaste process equipment that is not operational and/or is abandoned in place.
- Discussion of the site's waste disposal volume and waste reduction program.

71151 - Performance Indicator Verification  
(Last inspected April 2020)

1. Procedures for gathering and reporting NRC Performance Indicator (PI) data, including any Radiation Protection specific guidance and applicable "desktop guides".
2. Monthly/Quarterly Performance Indicator (PI) reports and copies of associated CAP documents, for Radiological Effluent Technical Specifications/ Offsite Dose Calculation Manual (RETS/ODCM) Radiological Effluent Occurrences since March 1, 2020.
3. Audits and self-assessment documents generated since March 1, 2020, related to Performance Indicators.
4. List of CAP documents (CRs, NCRs, PIPs, etc.) since March 1, 2020, using keywords such as abnormal, unmonitored, unplanned effluent release, etc. *This should be a list of corrective action documents containing a CR number and brief description, not full CRs.*

Assistance Requested During On-Site Inspection

- Notification of routine or special effluent sampling activities, or radioactive material shipments or receipts to be completed during the inspection week.
- Coordination with the REMP sampling technician so that an NRC inspector can go along on the weekly air sample collection.
- Review and discuss 2021 Land Use Census.
- Engineering and/or Health Physics walkdown of the meteorological tower, ventilation systems, and waste processing systems.
- Licensing and Health Physics assistance coordinating plant walk-downs, discussions with appropriate individuals, and observation of sampling activities.

Inspector Contact Information:

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