

**The following items are requested for the
Occupational Radiation Safety Inspection
at Diablo Canyon**

Dates of Inspection: 03/01/2021 to 03/05/2021

Integrated Report 2021001

Inspection areas are listed in the attachments below.

Please provide the requested information on or before **Monday, February 15, 2021**.

Please submit this information using the same lettering system as below. For example, all contacts and phone numbers for Inspection Procedure 71124.02 should be in a file/folder titled "2-A," applicable organization charts in file/folder "2-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.

2. Occupational ALARA Planning and Controls (71124.02)

Date of Last Inspection: **July 22, 2019**

- A. List of contacts and telephone numbers for ALARA program personnel, as well as the Licensing/Regulatory Affairs staff. Please include area code and prefix. If work cell numbers are appropriate, then please include them as well.
- 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, LARs, and LERs, written since the date of last inspection, focusing on ALARA
- D. Procedure index for ALARA Program procedures and other related disciplines.
- E. Please provide specific procedures related to the following areas noted below. Additional Specific Procedures may be requested by number after the inspector reviews the procedure indexes.
 - 1. ALARA Program
 - 2. ALARA Planning
 - 3. ALARA Reviews
 - 4. ALARA Committee
 - 5. Radiation Work Permit Preparation
- 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 last inspection, related to the ALARA program, including exceeding RWP Dose Estimates.

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. List of work activities (RWPs) greater than 1 rem, since date of last inspection, including the original dose estimates and actual doses accrued. (Excel format preferred). Please provide all revisions/changes, as well as any related RWPs that support the work activity.

Provide any post evaluations, lessons learned, and/or corrective action documents generated as a result of this work activity. If available, provide any justifications/reasons for actual dose exceedances of the initial dose estimate.
- I. List of active work activities (RWPs) that will be in use while we are onsite, including the dose and dose rate settings, and if available, the planned dose.

- J. Site dose totals for the past 3 years (based on dose of record). Also provide the current year-to-date (YTD) collective radiation exposure (CRE). In addition, please provide another document that separates the online and outage doses for the past 3 years.
- K. Most recent assessment of your isotopic mix, including the hard-to-detect radionuclides and alpha hazards. Include a list of new and historical exposure issues (radiological source term or high exposure areas/activities).
- L. If available, provide a copy of the ALARA outage report or evaluation for the two most recently completed outages for each unit.
- M. Please provide the methods/reports that are in your process to meet the requirements of 10 CFR 20.1101(c) for periodic review of your RP program.
- N. Current exposure trends (BRAC dose rates and/or source term information)

4. Occupational Dose Assessment (Inspection Procedure 71124.04)

Date of Last Inspection: **July 22, 2019**

- A. List of contacts and telephone numbers for the Dose Assessment personnel, as well as the Licensing/Regulatory Affairs staff. Please include area code and prefix. If work cell numbers are appropriate, then please include them as well.
- 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 date of last inspection, related to Occupational Dose Assessment
- D. Procedure indexes for Occupational Dose Assessment procedures and other related disciplines.
- E. Please provide specific procedures related to the following areas noted below. Additional Specific Procedures will be requested by number after the inspector reviews the procedure indexes.
 - 1. Radiation Protection Program
 - 2. Radiation Protection Conduct of Operations
 - 3. Personnel Dosimetry Program
 - 4. Electronic Dosimeters
 - 5. Air Sample Analysis
 - 6. Performance of High or Special Exposure Work
 - 7. Declared Pregnant Worker
 - 8. Bioassay Program (Internal Dose Assessment)
- 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 date of last inspection, associated with:
 - 1. National Voluntary Laboratory Accreditation Program (NVLAP)
 - 2. Dosimetry (TLD/OSL, etc.) problems
 - 3. Electronic alarming dosimeters
 - 4. Bioassays or internally deposited radionuclides or internal dose
 - 5. Neutron dose

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. List of positive whole body counts (excluding K-40) since date of last inspection, include date(s), reason(s), activity assessed, and doses calculated and assigned. Names and personal information can be redacted, if desired
- I. Part 61 analyses or other analyses of plant isotopic mixture (alpha, beta, gamma, and neutron) for appropriate instrumentation calibration sources and dosimetry selection and hard-to-detect plant nuclide scaling factors for intakes/uptakes.
- J. The most recent National Voluntary Laboratory Accreditation Program (NVLAP) accreditation report or, if dosimetry is provided by a vendor, the vendor's most recent results and which dosimeter(s) is (are) use at the site and for what purpose(s). (DLR, neutron, environmental, etc.)
- K. Please provide the latest assessment of your radiological source term as it relates to the internal/external exposure of workers.
- L. If available, please provide your latest source term reduction strategy.
- M. Have available for on-site review the LLDs or MDAs for each onsite WBC or other internal dose assessment instrumentation.
- N. If available, please provide the latest neutron source term characterization. Describe why the neutron dosimetry used is appropriate for these locations.
- O. A list of airborne radioactivity areas (and associate RWPs) where DAC-hour monitoring was used with air sampling to track and assign dose. (BZ lapel air samples, etc.)
- P. Please have available for on-site review, a list of workers that declared a pregnancy since the last inspection. Declared Pregnant Worker monitoring of worker and fetus. Please provide the most recent NRC Form 5 for these individuals. No more than three are requested. Please redact any sensitive information.
- Q. A list of EDEX or multi-badge dosimetry uses since the last inspection, include the associated RWP and dose accrued.