U.S. Department of Labor

Office of Workers' Compensation Programs
Division of Energy Employees Occupational
Illness Compensation
Washington, DC 20210

RELEASE - TRANSMISSION OF REVISED MATERIAL TO BE INCORPORATED INTO THE FEDERAL (EEOICPA) PROCEDURE MANUAL: CHAPTER 2-0900 DEVELOPMENT OF RADIOGENIC CANCER CLAIMS.

EEOICPA TRANSMITTAL NO. 16-06 March 2016

EXPLANATION OF MATERIAL TRANSMITTED:

This material is issued as procedural guidance to update, revise and replace the text of EEOICPA Procedure Manual (PM) Chapter 2-0900, Development of Radiogenic Cancer Claims. This version incorporates changes that have arisen since the last publication of Chapter 2-0900, Development of Radiogenic Cancer Claims:

- Retitles Chapter 2-0900 as "Development of Radiogenic Cancer Claims."
- Removes pagination from the Chapter and the Page Number column from the Table of Contents.
- Removes the footer on all pages subsequent to the Table of Contents.
- The Chapter contains updated language on the use of a CMC (Contract Medical Consultant), ECS (Energy Compensation System), the OWCP Imaging System (OIS), and updated guidance for actions related to NIOSH (case referrals, document preparation, dose reconstruction/reworks and Probability of Causation calculation).
- Retitles Section 3 as "Medical Evidence of Cancer" and adds new guidance relating to clinical evidence of cancer.
- Sections 6 through 19 from the last publication of 2-0900 have been renumbered.
- Retitles Section 6 as "Non-SEC Cancers and Dose Reconstruction" and combines the guidance from Section 7 from the last publication of 2-0900.

- Removes the reference to chronic lymphocytic leukemia (CLL) from Section 6 "Non-SEC Cancers and Dose Reconstruction."

- Section 9 "Cases Pended While at NIOSH" from the last publication of 2-0900 has been removed.

- Removes the guidance regarding the requirement to write a claimant(s) who does not sign the Form OCAS-1 from Section 10 "NIOSH Actions."

- Removes ICD-9 coding chart from Section 14(c) from the last publication of 2-0900.

- Section 16 from the previous publication of 2-0900 is now Section 14 and retitled "Comments to Dose Reconstruction."

- Section 17 from the previous publication of 2-0900 is now Section 15 "Proving Causation Between Diagnosed Non-SEC Cancer and Covered Employment." Guidance regarding carcinoma in-situ and references to CLL have been removed.

- Section 18 from the previous publication of 2-0900 is now Section 16 "Calculation of PoC Using NIOSH-IREP Computer Program." Guidance regarding NIOSH Cancer Models, Smoking History and Racial/Ethnic Identification, and Risk Models has been removed and updated guidance has been provided for the NIOSH-IREP Operating Guide.

- Section 19 from the previous publication of 2-0900 is now Section 17 "Establishing Causation for Cancer Under Part E." Guidance regarding the presumption of causation for certain cases under Part E has been removed.

The following Exhibits from the last publication of 2-0900 have been removed:

- Exhibit 3, Smoking History Request, Form EE/EN-8

- Exhibit 4, Ethnicity Request, Form EE/EN-9

- Exhibit 9, HHS Chronic Lymphocytic Leukemia Guideline Letter

The following Exhibit from the last publication of 2-0900 has been renamed:

- Exhibit 7, Glossary of Cancer Descriptions

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Director, Division of
Energy Employees Occupational Illness Compensation

Filing Instructions:

Remove	Insert
PM Ch. 2-0900 and Exhibits	PM Ch. 2-0900 and Exhibits

File this transmittal behind Part 2 in the front of the Unified Federal (EEOICPA) Procedure Manual.

Distribution: List No. 3: All DEEOIC Employees
List No. 6: Regional Directors, District Directors, Assistant District Directors, National Office Staff, and Resource Center Staff.

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1. Purpose and Scope. This chapter includes a narrative discussion of the procedures for determining whether an employee has been diagnosed with a cancer and the procedures for establishing causation as a result of exposure to occupational radiation.

2. Identifying a Claim for Cancer. The Claims Examiner (CE) must first identify whether the claim is being made for cancer. If Form EE-1 or Form EE-2 is marked for a cancer, then a cancer claim is established. The claimant is asked to identify the specific type of diagnosed cancer on the claim form.

3. Medical Evidence of Cancer. Energy Employees Occupational Illness Compensation Program Act (EEOICPA) regulations state that to establish a diagnosis of cancer, a claimant must submit medical evidence that sets forth the diagnosis and the date of the diagnosis. The CE verifies that sufficient medical evidence is in the case file that substantiates a diagnosis of cancer.

a. Diagnosis of Cancer. The case record must include a medical report from a qualified physician that lists a cancer diagnosis. The CE can make referrals to a Contract Medical Consultant (CMC) to assist in interpreting medical evidence as establishing a diagnosis of cancer. Whether the evidence originates from a claimant's physician or a CMC, a diagnosis generally derives from the following evidence:

(1) Tissue examination is the most conclusive method for making a cancer diagnosis, as it provides the physician with the vital information listed below regarding the tumor or lesion. A testing facility reports the outcome of human tissue analysis in a pathology report. The pathology report follows from a biopsy undertaken by a physician during routine screening or post mortem (autopsy). The pathology report identifies particular data that are critical for making a cancer diagnosis.

(a) The tissue of origin (where the tumor or lesion originated); and

(b) The status of the tested cellular tissue as benign, uncertain, or malignant. This chapter of the Federal (EEOICPA) Procedure Manual only addresses processing malignant (cancerous) tumors/lesions.

(2) A diagnosis can sometimes be made using one or more of the following methods, which are listed in order of preference. If the CE is unable to identify an affirmative diagnosis based on the medical evidence submitted, the case may be referred to a CMC.

(a) Cytology report describing cells obtained by scraping (e.g., from bone marrow), or by washing (e.g., fluid from lungs). An examination conducted by one of these cytology methods is generally less conclusive than tissue examination because the organization and extent of the tumor may not be as apparent. A positive cytology report would be a basis for further tests.

(b) Imaging (e.g., X-ray, CAT Scan, MRI) are the least specific type of tests in the diagnosis of cancer. Generally, X-rays are used as a basis for further tests. Radiology tests are extremely beneficial in determining the spread of cancer and/or determining the effects of cancer treatments.

(3) If the employee is deceased or if a living employee is unable to undergo additional diagnostic testing for medical reasons, clinical evidence is needed which shows that a qualified physician has evaluated available medical evidence and has provided a well-rationalized opinion that interprets such evidence as establishing a diagnosis of cancer. Documentation that a physician can use for such a purpose includes hospital admission/discharge reports or reports describing a tumor or possible malignancy; inconclusive diagnostic testing results, or other medical records alluding to the existence of a potential cancer.

(a) In the absence of other affirmative medical evidence collected during development, a CE may use a death certificate acknowledged by a physician or recognized by a state medical authority to establish a cancer diagnosis.

b. Diagnosis of Multiple Primary Cancers.

(1) If a CE identifies more than one primary cancer in the medical evidence in the same organ with the same diagnosis date and a physician has classified each as the same type of cancer, the CE considers all as one primary cancer.

For example, a surgeon performs two biopsies of the left breast on the same date. Several days afterwards, a pathologist interprets the samples as showing infiltrating ductal carcinomas. In this case, the CE considers the results as diagnosing one primary cancer of the left breast.

Alternatively, if the pathologist interpreted the same biopsies as documenting a lobular carcinoma and an infiltrating ductal carcinoma, the CE considers these cancers as two primary cancers, since the cancer types are different.

The CE can only resolve issues relating to the number of primary cancers diagnosed from pathology or clinical evidence by obtaining the opinion of a qualified physician. In the absence of a well-rationalized opinion from a claimant's treating physician, a CE refers such matters to a CMC for review.

(2) The above guidance applies only to multiple primary cancers of the same type in an organ. Situations involving bilateral organs are more complicated. Bilateral organs include the lungs, breasts, kidneys, adrenals, ovaries, and testes.

Biopsies taken from the left and right lungs might indicate the same type of cancer, e.g., non-small cell adenocarcinoma, in the right and left lungs. While one cancer may actually be metastatic from the other lung, without any indication in the pathology report or other medical evidence, it would be difficult to determine whether these two adenocarcinomas are two primary cancers or just one cancer. In these situations, the CE requests clarification from either the treating physician or a CMC.

c. Date of Diagnosis. The date of initial diagnosis is required in any claim for cancer. The date of diagnosis is

also a critical element used in the Interactive Radio-Epidemiological Program (IREP) for calculating the Probability of Causation (PoC). The employee's occupational exposure to radiation must be before the initial date of diagnosis for it to be compensable under Part B. While a claimant may list the date of diagnosis on Form EE-1 or Form EE-2, the CE reviews all of the medical evidence submitted in a claim package to determine the earliest date of cancer diagnosis.

(1) When using a pathology report to determine the date of diagnosis, the date that a physician biopsied the tissue is used as the date of diagnosis.

(2) In certain claim situations, the CE will have to use reasonable discretion to decide the date of diagnosis. For example, if the employee is deceased, and the only documentation available to support the diagnosis of cancer is the employee's death certificate signed by a physician, the CE may accept an affidavit from a survivor(s) and/or other individuals to establish that the employee's diagnosis date is subsequent to the employee's initial exposure to occupational radiation.

For example, a home health nurse might indicate in an affidavit his or her knowledge that on a specified date, a physician made a diagnosis of the employee's condition, as well as the circumstances under which he or she acquired such knowledge.

d. Deficiency in Medical Evidence. The CE advises the claimant of any deficiency in medical evidence and allows the claimant a period of up to 60 days to submit additional medical evidence. All development communication from the CE must be clear and include understandable guidance of what evidence is required to support the claim.

4. Pre-Cancerous and Non-Malignant Conditions. If the medical evidence provided by the claimant establishes a diagnosis of a condition in a pre-cancerous stage or is non-malignant, the CE cannot accept the condition as a cancer. However, the CE proceeds with development of the condition for coverage under Part E. The receipt of a qualified physician's opinion can only resolve the interpretation of whether a condition is a diagnosed cancer or not. If the CE cannot obtain clarification of such

issues from the claimant's chosen physician, he or she can refer the medical evidence to a CMC.

5. Specified Cancers. Members of the Special Exposure Cohort (SEC) who are diagnosed with any of the 22 specified cancers are eligible for benefits without the need for a dose reconstruction. Eligible members of a SEC class have a presumption that the diagnosed specified cancer was caused by radiation exposure during their eligible SEC employment.

6. Non-SEC Cancers and Dose Reconstruction. Any primary cancer that is not a specified cancer is a non-SEC cancer. Once the CE has determined that the employee has a diagnosed non-SEC cancer and covered employment, he or she prepares the claim for referral to the National Institute for Occupational Safety and Health (NIOSH) for a dose reconstruction. The CE is to report a secondary cancer only when the development of the claim has not resulted in the identification of the primary cancer.

a. Claimant Not SEC Member. When the employee is not a SEC member (i.e., the employment was outside the designated SEC period or the employee did not work the necessary workdays at an SEC site), the CE forwards the claim to NIOSH for dose reconstruction, once a cancer diagnosis and covered employment are confirmed.

b. SEC Case with Award. For any SEC cases where an award has been made for a specified cancer, any non-SEC cancers for the case must be forwarded to NIOSH for dose reconstruction to determine eligibility for medical benefits for the non-SEC primary cancers. In these SEC cases, all cancers are listed on the NIOSH Referral Summary Document (NRSD), including the specified cancer(s).

(1) An exception to this rule includes those SEC claims where a primary cancer, which is not a specified cancer, metastasizes to a secondary cancer site that a CE has decided is a specified cancer. For instance, prostate cancer (non-specified cancer) metastasizes to secondary bone cancer (specified cancer). If the bone cancer is accepted as a specified cancer under the SEC provision, the claimant can receive medical benefits for both primary and secondary cancers (prostate and bone cancer). However, according to EEOICPA regulations, payment for medical treatment of the underlying primary

cancer…does not constitute a determination by OWCP that the primary cancer is a covered illness. As such, it will be necessary for the CE to refer the prostate cancer to NIOSH for dose reconstruction to determine eligibility for benefits under Part E for prostate cancer. In this situation, since the bone cancer is a secondary cancer with known primary site (prostate), it is not included on the NIOSH NRSD.

c. Multiple Skin Cancers. When a claimant provides evidence that the covered employee has a large number of skin cancers, the CE will proceed as follows:

(1) The CE considers each malignant skin neoplasm (e.g., basal or squamous cell cancer) as a separate primary cancer, unless the medical records state that the neoplasm is a metastatic lesion.

(2) For NIOSH dose calculations, the date of diagnosis and the location (e.g., arm, neck, back) of the skin cancer are important. The CE must include this information in the medical section of the NRSD.

d. Multiple Primary Cancers for Other Organs/Locations. If a CE identifies more than one primary cancer location for an organ in the medical records (e.g., multiple sites of primary cancer in the lung), the CE notes this information in the medical section of the NRSD, including the cancer locations within the organ and the diagnosis date. NIOSH will perform dose calculations for each primary cancer site in a specific organ. When NIOSH reports the dose reconstruction results, the CE calculates the PoC values for each of the primary cancers in that organ.

7. Preparing Non-SEC Cancer Claim Files for Referral to NIOSH. The NRSD (Exhibit 1) is a tabular form containing the medical and employment information accepted by the CE as factual. This form provides NIOSH with the necessary information to proceed with the dose reconstruction process.

a. Instructions. Step-by-step instructions for completing the NRSD are included in Exhibit 2.

b. Smoking History. The employee's smoking history is required for cases that include primary lung cancer

(including primary trachea, bronchus, and lung) or for secondary cancer with an unknown primary cancer that includes lung cancer as a possible primary cancer.

(1) The method used to gather smoking history is Form EE/EN-8.

(2) Upon receipt of the information from the claimant, indicate the smoking level (at the time of cancer diagnosis) using the designations shown in the NRSD. If the case evidence contradicts information obtained on the questionnaire, the CE must clarify the discrepancy with the claimant prior to referral to NIOSH.

(3) If the claimant does not return the initial smoking questionnaire within 30 days, the CE sends a follow-up letter advising the claimant that they are to return the questionnaire within the next 30 days or their case will be closed administratively. After a total of 60 days has elapsed, the CE administratively closes the claim and informs the claimant by letter that the claim is closed and no further action will be taken relating to the claimed illness(es) under Part B. The CE proceeds with any necessary development relating to a Part E claim.

(a) If the CE can obtain the relevant information from the employee's medical records or Document Acquisition Request (DAR), the CE uses that information to complete the NRSD. The CE includes a memo to file explaining the source of the information.

c. Ethnicity. Employee's ethnicity is required for skin cancer cases.

(1) The method used to gather this information is Form EE/EN-9.

(2) Upon receipt of the information from the claimant, indicate the ethnicity using the designations shown in the NRSD.

(3) If the claimant does not return the initial ethnicity questionnaire within 30 days, the CE follows

the same steps required for collecting information relating to the employee's smoking history (i.e., second request, administrative closure and notice). Like the guidance for obtaining an employee's smoking history, if the CE can obtain the relevant ethnicity information from the employee's medical records or Document Acquisition Request (DAR), the CE uses that information to complete the NRSD. The CE includes a memo to file explaining the source of the information.

d. Case Referred to NIOSH.

(1) All findings made by the CE must be supported by the evidence in file and documented in the NRSD. The CE forwards a copy of the entire case file with the NRSD to NIOSH.

(2) The CE advises the claimant in writing that he or she has sent the case to NIOSH for dose reconstruction (Exhibit 3).

8. Preparing Amendments to the NRSD for Non-SEC Cancer Claims. Sometimes CEs obtain additional information on a case after they refer it to NIOSH but before the completion of the dose reconstruction. This includes new information related to the employee's employment, new medical condition(s), new authorized representative, or other survivor-related information. The CE is to bronze into OIS all documentation created or received for a case file.

When new information becomes available, the CE forwards this information to NIOSH so it is available for dose reconstruction. The CE identifies the portion of the NRSD that has changed based on new evidence reviewed by the District Office (DO). He or she also marks "Amendment" on the top of the NRSD and lists the employee's name, DOL case ID number, NIOSH tracking number, and DOL Information. The CE describes clearly and separates any "Amendment" NRSDs from NRSDs submitted with the DO's weekly package to NIOSH. A CE or other designated staff person ensures that any supplemental packages are separated from regular NRSDs for clear identification by NIOSH.

a. NIOSH Reports. NIOSH provides weekly reports to the DOs listing the cases for which the NIOSH contractor started performing dose calculations in the past week. For any revisions to information contained in the original

NRSD, the CE is to forward to NIOSH an amended NRSD clearly identifying the revised information. This will allow NIOSH to use the most accurate information in its dose reconstruction.

b. "Supplement" NRSD. If the CE needs to submit additional evidence to NIOSH, such as additional medical information for the same reported cancer, the CE submits a NRSD marked "Supplement." The CE lists on the referral the DOL case ID number, NIOSH tracking number, and employee's name. A CE uses a supplemental NRSD only for a submission that does not change the original information in the NRSD.

9. Cases Pulled While at NIOSH. During the dose reconstruction process, it may be necessary for NIOSH to contact the CE to resolve a discrepancy, or request clarification. Normally, this contact is via e-mail or telephone. The CE handles all contacts from NIOSH as quickly as possible. If the CE cannot provide an answer to a question without further development, the CE advises NIOSH of the steps being taken to resolve the matter and an approximate period for completion.

In cases where further development is needed as determined by NIOSH or DOL, NIOSH pulls the case from the dose reconstruction process and advises the CE by e-mail. NIOSH may also pull a case to allow DOL to determine if a case can be accepted under a SEC class. Since a pulled case stops the dose reconstruction process, the CE must proactively develop the case so the dose reconstruction process can proceed or a decision can be rendered on a SEC case.

a. Cases Pulled by DOL. When DOL determines that further development is needed before a dose reconstruction can proceed, the supervisor, SrCE (or journey level CE), or DO NIOSH liaison sends an e-mail (with copies to the other two DO staff) to the NIOSH Public Health Advisor (PHA) with a request that NIOSH pull the case while DOL develops the case for additional information. The CE must advise the claimant in writing when a case is pulled by DOL from the dose reconstruction process.

(1) The e-mail briefly explains the specific information the DO is attempting to clarify or obtain, e.g., employment, medical, smoking or race/ethnicity questionnaire, etc.

(2) On receipt of the development information, the designated DOL staff person notifies the NIOSH PHA (with copies to the other two DO staff) by e-mail of the resolution of the issue and requests that the case be removed from pulled status. The DO also prepares and forwards, as necessary, an amended NRSD containing the new information. The CE advises the claimant in writing that their case has been removed from pulled status and that the dose reconstruction is proceeding.

b. Cases Pulled Due to SEC. NIOSH may identify cases submitted for dose reconstruction that are potentially eligible for inclusion in a SEC class. This may typically occur when a new SEC class is designated. NIOSH pulls these cases from the dose reconstruction process and returns these cases with the dose reconstruction records to the appropriate district office for further development. The CE handling the case ensures that any record received from NIOSH as part of the dose reconstruction process is bronzed into OIS or maintained by the district office as a permanent record of the case file. NIOSH will send the claimant a letter advising the claimant that it is returning the claim to DOL for adjudication.

If DOL identifies a case that qualifies under the SEC provision but NIOSH did not pull it from the dose reconstruction process, the CE, through the SrCE or journey level CE, notifies the appropriate NIOSH PHA via e-mail to return the dose reconstruction records for further development. In these cases, the CE sends a letter to the claimant advising that his or her case is pulled from the dose reconstruction process for evaluation under the SEC provision.

If it is determined that the case does not qualify for the SEC class, the CE, through the SrCE or journey level CE, notifies the appropriate NIOSH PHA via e-mail to proceed with the dose reconstruction. The CE prints a copy of the "sent" e-mail and bronzes it into OIS. The e-mail includes a brief statement explaining why the case should proceed with dose reconstruction, e.g., non-specified cancer, insufficient latency period or does not meet the 250 workday requirement. In addition, the CE notifies the claimant by letter that the case is returned to NIOSH for dose reconstruction and the reason(s) it does not qualify

for the SEC class. The CE also sends a copy of this letter to NIOSH.

10. NIOSH Actions. Upon receipt of a claims package from DOL, NIOSH takes several actions to determine the employee's radiation dose. NIOSH will request Department of Energy (DOE) records and interview the claimant(s) to identify any additional relevant information on employment history and develop detailed information on work tasks and radiological exposures. NIOSH will also apply dose reconstruction methods to estimate radiation doses for workers seeking compensation for cancer who were not monitored or inadequately monitored, or whose records are missing or incomplete for exposure to radiation at a DOE or Atomic Weapons Employer (AWE) facility. NIOSH will then conduct a closing interview with the claimant(s) to review the dose reconstruction results and the basis upon which the results were calculated.

a. Obtain Signature on Form OCAS-1. Subject to any additional information provided by the claimant, the claimant is required to sign and return Form OCAS-1 to NIOSH within 60 days, certifying that he or she has no additional information and that the record for dose reconstruction should be closed.

Upon receipt of the signed Form OCAS-1 and completion of any changes in the dose reconstruction resulting from new information provided, NIOSH forwards a final dose reconstruction report, "NIOSH Report of Dose Reconstruction under EEOICPA", to DOL and to the claimant.

(1) NIOSH does not forward the dose reconstruction report to DOL for adjudication without receipt of Form OCAS-1 signed by the claimant or an authorized representative of the claimant.

(a) If the claimant or the authorized representative does not sign and return Form OCAS-1 within 60 days, NIOSH will administratively close the dose reconstruction and notify DOL of this action after notifying the claimant or the authorized representative.

(b) Upon receiving this notification by NIOSH, the CE records in the Energy Compensation System (ECS) the administrative closure of the affected

Part B claim based on the lack of a signed Form OCAS-1.

(c) If the employee meets the Part E employment requirements (contractor or subcontractor), prior to administrative closure, the CE determines if a causal link exists between the claimed illness and exposure to toxic substances (other than radiation) at a DOE facility or certain RECA facility. When a causal link is determined, the CE is able to accept the cancer under Part E. If no non-radiogenic toxic substance causal link is established, the CE administratively closes the case in ECS under Part E.

(d) The CE advises the claimant by letter that the case is closed. If the claimant later decides to sign the Form OCAS-1, he or she needs to notify DOL, after which the CE returns the case to NIOSH for processing.

(e) If additional information is submitted, NIOSH will review the evidence, prepare a new dose reconstruction report, and send a new Form OCAS-1 to the claimant and allow for an additional 60-day comment period.

(2) If the case has multiple claimants, NIOSH will wait 60 days for receipt of all signed Forms OCAS-1. If, after 60 days, NIOSH does not receive Form OCAS-1 from any of the claimants, NIOSH will administratively close the dose reconstruction and notify DOL of this action after notifying the claimants or the authorized representatives. The CE also administratively closes the corresponding DEEOIC claim(s) in accordance with paragraph 10a(1). If, after 60 days, NIOSH receives only one signed Form OCAS-1, NIOSH will forward the dose reconstruction package to DOL.

(a) One signed Form OCAS-1 is sufficient to proceed with issuing a decision for all filing claimants.

11. Receipt of Dose Reconstruction Results from NIOSH.

a. Content of NIOSH Report. The "NIOSH Report of Dose Reconstruction under EEOICPA" provides the information that

the CE needs to perform a PoC calculation, which is necessary to render a decision on the claim. The NIOSH report includes the following information:

(1) Annual dose estimates related to covered employment for each year from the date of initial radiation exposure at a covered facility to the date of cancer diagnosis;

(2) Separate dose estimates for acute and chronic exposures, different types of ionizing radiation, and internal and external doses, providing dose information for the organ or tissue relevant to the primary cancer site(s) established in the claim;

(3) Uncertainty distributions associated with each dose estimated, as necessary;

(4) Explanation of each type of dose estimate included in terms of its relevance for estimating PoC;

(5) Identification of any information provided by the claimant relevant to dose estimation that NIOSH decided to omit from the basis for dose reconstruction, justification for the decision, and if possible, a quantitative estimate of the effect of the omission on the dose reconstruction results; and

(6) A summary and explanation of information and methods applied to produce the dose reconstruction estimates, including any factual findings and the evidence upon which those findings are based.

b. NIOSH CD or Electronic Record. When NIOSH returns a dose reconstruction to DEEOIC, NIOSH will forward all case file documents via compact disc (CD) or as an electronic record, since NIOSH optically scans all documents referred to it for use in performing the dose reconstruction. The CD or electronic record will include the dose reconstruction input file (Excel spreadsheet) used for calculating the IREP probability of causation. The CE bronzes into OIS or includes as a permanent record of the case file any record received from NIOSH as part of the dose reconstruction process.

(1) Information contained on the NIOSH CD or electronic record will include:

(a) Dose reconstruction files; Computer Assisted Telephone Interview (CATI); dosimetry data; the NIOSH Report of Dose Reconstruction under EEOICPA; NIOSH's PoC calculation; Form OCAS-1; the NIOSH-IREP input file; and pertinent Atomic Energy Commission (AEC)/DOE reports, journal articles or other documents.

(b) Correspondence, including NIOSH letters to claimants, phone conversation notes, and e-mails.

(c) DOE files (data files listed in order of importance on the CD), including DOE dose and work history information and other DOE documents that NIOSH requested, such as incident reports and special studies.

(d) DOL files, including a copy of the case file optically imaged by NIOSH and the OCAS tracking sheets (signatures and dates).

(2) NIOSH will incorporate information from the above sources into the dose reconstruction report. Publicly available documents will be referenced by citation. NIOSH will add documents not publicly available in the record and, as noted above, will be included on the CD or as part of the electronic record transferred to DEEOIC.

(3) The CE need not review all of the documents on the CD or electronic record. Those documents that normally will not require review include the DOE documents, the claimant interview, and the NIOSH-conducted closing interview. The CE must always run the IREP separately.

c. NIOSH Unable to Perform Dose Reconstruction. In some cases, it may not be possible for NIOSH to complete a dose reconstruction because of insufficient information to reasonably estimate the occupational radiation dose received by the employee. In these situations, NIOSH notifies any claimant for whom it cannot complete a dose reconstruction and it describes the basis for this finding. NIOSH forwards its determination to DOL and the CE issues a RD to deny the claim based on NIOSH's inability to complete the dose reconstruction.

12. Review of Claim for Rework of Dose Reconstruction. The CE is responsible for comparing the dose reconstruction report to the evidence in the case file. If there are any significant discrepancies or changes between the information in the case file and the dose reconstruction report, including erroneous or incomplete information, or for which DEEOIC has received new information, the CE determines if rework may be necessary.

Significant discrepancies or changes would include, for example, additional cancer identified or changed cancer site, changed employment facilities or dates, different diagnosis code, or change in date of cancer diagnosis.

a. Cancer Change Rework.

(1) If additional cancer(s) is identified after the dose reconstruction is performed and:

(a) PoC is less than 50%, the CE submits a rework request to NIOSH.

(b) PoC is 50% or greater, a rework is not required. All additional primary cancers would be eligible for medical benefits under Part B and Part E. The CE documents the newly identified cancer(s) in the case file.

(2) If two or more primary cancers are addressed in the dose reconstruction, and it is later determined that one or more of the cancers should not have been included in the dose reconstruction (e.g., the cancer was found to be a recurrent cancer or an erroneously reported cancer) and:

(a) PoC is less than 50%, a rework is not required. The PoC for the remaining cancers will still be below 50%. The CE must use the PoC as calculated as the PoC of record; document the discrepancy between the cancer(s) identified in the dose reconstruction and those determined by DOL to be cancers in the case file and in the RD; and notify the NIOSH PHA of the change to the cancer(s) status so that NIOSH can update its records.

(b) If PoC is 50% or greater, submit a rework request to NIOSH. Also, if a primary cancer addressed in the dose reconstruction is found subsequently to be a secondary cancer with an unknown primary, submit a rework request to NIOSH.

DOs cannot substitute newly identified cancers or additional cancers not used in the dose reconstruction, or their diagnosis dates, for incorrectly reported cancers found in the dose reconstruction.

b. Smoking and Race/Ethnicity Changes Rework. If information related to race/ethnicity or smoking history changes after the dose reconstruction is performed, the CE re-runs IREP using the revised information. A rework is not required except for the following:

(1) If the PoC is initially below 45% and then increases above 50% or greater after re-running IREP using the revised information, the CE submits a rework request to the DEEOIC Health Physicist.

(2) If the PoC was above 50% and the change reduces the PoC below that threshold, the CE submits a rework request to the DEEOIC Health Physicist.

c. Diagnosis Code Changes Rework. Changes can affect the internal and/or external dose models used in the dose reconstruction and/or the IREP model. Accordingly, the CE submits a rework request for changes in diagnosis codes to the DEEOIC Health Physicist. If the diagnosis code changes for the following condition, no rework is required:

(1) For carcinoma in situ skin, if the type of cancer is specified by DOL (Malignant melanoma or Non-melanoma skin-Squamous cell), NIOSH will use only the specified IREP model. If the cancer is not specified, NIOSH will run both IREP models and the model which results in the highest PoC will be used.

d. NIOSH-IREP Changes Rework. If the diagnosis code changes, submit a rework request to the DEEOIC Health Physicist.

e. Diagnosis Date Changes Rework. The net effect of a change in the diagnosis date depends mostly on the type of cancer, the worker's age at the time of diagnosis, and whether or not the year of diagnosis falls within the latency period for development of the cancer (which, in turn, varies by IREP cancer model). Depending on the factors listed above, it is possible for an earlier diagnosis date to result in an increase in the PoC. For changes to the diagnosis date:

(1) When the PoC is less than 40% and,

(a) The diagnosis date is in the same calendar year, a rework is not required.

(b) If the diagnosis date is found to be outside the calendar year (either earlier or later), the CE submits a rework request to NIOSH.

(2) When the PoC is between 40% and 49.99%, and there is any change to the diagnosis date, the CE submits a rework request to the DEEOIC Health Physicist.

(3) When the PoC is 50% or greater,

(a) If the diagnosis date is found to be later, a rework is not required.

(b) If the diagnosis date is found to be earlier, the CE submits a rework request to NIOSH.

(c) The CE documents the difference in the diagnosis date in the case file and ensures that the difference in the diagnosis date used in the dose reconstruction is noted in the RD.

(d) The CE notifies the NIOSH PHA of the change in the diagnosis date so that NIOSH can update its records.

f. Employment Changes Rework.

(1) If the PoC is 50% or greater and the CE identifies additional DOL-verified employment, a rework is not required.

(2) If the PoC is 50% or greater and the DOL-verified employment is found to be less than that used in the dose reconstruction, the CE submits a request for rework to the DEEOIC Health Physicist for review, and includes an electronic copy of the dose reconstruction report.

(3) If the PoC is between 40% and 49.99%, and the CE identifies additional DOL-verified employment, the CE submits a request for rework to the DEEOIC Health Physicist for review, and includes an electronic copy of the dose reconstruction report.

(4) If the PoC is less than 40%, and additional DOL-verified employment is identified:

(a) If all the additional employment falls within the same calendar year and the year is addressed in the dose reconstruction, a rework is not required.

(b) If the additional employment extends into, or is wholly within another calendar year not addressed in the dose reconstruction, the CE submits a rework request to the NIOSH.

(5) Some dose reconstructions contain more employment than originally verified by DOL in the NRSD. NIOSH may have DOE dosimetry or employment records for periods not identified by DOL, or the dose reconstruction may use a continuous period rather than considering numerous breaks in employment.

(a) If the case is likely non-compensable, NIOSH may add the additional time period to the DOL-verified employment for the purpose of completing a dose reconstruction (unless it is military, navy nuclear, or non-DOE federal service) in a timely manner.

(b) If the PoC is less than 50% and the dose reconstruction contains employment added by NIOSH, a rework is not required. However, the CE must write a memo to file that DOL did not verify part of the employment period assumed by NIOSH, but that the employment period was assumed

correct for completing the dose reconstruction in a timely manner.

Should new information arise to warrant performing the dose reconstruction again (e.g., additional cancer diagnosis, additional employment at another site), only employment verified by DOL will be used, which may be more restrictive than that allowed in the current dose reconstruction. The CE ensures that he or she includes an explanation of this as part of the narrative analysis included in any forthcoming RD.

If NIOSH has added employment to a claim that is likely compensable, NIOSH contacts the CE with the additional employment information for DOL review and verification. After verification, the CE submits an amended NRSD listing all accepted employment to NIOSH.

(c) If the PoC is 50% or greater and the dose reconstruction contains employment added by NIOSH but not approved by the DO, the CE submits a rework request to the DEEOIC Health Physicist.

(6) If a CE identifies military, navy nuclear, or non-DOE federal service employment referenced in the dose reconstruction, the CE submits a rework request to the DEEOIC Health Physicist because this may mean that covered employment is not established.

(7) For any PoC, if the CE identifies changes to the employment site(s), the CE submits a rework request to the DEEOIC Health Physicist because this may alter the applicable site profile used in assessing occupational radiation exposure.

(8) When a rework is not required, the CE documents the changes to the employment in a memo to file and ensures that the difference(s) between the employment used in the dose reconstruction compared to the DOL-verified employment is noted in the RD. Finally, the CE notifies the NIOSH PHA of the change(s) in employment so NIOSH can update its records.

g. Additional Survivors (Claimants) Identified Rework.

(1) If the PoC is 50% or greater, NIOSH does not need to interview any newly identified claimants. A rework is not required.

(2) If the PoC is less than 50%, a rework request is sent to NIOSH to interview the new claimant(s), at the claimant(s)' request, to determine if there is some information that could significantly affect the dose reconstruction.

13. Procedures for Requesting Rework. For cases in which the CE determines that a rework is necessary, the CE e-mails his or her assigned Supervisory CE (SCE), SrCE or journey level CE with the amended NRSD attached, noting the issues with the dose reconstruction.

a. The CE's e-mail includes the following:

(1) Use an e-mail subject that is specific to the individual rework request. For example: DOL Case ID, NIOSH ID Number, DO, and "Rework", i.e., *1234-NIOSH ID #123456-Denver-Rework*.

(2) The CE briefly summarizes how he or she used the current dose reconstruction. Include the employment history used by NIOSH in the dose reconstruction; the cancer(s), diagnosis code(s) and diagnosis date(s) used in the dose reconstruction, and the PoC resulting from this information used in the dose reconstruction.

(3) Describe the reason(s) for the rework request. For example, an additional cancer has been verified, the wrong cancer was reported in the NRSD, the primary cancer was determined for a secondary cancer reported as an "unknown primary," more or less employment was determined, or the diagnosis date for one of the cancers in the dose reconstruction was found to be incorrect.

(4) Determine whether the employment history and cancer information listed on the Dose Reconstruction Coversheet is the exact information used by NIOSH in the dose reconstruction. If the information reported in the NRSD does not match the information stated on

the Dose Reconstruction Coversheet, review the dose reconstruction report, particularly in the sections "Dose Reconstruction Overview," and "Information Used", where NIOSH describes in more detail the information used to complete the dose reconstruction. This text may resolve an apparent discrepancy.

(5) Refer to Exhibit 4 for examples of rework requests and types of information needed.

b. The CE prepares an amended NRSD as necessary.

c. To track the action, the CE records the rework request in ECS.

d. The DEEOIC Health Physicist serves as the central liaison between NIOSH and DOL on all issues related to dose reconstruction. If the SCE, SrCE, or journey level CE agrees with the CE's findings regarding rework, he or she forwards the CE's e-mail along with the amended NRSD to the DO NIOSH liaison. In turn, the DO NIOSH liaison sends the request along with the amended NRSD to the DEEOIC Health Physicist and copies the CE, SCE, SrCE or journey level CE, and District Director. For instances where the CE determines that a rework request does not need to be forwarded to the DEEOIC Health Physicist (e.g., non-compensable claim with an accepted cancer not included in the dose reconstruction), the CE is to forward the rework request directly to NIOSH.

(1) The DEEOIC Health Physicist reviews the request for rework and determines whether a rework is required.

(2) If the DEEOIC Health Physicist needs additional information to make a determination, which may include requesting the case file, he or she contacts the CE.

e. Rework Not Needed. If the DEEOIC Health Physicist determines that the submitted information does not change the outcome of the dose reconstruction, he or she sends an e-mail to the DO NIOSH liaison, with a copy to the CE, or SCE, and District Director, explaining the rationale for not continuing the review of the dose reconstruction. When the CE receives this response, he or she ensures the

response is entered into ECS and proceeds with the IREP calculation.

(1) Updating Records. The CE is responsible for documenting any change to the case records in OIS. This is true regardless of whether the CE submits the case for a rework review by the DEEOIC Health Physicist. The CE is to always document, with memos to file, any analysis that applies to assessing the sufficiency of a dose reconstruction, along with the guidelines used to make that determination.

When the DO makes changes to information used in the NIOSH dose reconstruction, and no rework is required, the DO NIOSH liaison or other designated person sends an e-mail to the appropriate NIOSH PHA. This e-mail indicates what information changed, such as the diagnosis code, cancer name, employment dates, etc.

This allows NIOSH to update its records for the case, which is most critical with respect to changes involving diagnosis codes and PoC values different from those initially generated by the dose reconstruction. Forwarding these changes also allows NIOSH to compile accurate statistics on the types of cancers addressed in EEOICPA decisions that required a NIOSH dose reconstruction.

If a CE performs a new PoC calculation using new information without the need for rework, the DO NIOSH liaison must advise the NIOSH PHA via e-mail and attach the new IREP summary file. For example, in a case with an initial PoC less than 45%, the DEEOIC Health Physicist determined that a change in the diagnosis code did not require a rework of the dose reconstruction, but just a different NIOSH-IREP model run. If the new IREP run resulted in a PoC less than 45%, the CE uses the new IREP run and PoC as the value for the dose reconstruction but must advise NIOSH as noted above.

(2) Any future dose reconstruction rework based on additional verified cancer(s) or employment is performed by NIOSH using only DOL-verified information, which may be more restrictive than information used in the previous dose reconstruction

(i.e., in some likely non-compensable cases, NIOSH may assume a continuous employment period rather than considering numerous breaks in employment for the purpose of completing a dose reconstruction in a timely manner). Therefore, it is possible in some cases for the subsequent PoC to remain the same, increase only slightly, or even decrease to some degree if the dose reconstruction is reworked in the future.

f. Rework Needed. If the DEEOIC Health Physicist determines that a rework is necessary, he or she e-mails the CE, SrCE or journey level CE, SCE, District Director and the DO NIOSH liaison. In certain non-standard rework requests, the DEEOIC Health Physicist also copies the designated NIOSH Division of Compensation Analysis and Support (DCAS) contact person(s) on the e-mail.

(1) The CE takes the following actions:

(a) Forward the amended NRSD as an electronic attachment via e-mail to the NIOSH PHA assigned to the DO.

(b) Send a letter to the claimant (Exhibit 5) explaining that the case has been returned to NIOSH for a review of the dose reconstruction.

(c) Send a copy of this letter to the appropriate NIOSH PHA along with the weekly DO submissions to NIOSH.

g. After a revised dose reconstruction report is completed, NIOSH sends it to the claimant along with another Form OCAS-1. The claimant has 60 days to sign and return the form.

14. Comments to Dose Reconstruction Submitted to FAB. A claimant may choose to present comments regarding the findings reported in the NIOSH dose reconstruction. Claimant comments may be submitted for consideration as part of the following circumstances: a request for a review of the written record, oral hearing, or reconsideration; testimony or presentation of exhibits for an oral hearing; or a request for reopening or other post-adjudication action. In these situations, the DEEOIC

Health Physicist serves as the initial point of contact for addressing claimant-related comments to a NIOSH dose reconstruction. The CE or assigned DEEOIC FAB staff person takes the following steps to track dose reconstruction comments submitted for DEEOIC Health Physicist review:

a. Prepares a memo to the DEEOIC Health Physicist that identifies all comments related to the NIOSH dose reconstruction.

b. E-mails an electronic version of the memo to the DEEOIC Health Physicist. Attached to the e-mail is a copy of the claimant's comments/letter of objection, hearing transcript and applicable exhibits, if available. Copies of this e-mail are sent to the supervisor of the assigned CE or DEEOIC FAB staff member and the Policy Branch Program Specialist. The e-mail message should contain the following information in the subject line: the assigned DEEOIC staff member's FAB or district office location; "Tech Obj"; the DOL Case ID#; and the name of the covered facility, e.g., (FAB NO) Tech Obj-4112(Hanford).

c. Bronzes a copy of the memo with associated documents attached into OIS to document the referral and the person completing the action documents ECS Notes, verifying that the aforementioned actions have been completed.

d. Upon receipt of the comments related to the dose reconstruction, the DEEOIC Health Physicist determines whether the issues raised require further review by NIOSH. As part of this review, he or she will review applicable documents from OIS including: the NIOSH dose reconstruction report, an IREP summary for each cancer, and CATI summary for each claimant from the NIOSH dose reconstruction documentation. If the DEEOIC Health Physicist determines that the issues raised are appropriate for NIOSH review, he or she compiles a package consisting of a copy of the memo from the assigned DEEOIC staff member, a summary of the concerns raised regarding the NIOSH dose reconstruction process or copy of pertinent transcript data from the oral hearing, including exhibits (if applicable), the comments/objection letter from the claimant, and any additional documentation (e.g., exposure data). The DEEOIC Health Physicist submits this package to NIOSH for review and written response. The DEEOIC Health

Physicist can consult with NIOSH to clarify whether an issue is appropriate for NIOSH review.

e. Upon receipt of NIOSH's response, the DEEOIC Health Physicist reviews the response to confirm that it addresses the claimant's concerns. He or she will add any additional comments, noting that the comments are from DEEOIC, and forward this information to the assigned DEEOIC staff member and his or her respective supervisor via e-mail. Upon receipt of the review of NIOSH's response, the assigned DEEOIC staff member bronzes the responses into OIS. The assigned DEEOIC staff member incorporates the NIOSH findings into a FD/Remand or other post-adjudicatory decision (e.g, reconsideration, reopening, etc.). The FD/Remand or other post-adjudicatory decision must clearly summarize the claimant's concerns regarding the dose reconstruction and include a detailed summary of NIOSH's responses or, when appropriate to provide clarity, a verbatim recitation of NIOSH's comment response.

f. If the DEEOIC Health Physicist determines that the concerns do not warrant further review by NIOSH, the DEEOIC Health Physicist prepares an e-mail to the assigned DEEOIC staff member and his/her supervisor addressing the issues raised by the claimant regarding NIOSH dose reconstruction. In such instances, the assigned DEEOIC staff member incorporates the findings of the DEEOIC Health Physicist into either a FD/Remand or other post-adjudicatory decision. The FD/Remand or other post-adjudicatory decision must summarize clearly the claimant's concerns regarding the dose reconstruction and include the DEEOIC Health Physicist's comments to such concerns.

15. Proving Causation Between Diagnosed Non-SEC Cancer and Covered Employment. Under Part B, a covered employee seeking compensation for cancer, other than as a member of the SEC seeking compensation for a specified cancer, is eligible for compensation if DOL determines that the cancer was "at least as likely as not" (that is, a 50% or greater probability) caused by radiation doses incurred in the performance of duty while working at a DOE facility and/or an AWE facility. DEEOIC uses an algorithmic calculation provided by NIOSH to determine the PoC.

a. Cancers for Which the Primary Site is Unknown. Some claims involve cancers identified by their secondary sites

(sites to which a malignant cancer has spread), where the primary site is unknown.

(1) This situation most commonly arises when death certificate information is the primary source of a cancer diagnosis. It is accepted that cancer-causing agents, such as ionizing radiation, produce primary cancers. In a case in which the primary site of cancer is unknown, this means that the primary site must be established by inference to estimate the PoC.

(2) For background purposes, Exhibit 6, which is produced from Table 1 in 42 C.F.R. Part 81, indicates, for each secondary cancer, the set of primary cancers producing approximately 75% of that secondary cancer among the U.S. population (males and females were considered separately). NIOSH performs the dose reconstruction for the cancer site that yields the highest PoC.

If the PoC yields a result greater than 50%, all of the secondary cancers are covered for medical benefits even if no dose reconstruction was performed for that secondary cancer.

b. Cancers of the Lymph Node. The CE considers all secondary and unspecified cancers of the lymph node as secondary cancers (those resulting from metastasis of cancer from a primary site). For claims identifying cancers of the lymph node, Exhibit 6 provides guidance for assigning a primary site and calculating the PoC using NIOSH-IREP.

c. Claims With Two or More Primary Cancers. For these claims, DOL uses NIOSH-IREP to calculate the estimated PoC for each cancer individually. The CE then performs an additional statistical procedure following the use of NIOSH-IREP to determine the probability that at least one of the cancers was caused by radiation (discussed further in the NIOSH-IREP procedures). This approach is important to the claimant because it determines a higher PoC than is determined for either cancer individually.

For cases involving multiple primary cancers where the PoC is greater than 50%, all of the primary cancers will be covered for medical benefits.

d. Claims for Certain Cancers. Sometimes NIOSH guidance requires that a CE run two or three NIOSH-IREP models for a particular cancer. This most often occurs with different types of leukemia. NIOSH only includes the NIOSH-IREP input and associated summary sheet providing the highest PoC in the "Dose Reconstruction Files" in the data sent to the DO.

16. Calculation of PoC Using NIOSH-IREP Computer Program. DOL calculates the PoC for all cancers using NIOSH-IREP. The risk models developed by the National Cancer Institute and the Center for Disease Control for NIOSH-IREP provide the primary basis for developing guidelines for estimating PoC under EEOICPA. They directly address 33 cancers and most types of radiation exposure relevant to claimants covered by EEOICPA. A glossary of cancer descriptions is provided in 42 C.F.R. Part 81 and is produced as Exhibit 7.

a. NIOSH-IREP Operating Guide. The CE uses procedures specified in the NIOSH-IREP Operating Guide to calculate PoC estimates under EEOICPA. The guide provides step-by-step instructions for the operation of NIOSH-IREP. There are two user guides, one for cases with a PoC less than 45% or greater than 52%; and another, termed the Enterprise Edition, for cases with PoCs of 45% to 52%. Enterprise Edition cases can be identified by looking at the Excel input file name which would include the notation "EE."

(1) For cases with a PoC less than 45% or greater than 52%, the CE accesses NIOSH-IREP on the NIOSH website to perform the PoC calculation. The CE uses data from the CD or electronic record for the NIOSH-provided input file for each cancer.

When two or more cancers are present, the CE uses the multiple primary cancer equation to calculate the total PoC.

(2) For cases with POCs between 45% and 52%, another software program, called the NIOSH-IREP Enterprise Edition (NIOSH-IREP-EE), is used to perform the PoC calculation. The Enterprise Edition is used for this PoC range to achieve better statistical precision and further reduces the chance of denying a claim because of sampling error.

(3) For multiple primary cancers (or secondary cancers with no known primary), the CE performs the NIOSH-IREP-EE calculation for each cancer.

17. Establishing Causation for Cancer Under Part E. EEOICPA presumes medical conditions approved under Part B are caused by exposure to a toxic substance under Part E, so long as there is covered contractor employment and in the case of deceased employees, that a survivor is found eligible.

NIOSH Referral Summary Document (NRSD)

Enter a "X" where appropriate

	Initial		Amendment		Supplement
Remarks (if Amendment or Supplement):					

1. DOL Case Number:

Case File Contact Information

2. Energy Employee (EE):

a. Name (First-Middle-Last-Suffix)		
b. Gender (Male or Female)		
c. Date of Birth (MM/DD/YYYY)		
d. Date of Death (MM/DD/YYYY)		
e. Address (Street, City, State, Zip)		
f. Phone Number and Type		

3. Survivor(s) (SV) (If applicable, create a table for each):

a. Name (First-Middle-Last-Suffix)		
b. Address (Street, City, State, Zip)		
c. Phone Number and Type		
d. Relationship to employee		
e. Currently eligible survivor (Y/N)		

a. Name (First-Middle-Last-Suffix)		
b. Address (Street, City, State, Zip)		
c. Phone Number and Type		
d. Relationship to employee		
e. Currently eligible survivor (Y/N)		

a. Name (First-Middle-Last-Suffix)		
b. Address (Street, City, State, Zip)		
c. Phone Number and Type		
d. Relationship to employee		
e. Currently eligible survivor (Y/N)		

4. Other Contact(s)(OC)(If applicable, create a table for each):

a. Name (First-Middle-Last-Suffix)	
b. Address (Street, City, State, Zip)	
c. Phone Number and Type	
d. Relationship to employee	

Medical and Employment Information

5. EE Covered Cancer Information (create a table for each cancer):

a. Primary [☐] or Secondary (metastatic) [☐]	
b. Cancer Description/Type	
c. Associated ICD-9 Code	
d. Associated ICD-10 Code	
e. Date of Cancer Diagnosis	

6. Other Covered Condition:

a. SEC Cancer Claim, but filing for Non-SEC cancer medical benefits [☐]
b. Other claim for benefits scenario [☐]
c. Explain:

7. Energy Employee Verified Employment History:
(List all breaks in employment at the DOE or AWE Facility):

a. Employer / Facility Name	
b. Start Date	
c. End Date	
d. Employment Badge Number	
e. Dosimetry Badge No.	
f. Job Title	

8. Employment Verification Information Valuable to NIOSH:

a. ☐ DOE could not verify employment
b. ☐ Employment Verification based upon Affidavit or Other Credible Evidence.
c. ☐ Worked for a contractor/sub-contractor not listed in DOE Office of Worker Advocacy facility online database.

9. Other information relevant to dose reconstruction, if required:

a. If the claim is for **skin cancer** or a secondary cancer for which skin cancer is a likely primary cancer, list one or more of the following:	☐ American Indian or Alaska Native ☐ Asian, Native Hawaiian, or Pacific Islander ☐ Black ☐ White-Hispanic ☐ White-Non-Hispanic ☐ Not given
b. If the claim is for **lung cancer** or a secondary cancer for which lung cancer is a likely primary cancer, select one of the following (Note: Currently refers to time of cancer diagnosis):	☐ Never smoked ☐ Former smoker ☐ Current smoker (? cig/day) →☐ <10 cig/day →☐ 10-19 cig/day →☐ 20-39 cig/day →☐ 40+ cig/day

10. DOL Information:

a. District Office	
b. Claims Examiner Name	
c. Claims Examiner Phone Number	
d. Claims Examiner e-mail address	

Reviewed by:

Claims Examiner _____ Date _____

INSTRUCTIONS FOR COMPLETING THE NRSD				
No.	**Title**	**Description**	**Example**	
N/A	NRSD Type	Enter an "X" next to the type of NRSD that is being submitted. If you select Amendment or Supplement enter Remarks (the reason and or data that has created the need for an Amendment/Supplement. For an Initial NRSD include all sections, unless they will be blank (i.e., other contact if there isn't one). For an Amendment include the employee's name, DOL case number, NIOSH tracking number, the tables that include changed information, and the DOL information (including the SrCE or journey level CE signature). For Supplements, include the DOL case number, NIOSH tracking number, and employee's name.		
1	DOL Case ID	Enter the case ID number	12345	
2	Energy Employee (EE)	The employee as listed on the EE-1/EE-2.		
a	Name	Enter the Employee's name as it is listed in ECS/Claim Form (First, Middle Initial, Last, Suffix)	Fred R. Flintstone, III	
b	Gender	Enter ***Male*** or ***Female*** as indicated in ECS/Claim Form	Male, Female	
c	Date of Birth	Enter the date of birth in MM/DD/YYYY format	01/31/1964	
d	Date of Death	***If applicable***, enter the date of death in MM/DD/YYYY format	11/01/2006	
e	Address	***If applicable***, enter the full address of the EE (Street, City, State, and zip code) Helpful Hint: Adding the +4 zip code may speed up mail delivery by several days (visit www.usps.com to find an address' +4 zip code). o	710 Bedrock Dr., Aiken	
f	Phone Number and Type	***If available/applicable,*** enter the employee's 10 digit phone number. Refer to ECS for the EE-2. Type can include home, work, cell, day, evening, vacation home, etc.	865-123-9870	Home
3	Survivor(s) Data	***If applicable,*** enter the survivor's data for each survivor that has filed a Claim for Benefits, Form EE-2. If not applicable (the employee is living), delete these tables. If there are more than 3 survivors, copy and paste one table and add to the bottom, be sure to include a space between them.		
a	Name	Enter the Survivor's name (First, Middle Initial, Last, Suffix). Refer to ECS for the EE-2	Betty D. Flintstone	
b	Address	Enter the full address of the survivor (Street, City, State, and zip code). Refer to ECS or the EE-2.	710 Bedrock Dr., Aiken, SC 26175-0454	
c	Phone Number and Type	**If available**, enter the survivor's 10 digit phone number. Refer to ECS or the EE-2. Type can include home, work, cell, day, evening, vacation home, etc.	703-999-8000	Other
d	Relationship to Employee	Enter the survivor's relationship to the employee as selected on the EE-2	Spouse, Child, Grandchild	
e	Currently eligible survivor (Yes or No)	Enter Yes or No. Entering "Yes" means the survivor has met all the requirements to establish survivorship. Also note if the survivor is a "Part E Only" survivor (i.e., a non-spousal child). In cases of multiple survivors, indicate which survivor would prefer to be contacted by entering "Primary Contact" in the space provided.	Yes (Part E Only/Non-spousal Child)/Primary Contact	
4	Other Contact	**If applicable,** enter the Authorized Representative/Power of Attorney (POA) data. If not, delete this table. If there is more than one contact, copy and paste the table and add to the bottom, be sure to include a space between them.		
a	Name	Enter the Contact's name (First, Middle Initial, Last, Suffix)	Ira M. Lawyer, Jr.	
b	Address	Enter the full address of the survivor (Street, City, State, and zip code)	710 Bedrock Dr., Aiken, SC 26175-0454	
c	Phone Number and Type	**If available**, enter the survivor's 10 digit phone number. Type can include home, work, cell, day, evening, vacation home, etc.	703-999-8000	Work

INSTRUCTIONS FOR COMPLETING THE NRSD				
	d	Relationship to employee	**If known,** enter the contact's relationship to the EE	Lawyer
5		EE Covered Cancer Information	Enter the EEs verified diagnosed cancer(s). Create a table (copy, cut, paste); for each primary cancer or secondary cancer for which there is an unknown primary.	
	a	Primary or Secondary	Place an "X" (by clicking) in the box that best describes the cancer (Primary or Secondary)	
	b	Cancer Description/Type	Enter the cancer description from the pathology/operative report, etc.	Chronic myelomonocytic leukemia, in remission
	c	Associated ICD-9 Code	Enter the ICD-9 code that best describes the cancer	206.11
	d	Associated ICD-10 Code	Enter the ICD-10 code that best describes the cancer	C93.11
	e	Date of Cancer Diagnosis	Enter the date of cancer diagnosis from pathology report, operative report, death certificate, etc. in MM/DD/YYYY format. The entire date is not required but preferred. List the month and year if the full date is not available. The year of diagnosis is required.	01/10/2001
6		Other Covered Condition	**If applicable,** place and "X" (by clicking) in the box(es).	
	a	SEC Cancer Claim, but filing for Non-SEC cancer medical benefits	Select this box if the claim is an employee claim or a survivor claim where the employee filed initially, that is being or has been accepted for an SEC cancer; and there is a claim for a non-SEC Cancer.	Employee is accepted for SEC lung cancer; and now is filing for a non-SEC skin cancer.
	b	Other claim for benefits scenario	If there is any scenario not "typical" (i.e., non SEC cancer/employment) and not covered in 6.a, select this box by clicking.	Part B survivor case accepted for CBD. Under Part E, cannot establish death link relating to CBD; death certificate lists lung cancer as cause of death.
	c	Explain	Provide a detailed/specific explanation for the reason box 6.b was selected	For the example above: "Survivor already compensated under Part B, Dose Reconstruction will be to establish death link for Part E only."
7		Energy Employee Verified Employment History	Complete this section for all verified employment. Any breaks in employment seven days or more must be reported separately. Create another table by using copy, paste; remember to leave a space between them. It is not necessary to verify employment beyond the date of cancer diagnosis for the purposes of submitting the NRSD; however, once submitted, continue to complete employment verification for toxic exposure and other claimed illnesses. Remember that the verified employment may extend beyond the covered employment at a particular site. The CE must verify the covered dates for a site by going to the DOE Office of Worker Advocacy Covered Facility List (http://www.hss.energy.gov/healthsafety/fwsp/advocacy/faclist/findfacility.cfm).	
	a	Employer/Facility Name	Enter the employer and Facility Name	Union Carbide/K-25
	b	Uranium Mine/Mill	For RECA Section 5 workers, Enter Name of Uranium Mine/Mill	Climax Uranium Mill, Grand Junction, CO
	c	Start Date	Enter the start date in MM/DD/YYYY Format	01/01/1956
	d	End Date	Enter the end date in MM/DD/YYYY Format	12/31/1959
	e	Employment badge number	**If available**, list the EEs employment badge number from the EE-3 or DAR.	10349
	f	Dosimetry Badge No.	**If available**, list the EEs dosimetry badge number from the EE-3, DAR, or ORISE	10949
	g	Job Title	**If available,** list the EEs job title (for the specific employment period) using information from the EE-3, DAR, or ORISE	Pipefitter

INSTRUCTIONS FOR COMPLETING THE NRSD				
8		Employment verification information valuable to NIOSH	Select these boxes, by clicking, if applicable.	
	a	DOE could not verify employment	Select this box if employment wasn't verified	
	b	Employment verification based on affidavit or other credible evidence		
	c	Worked for a contractor/sub-contractor not listed	If the employee worked for a contractor/subcontractor not listed on the DOE Office of Worker Advocacy Covered Facility List, select this box.	F.H. McGraw
9		Other information relevant to dose reconstruction	For skin cancer and lung cancer cases additional information regarding the following must be provided.	
	a	Ethnicity selection	For skin cancers, it is required that the District Office supply NIOSH with the EEs race/ethnicity. The method used to gather this information is EE/EN-9. If the claimant does not return the questionnaire within 60 days, the case will be administratively closed. However, if the CE can obtain the information from the EE's medical information or other credible source (i.e., DAR), the NRSD may be completed using that information and forwarded to NIOSH with an explanation of where the information was acquired.	
	b	Smoking History	For lung cancer or a secondary cancer with an unknown primary cancer that includes lung cancer as a possible primary cancer, the CE must request the EEs smoking history using the EE/EN-8. If the claimant does not return the questionnaire within 60 days, the case will be administratively closed. However, if the CE can obtain the information from the EE's medical information or other credible source (i.e., DAR), the NRSD may be completed using that information and forwarded to NIOSH with an explanation of where the information was acquired. If the employee is a current smoker (currently refers to time of cancer diagnosis), then the CE must select an additional box, which indicates the amount (per day) the employee smoked at the time of cancer diagnosis.	
10		DOL Information	Enter the requested information	
	a	District Office	Enter the CE's District Office	Cleveland, Denver, Jacksonville, Seattle
	b	Claims Examiner Name	Enter the CE's full name	John Q. Examiner
	c	Claims Examiner Phone No.	Enter the CE's direct dial phone number (not the toll free number)	(904)357-4795 x74307
	d	Claims Examiner e-mail address	Enter the CE's DOL e-mail address	examiner.john@dol/.gov
Reviewed by			A CE/SrCE must review the NRSD, sign, and date; affirming that to the best of her/his ability, they have reviewed the information provided and believe it to be accurate and correct.	
Note: A complete copy of the case file (including the Part D if available) via CD or other means of electronic submission, will be duplicated and sent with the NRSD to NIOSH.				

NIOSH Referral Letter to Claimant

Dear *[Insert Claimant Name]*:

We have received the necessary medical and employment information submitted in support of your claim for compensation under the Energy Employees Occupational Illness Compensation Program Act (EEOICPA).

The next step in the adjudication of your claim is the dose reconstruction process. The National Institute for Occupational Safety and Health (NIOSH), an agency within the Department of Health and Human Services, administers this portion of the process. In order for NIOSH to proceed with the dose reconstruction, they must have access to your complete case record. Therefore, a copy of your case file is being referred to them.

Based on our review of your claim, we will report the following information to NIOSH:

Medical

- Cancer diagnosis type (nomenclature), *[Insert Diagnosis Code(s)]* and date of diagnosis

Employment

- Employer name, facility, and dates of employment (list each individually)

If you *[or the "the employee" when writing to a survivor]* had any other primary cancers, in addition to what is listed above, it is important that you send written medical records documenting an explicit diagnosis of any additional primary cancers, the type of cancer, and the date of its first diagnosis. Also, with regard to employment, if you [or "the employee" if writing to a survivor] had other covered employment, either before or after the dates shown above, or employment at another Department of Energy covered facility, please send us any evidence you have that supports this additional employment. Any such medical or employment evidence

should be sent to your claims examiner at the mailing address provided below.

Once NIOSH receives your case record, they will send you a letter advising that they have received your information. The letter will contain information on dose reconstruction and what to expect from NIOSH in regard to your claim. NIOSH has informed us that the process of dose reconstruction can be time consuming because it relies on information that must be collected from a number of sources. NIOSH's first priority is to ensure the collected information is valid and that the assumptions used to estimate doses are fair, consistent, and well-grounded in the best available science.

Once NIOSH completes the dose reconstruction, they will send us the results, and we will apply a formula, using the NIOSH data, to determine whether your *[or the employee's]* claimed cancer is at least as likely as not (a 50% or greater probability) related to the covered employment. We will then notify you, in writing, regarding the status of your claim.

If you have specific questions regarding the status of the dose reconstruction, you may contact the NIOSH office by calling their toll-free number at **1-877-222-7570**. Any other questions regarding your claim should be addressed to your claims examiner at the mailing address below.

Sincerely,

Claims Examiner
{Insert Central Mailroom Address}

Examples of Rework Request

These examples do not cover all scenarios. Please use your professional judgment in conveying the most accurate and pertinent information necessary concerning how the DR was performed, and what modifications need to be made. Also, ensure that the appropriate ICD code with the condition description is included.

1. Additional cancer reported to the DO (employment history unchanged):

NIOSH DR for Karen Smith, 111-11-1111, (NIOSH 3450). Ms. Smith was employed at the Paducah Gaseous Diffusion Plant for several periods between 09/28/55 to 12/28/79. The DR was performed for two cancers: BCC (left preaurical area), diagnosed on 01/28/02; and SCC in-situ right ear, diagnosed on 9/17/02. The POC was 38.14%.

Subsequently, the DO received evidence of an additional verified cancer: SCC (right posterior inferior pinna), diagnosed on 07/31/03.

2. Cancers were incorrectly reported in the NRSD (employment history has not changed):

John M. Jones, 222-22-2222, (NIOSH 5678). Mr. Jones was employed at the Nevada Test Site from (09/01/65 to 03/3/73) and (11/19/79 to 09/30/87). The DR was performed for two cancers:

- Prostate cancer, diagnosed on 01/01/98
- Adenocarcinoma, Barrett's Esophagus, diagnosed on 11/15/01

The POC was 36.39%. We reviewed the case file and determined that the prostate diagnosis date and the Barrett's Esophageal cancer were incorrectly reported. The correct cancer information follows:

1. Prostate cancer, diagnosed on 04/08/98 - (diagnosis 4 months later than reported)
2. Adenocarcinoma, lower (distal) esophagus, diagnosed on 11/15/01

3. Corrections to employment (cancer unchanged)

Mary Smith, 333-33-3333 (NIOSH 91264). Ms. Smith worked at NTS for four periods from the 1950s to the 1970s. The DR was performed for astrocytoma, diagnosed on 03/19/77. Based on the employment used in the DR, the POC was 35.57%.

The DR used the following NTS employment dates, as reported in the NRSD:

1. 04/24/57 - 06/24/57
2. 07/09/60 - 01/18/63
3. 01/31/63 - 07/19/65
4. 07/26/55 - 02/01/74

Subsequent to submitting the NRSD report, we received additional employment evidence to determine that employment period 4 above, should actually be 07/26/**65** - 02/01/74, resulting in about 5 years less verified employment than represented in the current DR.

4. Correction to cancers and employment history:

Tom Doe, 444-44-4444 (NIOSH 23679). The DO reported that Mr. Doe was employed at the Tonopah Test Range and Nevada Test Site (NTS) from 03/27/87 to 01/22/91. The DR was performed for esophageal cancer, diagnosed on 03/26/93. The POC was 2.35%.

We reviewed the case file and found that the cancer and the employment site and dates reported in the original NRSD were incorrect. Please replace the originally reported esophageal cancer, with the following two cancers:

- Squamous cell carcinoma of the right piriform fossa, diagnosed on 01/31/90
- Squamous cell carcinoma of the distal esophagus, diagnosed on 03/25/93

In addition, Mr. Doe was on leave without pay as of 01/22/90, although his actual termination date was 01/22/91. Therefore, the correct employment is: Solely at NTS (no Tonopah employment) from 03/27/87 to 01/22/90, one less year than originally reported.

5. Correction to reported cancers, and additional cancer (no changes to employment):

DR for James Johnson, 555-55-5555 (NIOSH 0432). Mr. Johnson was employed at NTS intermittently from 09/07/54 to 12/31/95. The NRSD reported 4 primary cancer sites for dose reconstruction: two (2) prostate cancers (right and left lobes), and two (2) BCCs, diagnosed in 10/97 and 04/99. The resultant POC was 51.05%.

Upon further review of the medical evidence, we determined that the two prostate cancers should only be reported as one, as the pathology report for both lobes was reported within the same two weeks, and there is no indication that the two lobes are separate primaries. We also determined that the 04/99 BCC was a recurrent cancer of the 10/97 BCC and should not be included in the DR. In addition, we received additional medical evidence of another verified cancer: SCC (scalp), diagnosed on 06/12/96.

Therefore the DR should be performed for the correct cancers as follows:

1. Prostate, diagnosed on 10/14/84
2. BCC (rt cheek), diagnosed on 10/23/97
3. SCC (scalp), diagnosed on 06/12/96.

6. Deletion of several cancers from a list of multiple cancers (no change in employment):

DR for Pete James, 666-66-6666 (NIOSH 3495). Mr. James was employed at the Pacific Northwest National Lab from 08/25/69 to 06/28/87. The DR was performed for eleven (11) cancers. The POC was 52.1%.

Upon further review of the medical evidence in the case file, we determined that only eight (8) of the original eleven (11) cancers are verifiable. Below is the list of the 11 initially reported cancers; the three (3) erroneous cancers are identified by strikethrough:

1. Seminoma of the R. Testicle, 06/01/77
2. ~~BCC R. Shoulder, 10/30/97~~
3. BCC R. Cheek, 10/30/97
4. SCC in situ, L. Temple, 02/24/98
5. SCC in situ, Scalp, 02/24/98
6. ~~SCC in situ, L. Forearm, 04/24/98~~

7. SCC in Situ, L. Dorsal Forearm, 06/23/98
8. SCC R. Cheek, 11/29/01
9. BCC L. Chin, 11/29/01
~~10. BCC L. Cheek, 02/07/02~~
11. SCC in situ, L. Lateral Forearm, 06/30/03

The 8 DOL verified cancers are therefore:

1. Seminoma of the R. Testicle, 06/01/77
2. BCC R. Cheek, 10/30/97
3. SCC in situ, L. Temple, 02/24/98
4. SCC in situ, Scalp, 02/24/98
5. SCC in Situ, L. Dorsal Forearm, 06/23/98
6. SCC R. Cheek, 11/29/01
7. BCC L. Chin, 11/29/01
8. SCC in situ, L. Lateral Forearm, 06/30/03

7. Additional verified employment periods (employment in NRSD correct):

DR for Sam Jones, 777-77-7777 (NIOSH 3254). The DR was performed for liver cancer, diagnosed on 09/03/87. The POC was 22%. The DR Coversheet (dated 06/02/05) notes Mr. Jones' Hanford employment as: "06/29/54-07/12/77 (eleven periods of employment)." This is correct based on the employment originally reported in the NRSD by the DO.

We have subsequently received evidence of additional verified Hanford employment periods:

1. 01/01/53 to 12/31/53
2. 08/07/53 to 06/28/54
3. 01/30/62 to 04/15/62
4. 01/01/79 to 12/31/79
5. 01/01/80 to 12/31/80

Review of Dose Reconstruction Letter to Claimant

Dear Claimant Name:

We recently received the results of the dose reconstruction conducted by the National Institute for Occupational Safety and Health (NIOSH) in regard to your claim for compensation under the Energy Employees Occupational Illness Compensation Program Act. After review of the dose reconstruction and the evidence received in support of your claim, it was discovered that [insert reason].

We determined that your claim must be returned to NIOSH so that they can review and revise the dose reconstruction, as appropriate, to include this information. *This may not affect the outcome of your claim*, but the information used in the dose reconstruction must accurately reflect what is shown in the evidence received by the district office. Your NIOSH tracking number xxxxx will remain the same. Your claim will receive priority consideration by NIOSH.

You will have the opportunity to review the revised dose reconstruction report, and will again be required by NIOSH to sign the OCAS-1 to acknowledge your receipt of the revised report and initial dose reconstruction results.

When NIOSH finishes its revised study and sends us the results, we will apply a formula to the dose reconstruction to determine whether the cancer(s) was at least as likely as not (50% or greater chance) related to the covered employment. We will then notify you in writing regarding the status of your claim.

If you have specific questions regarding the status of the dose reconstruction, you may contact the NIOSH office by calling toll free at **1-877-222-7570**. Any other questions should still be addressed to this district office.

Sincerely,

Claims Examiner
District Office Location

cc: NIOSH Public Health Advisor

Primary Cancer Sites

Secondary Cancer	Likely Primary Cancers
Lymph nodes of head, face and neck	Malignant neoplasm of base of tongue, Malignant neoplasm of parotid gland, Malignant neoplasm of tonsil, unspecified, Malignant neoplasm of pharynx, unspecified, Malignant neoplasm of glottis, Malignant neoplasm of trachea, Malignant melanoma of lip, Unspecified malignant neoplasm of skin of lip, Malignant neoplasm of nipple and areola, unspecified female breast, Malignant neoplasm of thyroid gland
Intrathoracic lymph nodes	Malignant neoplasm of upper third of esophagus, Malignant neoplasm of trachea, Malignant neoplasm of nipple and areola, unspecified female breast
Intra-abdominal lymph nodes	Malignant neoplasm of upper third of esophagus, Malignant neoplasm of pylorus, Malignant neoplasm of hepatic flexure, Malignant neoplasm of head of pancreas, Malignant neoplasm of trachea, Malignant neoplasm of nipple and areola, unspecified female breast, Malignant neoplasm of endocervix, Malignant neoplasm of prostate, Malignant neoplasm of unspecified kidney, except renal pelvis, Follicular lymphoma, unspecified, extranodal and solid organ sites
Lymph nodes of axilla and upper limb	Malignant neoplasm of trachea, Malignant melanoma of lip, Malignant neoplasm of nipple and areola, unspecified female breast
Inguinal and lower limb lymph nodes	Malignant neoplasm of rectosigmoid junction, Malignant neoplasm of trachea, Malignant melanoma of lip, Unspecified malignant neoplasm of skin of lip, Malignant neoplasm of prepuce
Intrapelvic lymph nodes	Malignant neoplasm of hepatic flexure, Malignant neoplasm of rectosigmoid junction, Malignant neoplasm of trachea, Malignant neoplasm of endocervix, Malignant neoplasm of corpus uteri, unspecified, Malignant neoplasm of prostate, Malignant neoplasm of trigone of bladder
Lymph nodes of multiple sites	Malignant neoplasm of upper third of esophagus, Malignant neoplasm of cardia, Malignant neoplasm of hepatic flexure, Malignant neoplasm of trachea, Malignant neoplasm of nipple and areola, unspecified female breast
Lymph nodes, site unspecified	Malignant neoplasm of upper third of esophagus, Malignant neoplasm of cardia, Malignant neoplasm of sigmoid colon, Malignant neoplasm of trachea, Malignant melanoma of lip, Malignant neoplasm of nipple and areola, unspecified female breast, Malignant neoplasm of prostate
Lung	Malignant neoplasm of hepatic flexure, Malignant neoplasm of trachea, Malignant melanoma of lip, Malignant neoplasm of nipple and areola, unspecified female breast, Malignant neoplasm of prostate, Malignant neoplasm of trigone of bladder, Malignant neoplasm of unspecified kidney, except renal pelvis
Mediastinum	Malignant neoplasm of upper third of esophagus, Malignant neoplasm of trachea, Malignant neoplasm of nipple and areola, unspecified female breast

Pleura	Malignant neoplasm of upper third of esophagus, Malignant neoplasm of hepatic flexure, Malignant neoplasm of trachea, Malignant neoplasm of nipple and areola, unspecified female breast, Malignant neoplasm of unspecified ovary , Malignant neoplasm of prostate, Malignant neoplasm of unspecified kidney, except renal pelvis
Other respiratory organs	Malignant neoplasm of upper third of esophagus, Malignant neoplasm of hepatic flexure, Malignant neoplasm of glottis, Malignant neoplasm of trachea, Unspecified malignant neoplasm of skin of lip, Malignant neoplasm of nipple and areola, unspecified female breast, Malignant neoplasm of prostate, Malignant neoplasm of thyroid gland
Small intestine, including duodenum	Malignant neoplasm of duodenum, Malignant neoplasm of hepatic flexure, Malignant neoplasm of head of pancreas, Malignant neoplasm of trachea, Malignant neoplasm of connective and soft tissue of head, face and neck, Malignant melanoma of lip, Malignant neoplasm of nipple and areola, unspecified female breast, Malignant neoplasm of unspecified ovary, Malignant neoplasm of unspecified kidney, except renal pelvis
Large intestine and rectum	Malignant neoplasm of hepatic flexure, Malignant neoplasm of rectosigmoid junction, Malignant neoplasm of trachea, Malignant neoplasm of nipple and areola, unspecified female breast, Malignant neoplasm of unspecified ovary, Malignant neoplasm of prostate
Retroperitoneum and peritoneum	Malignant neoplasm of cardia, Malignant neoplasm of hepatic flexure, Malignant neoplasm of rectosigmoid junction, Malignant neoplasm of head of pancreas, Malignant neoplasm of trachea, Malignant neoplasm of peripheral nerves of head, face and neck, Malignant neoplasm of nipple and areola, unspecified female breast, Malignant neoplasm of corpus uteri, unspecified, Malignant neoplasm of unspecified ovary
Liver, specified as secondary	Malignant neoplasm of cardia, Malignant neoplasm of hepatic flexure, Malignant neoplasm of rectosigmoid junction, Malignant neoplasm of head of pancreas, Malignant neoplasm of trachea, Malignant neoplasm of nipple and areola, unspecified female breast
Other digestive organs	Malignant neoplasm of upper third of esophagus, Malignant neoplasm of cardia, Malignant neoplasm of hepatic flexure, Malignant neoplasm of head of pancreas, Malignant neoplasm of trachea, Malignant neoplasm of nipple and areola, unspecified female breast, Malignant neoplasm of prostate
Kidney	Malignant neoplasm of hepatic flexure, Malignant neoplasm of trachea, Malignant neoplasm of nipple and areola, unspecified female breast, Malignant neoplasm of endocervix, Malignant neoplasm of prostate, Malignant neoplasm of trigone of bladder, Malignant neoplasm of unspecified kidney, except renal pelvis, Follicular lymphoma, unspecified, extranodal and solid organ sites
Other urinary organs	Malignant neoplasm of hepatic flexure, Malignant neoplasm of nipple and areola, unspecified female breast, Malignant neoplasm of endocervix, Malignant neoplasm of unspecified ovary, Malignant neoplasm of prostate, Malignant neoplasm of trigone of bladder, Malignant neoplasm of unspecified kidney, except renal pelvis

Skin	Malignant neoplasm of hepatic flexure, Malignant neoplasm of trachea, Malignant neoplasm of peripheral nerves of head, face and neck, Malignant melanoma of lip, Unspecified malignant neoplasm of skin of lip, Malignant neoplasm of nipple and areola, unspecified female breast, Malignant neoplasm of unspecified kidney, except renal pelvis
Brain and spinal cord	Malignant neoplasm of trachea, Malignant melanoma of lip, Malignant neoplasm of nipple and areola, unspecified female breast
Other parts of nervous system	Malignant neoplasm of trachea, Malignant melanoma of lip, Malignant neoplasm of nipple and areola, unspecified female breast, Malignant neoplasm of prostate, Follicular lymphoma, unspecified, extranodal and solid organ sites
Bone and bone marrow	Malignant neoplasm of trachea, Malignant neoplasm of nipple and areola, unspecified female breast, Malignant neoplasm of prostate
Ovary	Malignant neoplasm of hepatic flexure, Malignant neoplasm of nipple and areola, unspecified female breast, Malignant neoplasm of unspecified ovary
Suprarenal gland	Malignant neoplasm of hepatic flexure, Malignant neoplasm of trachea, Malignant neoplasm of nipple and areola, unspecified female breast
Other specified sites	Malignant neoplasm of hepatic flexure, Malignant neoplasm of trachea, Malignant melanoma of lip, Malignant neoplasm of nipple and areola, unspecified female breast, Malignant neoplasm of unspecified ovary, Malignant neoplasm of prostate, Malignant neoplasm of trigone of bladder

Glossary of Cancer Descriptions

Cancer Description
Malignant neoplasm of lip
Malignant neoplasm of tongue
Malignant neoplasm of major salivary glands
Malignant neoplasm of gum
Malignant neoplasm of floor of mouth
Malignant neoplasm of other and unspecified parts of mouth
Malignant neoplasm of oropharynx
Malignant neoplasm of nasopharynx
Malignant neoplasm of hypopharynx
Malignant neoplasm of other and ill-defined sites within the lip, oral cavity, and pharynx
Malignant neoplasm of esophagus
Malignant neoplasm of stomach
Malignant neoplasm of small intestine, including duodenum
Malignant neoplasm of colon
Malignant neoplasm of rectum, rectosigmoid junction, and anus
Malignant neoplasm of liver and intrahepatic bile ducts
Malignant neoplasm of gall bladder and extrahepatic bile ducts
Malignant neoplasm of pancreas
Malignant neoplasm of retroperitoneum and peritoneum
Malignant neoplasm of other and ill-defined sites within the digestive organs and peritoneum
Malignant neoplasm of nasal cavities, middle ear, and accessory sinuses
Malignant neoplasm of larynx
Malignant neoplasm of trachea, bronchus and lung
Malignant neoplasm of pleura
Malignant neoplasm of thymus, heart, and mediastinum
Malignant neoplasm of other and ill-defined sites within the respiratory system and intrathoracic organs

Glossary of Cancer Descriptions

Malignant neoplasm of bone and articular cartilage
Malignant neoplasm of connective and other soft tissue
Malignant melanoma of skin
Other malignant neoplasms of skin
Malignant neoplasm of female breast
Malignant neoplasm of male breast
Malignant neoplasm of uterus, part unspecified
Malignant neoplasm of cervix uteri
Malignant neoplasm of placenta
Malignant neoplasm of body of uterus
Malignant neoplasm of ovary and other uterine adnexa
Malignant neoplasm of other and unspecified female genital organs
Malignant neoplasm of prostate
Malignant neoplasm of testis
Malignant neoplasm of penis and other male genital organs
Malignant neoplasm of urinary bladder
Malignant neoplasm of kidney and other and unspecified urinary organs
Malignant neoplasm of eye
Malignant neoplasm of brain
Malignant neoplasm of other and unspecified parts of nervous system
Malignant neoplasm of thyroid gland
Malignant neoplasm of other endocrine glands and related structures
Malignant neoplasm of other and ill-defined sites
Secondary and unspecified malignant neoplasm of the lymph nodes
Secondary malignant neoplasm of the respiratory and digestive organs
Secondary malignant neoplasm of other tissue and organs
Malignant neoplasm without specification of site
Lymphosarcoma and reticulosarcoma
Hodgkin's disease
Other malignant neoplasms of lymphoid and histiocytic tissue
Multiple myeloma and other immunoproliferative neoplasms
Lymphoid leukemia
Myeloid leukemia
Monocytic leukemia
Other specified leukemia
Leukemia of unspecified cell type