

Greene, Natasha

From: Greene, Natasha
Sent: Monday, September 9, 2019 4:28 PM
To: Wynegar, Richard
Cc: Carson, Louis; O'Donnell, John; Baca, Bernadette; Kolcum, Gregory; Merker, Lindsay; Hammon-Karl, Tracy; Hedges, Tony L.
Subject: CGS Wishlist - 5678 and MCA!
Attachments: CGS2019004 2RS5678 Wishlist.pdf; CGS2019405 71130-11(MCA) Wishlist.pdf

FYI – If you received this before, there have been corrections.

Hello!

Please see the attached document request list (i.e., wishlist) for the upcoming radiation safety inspection scheduled for **November 4 through 8, 2019** at your site. Currently, the inspectors scheduled for this inspection are Natasha Greene, Louis Carson, John O'Donnell, and Bernadette Baca. I am the inspection team lead for the Public Radiation Safety inspection. The inspection will focus on Inspection Procedures (IP) 71124.05, 71124.06, 71124.07, and 71124.08. All requested documents should be uploaded on or before **October 15, 2019**.

In addition, during this period, we will perform an inspection under the Security cornerstone via IP 71130.11 for MC&A, where Louis Carson will lead. All requested documents should be uploaded on or before **October 15, 2019**.

If there are any questions and/or concerns regarding these requests, please feel free to contact me directly. When available, please inform me of the scheduled Entrance/Exit meeting time and location. We currently expect to conduct an Entrance on Monday, late afternoon, and an Exit early on Friday morning. Also, please inform me of any required docs/actions needed to acquire/maintain site access for the scheduled inspectors. Thank you!

NOTE:

The information requested for an in-office review may be provided in either electronic or paper media or a combination of these. Information provided in electronic media may be in the form of uploads to an online secured document management service, e-mail attachments, or CD. The agency's text editing software is MS Word; however, we have document viewing capability for Adobe Acrobat (.pdf) text files. *Information requested to be reviewed onsite during the inspection week should be paper media.*

P.S. If you are not the correct contact for this inspection, please pass it on to the appropriate staff member and 'CC' me. I request in advance that these documents remain accessible for a period of at least 30 days post the Exit meeting date.

P.S. The noted inspectors are subject to change and you will be notified accordingly, if needed.

Thanks :-),

Natasha A. Greene, PhD

Senior Health Physicist

RIV/DNMS/RIB

NRC RJV/ACAA Chairman

ML19274D580

**The following items are requested for the
Public Radiation Safety Inspection
at Columbia**

Dates of Inspection: 11/04/2019 to 11/08/2019

Integrated Report 2019004

Inspection areas are listed in the attachments below.

Please provide the requested information on or before **Tuesday, October 15, 2019**.

Please submit this information using the same lettering system as below. For example, all contacts and phone numbers for Inspection Procedure 71124.05 should be in a file/folder titled "5-A," applicable organization charts in file/folder "5-B," etc.

The information should be provided in electronic format or a secure document management service. If information is placed on a *secured document management system*, please ensure the inspection exit date entered is at least 30 days later than the onsite inspection dates, so the inspectors will have access to the information while writing the report.

In addition to the corrective action document lists provided for each inspection procedure listed below, please provide updated lists of corrective action documents at the entrance meeting. The dates for these lists should range from the end dates of the original lists to the day of the entrance meeting.

If more than one inspection procedure is to be conducted and the information requests appear to be redundant, there is no need to provide duplicate copies. Enter a note explaining in which file the information can be found.

If you have any questions or comments, please contact Natasha Greene at 817-200-1154 or via e-mail at Natasha.Greene@nrc.gov.

PAPERWORK REDUCTION ACT STATEMENT

This letter 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, control number 3150-0011.

5. Radiation Monitoring Instrumentation (71124.05)

Date of Last Inspection: **September 11, 2017**

- A. List of contacts and telephone numbers for the following areas below. Please include area code and prefix. If work cell numbers are appropriate, then please include them as well.
1. Process monitor calibration (Include Chemistry, Systems Engineering and I&C, as applicable)
 2. Radiation protection instrument calibration (Portable and Stationary)
 3. Installed instrument calibrations (Include Systems Engineering and I&C)
 4. Count room and Laboratory instrument calibrations (Include RP and Chemistry, as applicable)
 5. EP contacts for Equipment Important to Emergency Response/Preparedness (EITER)
 6. Licensing/Regulatory Affairs
- B. Applicable organization charts, including position or job titles. Please include as appropriate for your site, Site Management, RP, Chemistry, Maintenance (I&C), Engineering, and Emergency Protection. (Recent pictures are appreciated.)
- C. Copies of audits, self-assessments, vendor or NUPIC audits for contractor support, LARs, and LERs, performed since the date of the last inspection, related to:
1. Portable Radiation instruments: Area radiation monitors, portable continuous air monitors (AMS3/4), portable survey instruments (count rate, dose rate, occupational air sampling), electronic dosimeters, teledosimetry
 2. Stationary Radiation Instruments: Portal monitors, small article monitors, personnel contamination monitors, or whole body counters
 3. Installed Radiation Instruments: Area radiation monitors (RMS), process monitors (non-effluent), criticality monitors, accident monitors
 4. Count Room instrumentation (Chemistry and RP, if separate RP Ops and Effluents): Gamma Spec, LSC, Gross Alpha, Gross Beta, including bench-top counters
- D. Procedure indexes for radiation protection procedures and other related disciplines.
1. Calibration, use, and operation of continuous air monitors, portable survey instruments, temporary area radiation monitors, electronic dosimeters, teledosimetry
 2. Calibration use and operation of portal monitors, small article monitors, personnel contamination monitors, and whole body counters
 3. Calibration of installed area radiation monitors, process monitors, criticality monitors, and accident monitors
 4. Calibration use and operation of Count Room instrumentation (GS, LSC, GA, GB) (include bench top counters here)
- NOTE: Please ensure that RP, Chemistry, and I&C procedures are included, as appropriate.
- E. Please provide specific procedures related to the following areas noted below. Additional procedures may be requested by number after the inspector reviews the procedure index.

1. Calibration of portable ion chambers
 2. Calibration of Friskers
 3. Calibration of telescoping high range instruments
 4. Calibration of portable neutron instruments
 5. Calibration of SAMs
 6. Whole body counter calibration
 7. Laboratory instrumentation quality control
 8. Calibration of Containment/Drywell high range radiation monitor
- F. Please provide a list of NRC Regulatory Guides and NUREGs that you are currently committed to relative to this program. Please include the revision and/or date for the commitment and where this may be located in your current licensing basis documents.
- G. Please provide a summary list of corrective action documents (including corporate and sub-tiered systems) written since the date of the last inspection, related to the following programs:
1. Area radiation monitors, continuous air monitors, portable survey instruments, electronic dosimeters, and teledosimetry
 2. Portal monitors, small article monitors, personnel contamination monitors, and whole body counters
 3. Installed radiation monitors, criticality monitors, accident range monitors
 4. Count room radiation instruments
- NOTE: These lists should include a description of the condition that provides sufficient detail that the inspectors can ascertain the regulatory impact, the significance level assigned to the condition, the status of the action (e.g., open, working, closed, etc.) and the search criteria used. Please provide in document formats which are "sortable" and "searchable" so that inspectors can quickly and efficiently determine appropriate sampling and perform word searches, as needed. (Excel spreadsheets are the preferred format.) If codes are used, please provide a legend for each column where a code is used.
- H. State the required calibration frequency and provide the most recent calibration data for the whole body counters, at least one portable survey instrument, one area radiation monitor, one air sampler, one continuous air monitor, and one drywell/containment high-range monitor.
- I. Provide a list of any scheduled calibrations, while we are onsite, for the instrumentation noted in request above, in 5-I.
- J. Provide the alarm set point values for the portal and personnel contamination monitors in operation.
- K. Radiation Monitoring System health report for the previous 12 months
- L. Provide the following lists of instruments to include make, model, identifier (S/N or plant ID), and location:
1. Portable radiation instruments currently in use (for EADs just make, model, and quantity).
 2. Stationary radiation instruments currently in use.
 3. Installed Radiation monitors

- a. Area radiation monitors and
 - b. Process radiation monitors.
(Include their instrumentation designator, function and calibration procedure number and title.) Please indicate which, if any, detectors have been replaced within the past 2 years (since the last inspection).
 - c. Radiation instrumentation abandoned in place.
 - d. Radiation instrumentation covered by the maintenance rule.
- M. Provide a list of sources used routinely for source check of portable, stationary, and installed radiation monitoring instruments.
- N. Provide the NIST traceability and calibration or verification of the primary sources for instrument calibration and the procedures used to achieve this.

6. Radioactive Gaseous and Liquid Effluent Treatment (71124.06)

Date of Last Inspection: **September 11, 2017**

- A. List of contacts and telephone numbers for the following areas. Please include area code and prefix. If work cell numbers are appropriate, then please include them as well.
 - 1. Radiological effluent control (liquid & gaseous) and reporting (RP, Chemistry, RW, Ops, etc.)
 - 2. Effluent Monitor calibration (liquid and gaseous) and maintenance (RP, Chemistry, I&C, Maintenance, Systems Engineering, EP, etc.)
 - 3. Engineered safety feature air cleaning systems for effluent release (Systems Engineering, I&C, Maintenance, etc.)
 - 4. Licensing/Regulatory Affairs
- B. Applicable organization charts including position or job titles for the above individuals and also for their supportive Management. Please include as appropriate for your site, Site Management, RP, Chemistry, Maintenance (I&C), Engineering, and Emergency Protection. (Recent pictures are appreciated.)
- C. Copies of audits, self-assessments, vendor or NUPIC audits of contractor support, and LERs written since the date of the last inspection, related to:
 - 1. Radioactive effluents and effluent radiation monitors
 - 2. Engineered Safety Feature Air cleaning systems
- D. Procedure indexes for the following areas and related disciplines.
 - 1. Radioactive effluents and effluent radiation monitors (to include the flow monitors)
 - 2. Engineered Safety Feature Air cleaning systems (both TS and non-TS systems for effluents)
- E. Please provide specific procedures related to the following areas noted below. Additional procedures may be requested by number after the inspector reviews the procedure indexes.
 - 1. Sampling and analysis of radioactive effluents
 - 2. Effluent monitor setpoint determination
 - 3. Generating radioactive effluent release permits
 - 4. Effluent Monitor Calibrations (Include associated flow monitors)
 - 5. Laboratory instrumentation quality control
 - 6. In-place testing of HEPA filters and charcoal adsorbers for TS effluent exhaust systems and other effluent air-cleaning systems, but not breathing air systems
- F. Please provide a list of NRC Regulatory Guides and NUREGs that you are currently committed to relative to this program. Please include the revision and/or date for the commitment and where this may be located in your current licensing basis documents.
- G. Please provide a summary list of corrective action documents (including corporate and sub-tiered systems) written since the date of the last inspection, associated with:

1. Radioactive effluents
2. Effluent radiation monitors (include associated effluent flow monitors)
3. Engineered Safety Feature Air cleaning systems (effluents, not breathing air)

NOTE: These lists should include a description of the condition that provides sufficient detail that the inspectors can ascertain the regulatory impact, the significance level assigned to the condition, the status of the action (e.g., open, working, closed, etc.) and the search criteria used. Please provide in document formats which are "sortable" and "searchable" so that inspectors can quickly and efficiently determine appropriate sampling and perform word searches, as needed. (Excel spreadsheets are the preferred format.) If codes are used, please provide a legend for each column where a code is used.

- H. Annual Radioactive Effluent Release Reports for the latest two calendar years
- I. Current revision of the Offsite Dose Calculation Manual (or other name, but include all parts for effluents) and any changes made since the last inspection.
- J. The inter-laboratory comparison results for laboratory quality control performance of effluent sample analysis for the latest two calendar years
- K. Effluent sampling schedule for the week of the inspection
- L. Provide the last three annual trends of vent/stack effluent flow rates, by chart or table.
- M. Operations department (or other responsible dept.) log records for effluent monitors removed from service or out of service or a list of the same and compensatory actions taken during the out of service condition.
- N. Listing or log of liquid and gaseous release permits since the date of the last inspection
- O. A list of the technical specification-required air cleaning systems with the two most recent surveillance test dates of in-place filter testing (of HEPA filters and charcoal adsorbers) and laboratory testing (of charcoal efficiency) and the work order numbers associated with the surveillances (and their system number/name).
- P. System Health Report for radiation monitoring instrumentation. Also, please provide a specific list of all effluent radiation monitors that were considered inoperable for 7 days or more since the date of the last inspection. If applicable, please provide the relative Special Report and condition report(s). If not covered by maintenance rule, please provide rationale.
- Q. A list of significant changes made to the gaseous and liquid effluent process monitoring system since the date of the last inspection. If applicable, please provide the corresponding UFSAR section in which this change was documented.
- R. A list of any occurrence in which a non-radioactive system was contaminated by a radioactive system since the date of the last inspection. Please include any relevant condition report(s).
- S. Current Part 61 analyses for hard to detect radionuclides
- T. Latest Land Use Census (coordinate with 71124.07)

U. Effluent based procedures for EALs or EOPs.

7. Radiological Environmental Monitoring Program (71124.07)

Date of Last Inspection: **September 11, 2017**

- A. List of contacts and telephone numbers for the following areas. Please include area code and prefix. If work cell numbers are appropriate, then please include them as well.
 - 1. Radiological environmental monitoring (RP, Chemistry, I&C, etc.)
 - 2. Meteorological monitoring (RP, Chemistry, EP, I&C, System Engineering, etc.)
 - 3. Maintenance and calibration of the above equipment
 - 4. Licensing/Regulatory Affairs
- B. Applicable organization charts including position or job titles. Please include as appropriate for your site, Site Management, RP, Chemistry, Maintenance (I&C), Engineering, and Emergency Protection. (Recent pictures are appreciated.)
- C. Copies of audits, self-assessments, vendor or NUPIC audits of contractor support, and LERs written since the date of the last inspection, related to:
 - 1. Radiological environmental monitoring program (including contractor environmental laboratory audits, if used to perform environmental program functions)
 - 2. Environmental TLD processing facility
 - 3. Meteorological monitoring program
- D. Procedure index for the following areas and other related disciplines.
 - 1. Radiological environmental monitoring program
 - 2. Meteorological monitoring program
 - 3. Maintenance and calibration of related instrumentation, including the meteorological tower
- E. Please provide specific procedures related to the following areas noted below. Additional procedures may be requested by number after the inspector reviews the procedure indexes.
 - 1. Sampling, collection and preparation of environmental samples
 - 2. Sample analysis (if performed onsite)
 - 3. Laboratory instrumentation quality control
 - 4. Meteorological Tower sensor calibrations
- F. Please provide a list of NRC Regulatory Guides and NUREGs that you are currently committed to relative to this program. Please include the revision and/or date for the commitment and where this may be located in your current licensing basis documents.
- G. Please provide a summary list of corrective action documents (including corporate and sub-tiered systems) written since the date of the last inspection, related to the following programs:
 - 1. Radiological environmental monitoring (include TLDs and air sample pumps or their infrastructure)
 - 2. Meteorological monitoring (include Met Tower sensors and support equipment)

These lists should include a description of the condition that provides sufficient

detail that the inspectors can ascertain the regulatory impact, the significance level assigned to the condition, the status of the action (e.g., open, working, closed, etc.) and the search criteria used. Please provide in document formats which are "sortable" and "searchable" so that inspectors can quickly and efficiently determine appropriate sampling and perform word searches, as needed. (Excel spreadsheets are the preferred format.) If codes are used, please provide a legend for each column where a code is used.

- H. Copies of the two most recent calibration packages for the meteorological tower instruments
- I. Copies of the Annual Radiological Environmental Operating Reports and Land Use Census for the latest two calendar years, and current revision of the Offsite Dose Calculation Manual. Please include any supportive documentation for the changes made to the ODCM since the last inspection.
- J. Copy of the environmental laboratory's inter-laboratory comparison program results for the latest two calendar years, if not included in the Annual Radiological Environmental Operating Report
- K. Data from the environmental laboratory documenting the analytical detection sensitivities for the various environmental sample media (i.e., air, water, soil, vegetation, and milk)
- L. Quality Assurance audits (e.g., NUPIC) for contracted services
- M. Current NEI Groundwater Protection Initiative (GPI) Plan and status. Provide the most recent monitoring results for each monitoring well per the GPI. Provide a separate list of any missed samples, as applicable.
- N. Technical requirements manual or licensee controlled specifications which list the meteorological instruments' calibration requirements
- O. If applicable, per NEI 07-07, provide any reports that document any spills/leaks to groundwater since the date of the last inspection. Please indicate what external communications were made regarding each spill/leak.
- P. Provide any new entries into 10 CFR 50.75(g) files since the date of the last inspection.
- Q. Please identify your three *highest* X/Q (chi/Q) and/or D/Q sectors, as currently used in the selection of your required REMP sampling locations. If these are *different* values from your most recent meteorological assessment, please provide that assessment and indicate the three *highest* X/Q and/or D/Q sectors per your latest assessment. Also indicate your noted *predominant* and *least prevalent* wind direction/sector, as used in your REMP analysis.
- R. Provide the height of the highest effluent release point. Please indicate if the height accounts for plant grade elevation. Please also provide the *most probable* atmospheric release height, if different from the highest effluent release point.
- S. Please provide a schedule of any planned REMP sampling activities while we, the NRC, are scheduled to be onsite performing this inspection.

8. Radioactive Solid Waste Processing, and Radioactive Material Handling, Storage, and Transportation (71124.08)

Date of Last Inspection: **September 11, 2017**

- A. List of contacts and telephone numbers for the following areas. Please include area code and prefix. If work cell numbers are appropriate, then please include them as well.
 - 1. Solid Radioactive waste processing (RP, Chemistry, Ops, Maintenance, I&C, Engineering, etc.)
 - 2. Transportation of radioactive material/waste (RP, Maintenance, Ops, Security, Chemistry, etc.)
 - 3. personnel involved in solid radwaste processing, transferring, and transportation of radioactive waste/materials)
 - 4. Licensing/Regulatory Affairs
- B. Applicable organization charts including position or job titles. Please include as appropriate for your site, Site Management, RP, Chemistry, Maintenance (I&C), Engineering, and Emergency Protection. (Recent pictures are appreciated.)
- C. Copies of audits, department self-assessments, and LERs written since the date of the last inspection, related to:
 - 1. Solid radioactive waste management
 - 2. Radioactive material/waste transportation program
- D. Procedure index for the following areas and other related disciplines.
 - 1. Solid radioactive waste management
 - 2. Radioactive material/waste transportation
- E. Please provide specific procedures related to the following areas noted below. Additional procedures may be requested by number after the inspector reviews the procedure indexes.
 - 1. Process control program and any changes made since the last inspection
 - 2. Solid and liquid radioactive waste processing
 - 3. Waste stream sampling and analysis
 - 4. Waste characterization and classification
 - 5. Radioactive material/waste packaging & shipping
- F. Please provide a list of NRC Regulatory Guides and NUREGs that you are currently committed to relative to this program. Please include the revision and/or date for the commitment and where this may be located in your current licensing basis documents.
- G. Please provide a summary list of corrective action documents (including corporate and sub-tiered systems) written since the date of the last inspection, related to:
 - 1. Solid radioactive waste
 - 2. Transportation of radioactive material/waste

NOTE: These lists should include a description of the condition that provides sufficient detail that the inspectors can ascertain the regulatory impact, the

significance level assigned to the condition, the status of the action (e.g., open, working, closed, etc.) and the search criteria used. Please provide in document formats which are "sortable" and "searchable" so that inspectors can quickly and efficiently determine appropriate sampling and perform word searches, as needed. (Excel spreadsheets are the preferred format.) If codes are used, please provide a legend for each column where a code is used.

- H. Copies of training lesson plans for 49 CFR 172, Subpart H, for radwaste processing, packaging, and shipping
- I. Provide a summary list or log of radioactive material and radioactive waste shipments for the two most recent calendar years, in addition to the current calendar year.
- J. Please provide at least two different radioactive waste stream sample analysis results and resulting scaling factors for the latest two calendar years.
- K. A listing of all onsite radwaste storage facilities. Please include a summary or list of the items stored in each facility with the most recent dose rates/surveys.
- L. A list of any significant (e.g., DAW, resins, Type B or greater) radioactive shipments that will be completed during our onsite inspection period. If available, please provide the applicable shipping manifests/waste characterizations and most recent surveys for each shipment.
- M. A list of significant changes made to the liquid or solid radwaste processing systems since the date of the last inspection. If applicable, please provide the corresponding UFSAR section in which this change was documented. Provide any supportive documentation for the changes made or have it readily available for review.
- N. List of radioactive waste processing systems or equipment abandoned in place since the last inspection.
- O. Please provide a schedule of radioactive material or waste processing or shipment activities during the inspection week. Please indicate the current storage location of the stored RAM or waste prepared for shipment, as well as any supportive surveys of its measured dose rates. If available, please indicate its current stated waste class.