



RELEASE - TRANSMISSION OF REVISED MATERIAL TO BE  
INCORPORATED INTO THE FEDERAL (EEOICPA) PROCEDURE MANUAL:  
CHAPTER 2-0700, Establishing Toxic Substance Exposure.

EEOICPA TRANSMITTAL NO. 16-01

November 2015

EXPLANATION OF MATERIAL TRANSMITTED:

This material is issued as procedural guidance to update, revise and replace the EEOICPA Procedure Manual (PM) Chapter 2-0700, Establishing Toxic Substance Exposure to include:

- 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.
- Replaces all reference to District Medical Consultant (DMC) with Contract Medical Consultant (CMC).
- Replaces all reference to Energy Case Management System (ECMS) with Energy Compensation System (ECS).
- Removes all reference to TMS the Telephone Management System from ECMS.
- Replaces reference to The Center to Protect Worker Rights with The Center for Construction Research and Training (CPWR).
- Updates the Site Exposure Matrix (SEM) link.
- Adds guidance requiring FAB to document in Remand Orders and Final Decisions that FAB conducted its own Site Exposure Matrix (SEM) search.

The following Exhibit has been added to the chapter:

- Exhibit 3, Establishing Causation for Asbestosis and Hearing Loss.

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FILING INSTRUCTIONS:

Remove

PM Ch. 2-0700

Insert

PM Ch. 2-0700

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 describes the procedures that the Division of Energy Employees Occupational Illness Compensation (DEEOIC) uses to establish toxic substance exposure under Part E of the Energy Employees Occupational Illness Compensation Program Act (EEOICPA).

These procedures outline means to develop for exposure to toxic substances at a covered Department of Energy (DOE) and Radiation Exposure Compensation Act (RECA) Section 5 facility. In particular, the chapter addresses the Site Exposure Matrices (SEM) and guidance for its use and explains required actions when SEM data is lacking or incomplete.

2. Rules for Establishing Exposure. To establish that an employee was exposed to a toxic substance, the evidence of file must show evidence of potential or plausible exposure to a toxic substance and evidence of covered DOE contractor/subcontractor or uranium employment at a covered DOE/RECA facility during a covered time period.

a. Documentation. Exposure to a toxic substance can be established by the submission of probative documentation that shows such substance was present at the facility where the employee worked, that there was a reasonable likelihood for employee exposure, and that the employee came into contact with such substance.

b. Presence and Contact. Whenever possible, the claims examiner (CE) considers such issues as whether the substance was present, not only in the facility, but in the specific building(s) and/or areas where the employee worked, and whether the substance was used during the processes involved as part of the employee's job duties and exposure routes (e.g., a welder exposed to fumes). The SEM (discussed below) will be especially helpful in evaluating for the presence of a toxic substance in a certain building/area/work process.

(1) Presence of toxic substance. The CE may look to the SEM, facility exposure records, Data Acquisition Request (DAR) records, the

Occupational History Questionnaire (OHQ), employee records, verified affidavits, DOE Former Worker Program (FWP) screening records, National Institute for Occupational Safety and Health (NIOSH) site profiles, employee submitted evidence, and other evidence that establishes a toxic substance was present at the facility where the employee worked. The CE may also use Industrial Hygienist (IH) referrals as discussed below.

(2) Employee contact with a toxic substance. The CE's review of the evidence described above may be sufficient to establish that the employee came in contact with the toxic substance. Information such as the claimant's response to the OHQ performed by the Resource Center (RC), reviewed in conjunction with DAR records and the SEM, may help the CE decide what further development may be necessary (e.g., to determine whether contact was likely given the employee's labor category, labor process, or given safety controls or risk factors that may have been present at the worksite).

(3) Plausibility. When evaluating the evidence to determine whether a toxic substance was potentially present at a given facility (by building, area, work process, labor category) and whether it is likely that an employee came into contact with a toxic substance in the course of employment at a covered facility, the CE must determine whether such contact is plausible.

To do so, the CE must review all evidence on file and decide whether it makes sense that the claimed exposure could have potentially occurred. Sometimes this evaluation will require a referral to an IH.

For example, if an employee is claiming lung cancer due to exposure to uranium metal maintained exclusively in a glove box (an enclosure to protect the worker from uranium

exposure), the CE must examine whether or not an exposure route is plausible.

Without evidence that the employee was involved in machining uranium or cleaning out the glove box, or that he or she was exposed in some other way such as a leak in the glove box, no exposure route (inhalation which would potentially be linked to lung cancer) is plausible.

(4) Sample Evaluation of Presence and Contact.

A chemical operator involved in cascade operations at K-25 claims peripheral neuropathy. His responses to the OHQ show he worked with a variety of toxic substances on a routine basis, including mercury. Information obtained through the DAR records confirms his worksite (K-33), which is located within K-25, and job duties.

The CE searches SEM (see paragraph 10 below) and confirms the presence of mercury at the K-33 cascade building. Further, SEM supports a link between mercury and peripheral neuropathy. A physician's report indicates a diagnosis of peripheral neuropathy and mentions that the employee has had tingling in his arms for approximately a year. An accident report notes a major mercury spill during the time in which the claimant worked at K-33.

The evidence is sufficient to establish that the employee had peripheral neuropathy and potential exposure to mercury in the course of his employment at a covered DOE facility. The mercury spill accident report lends support to the finding that it is plausible, given the facts, to assume that the claimant encountered an occupational exposure to a toxic substance in the course of his work.

Any question as to route of exposure (e.g., inhalation, absorption), even if presence is established, should be referred to an IH, as outlined in paragraph 12 below.

c. Burden of Proof. If no medical evidence is submitted that would lend support to a connection between the claimed condition and potential exposure to a toxic substance (and no such evidence is available from the sources referenced in the previous section), the CE requests such evidence from the claimant before issuing a denial. While the CE must exhaust all reasonable development prior to issuing a denial, the claimant does bear the overall burden of proving his or her claim.

d. Causation Test for Toxic Exposure. The CE must develop the requisite employment and exposure evidence to render a causation determination. Specific causation requirements for cancer and other conditions are outlined in other chapters. In general, the CE develops the evidence on file and a determination is made based upon the "at least as likely as not" causation test.

While resources are provided to assist the CE, there is no simple one-step tool for making this determination. Instead, the CE must base the determination on the totality of evidence in the case file. The CE does not use studies or reports obtained from the Internet or other sources to justify case decisions, unless the National Office (NO) has specifically authorized such usage. In addition, the CE may not base a decision on a vague reference to "medical literature."

(1) Causation Test for Toxic Exposure. Evidence must establish a relationship between exposure to a toxic substance and an employee's illness or death. The evidence must show that it is "at least as likely as not" that such exposure at a covered DOE/RECA facility during a covered time period was a significant factor in aggravating, contributing to, or causing the employee's illness or death, and that it is "at least as likely as not" that exposure to a toxic substance(s) was related to employment at a covered DOE/RECA facility.

(2) "At Least as Likely as Not." Part E only

requires proof that established exposure "at least as likely as not" was a *significant factor* in aggravating, contributing to or causing the employee's illness, disease or death. As with Part B, "at least as likely as not" means 50% or greater likelihood.

When a referral to NIOSH for a cancer claim related to radiation results in a probability of causation of greater than or equal to 50%, the regulations provide that this requirement has been met. In other cases the CE bases a determination on a review of the evidence of file as a whole, to determine if the "at least as likely as not" standard has been met. The CE weighs all of the evidence available and provides a clearly written rationale supporting his or her findings in the recommended decision.

(3) Significant factor. The CE evaluates the evidence as a whole when attempting to determine whether or not exposure to a toxic substance was indeed a significant factor in contributing to, aggravating, or causing the claimed illness or death of the employee. In most instances this evaluation will be done on a case-by-case basis.

In some cases a Contract Medical Consultant (CMC) evaluation will be necessary. The CE looks at the claimed exposure, the presence of such exposure, the duration of the verified employment, and any other important exposure/employment factors when ascertaining the possible role the toxic substance exposure played in the onset of the covered illness.

e. Using SEM to Evaluate Causation in General. The SEM is not used to establish or deny causation by itself, but is used as a tool to assist in the evaluation of causation in light of the evidence as a whole. The purpose of this searchable database is twofold. First, the database details many possible toxic substances that may have been present at a given facility. Second, the database describes the

relationship between a specific toxic substance and a covered illness.

The CE reviews the database to assist in a determination of whether the claimed toxic substance was present at the facility where employment occurred and whether or not a relationship exists between exposure to a toxic substance and a particular covered illness. However, the database does not serve as a comprehensive list of all potential toxic substances that could be present at a facility, and the CE must confirm additional claimed toxic substances through employment records, DAR records, DOE FWP records, and other means. If the CE cannot confirm the presence of a toxic substance through these sources, the claimant should be notified and given an opportunity to present additional evidence that establishes the presence of such a toxic substance. Finally, once the CE completes all reasonable development and carefully weighs the evidence on the whole, including the SEM findings, the CE must determine whether or not a referral is needed to a CMC or Industrial Hygienist/Toxicologist to further evaluate causation. Procedures for this and other actions are outlined below.

f. DOE Physician Panels. Cases with positive DOE physician panel findings approved by DOE (signed by a DOE official) under the old Part D are accepted for causation on the basis of those findings for all conditions claimed under Part E that were approved by the panel. The CE uses the DOE physician panel finding as the basis for the decision and no further development for causation is required.

If the positive physician panel decision is not approved by DOE (not signed by a DOE official) it is not an approved finding, however, unsigned reports still may contain useful information for causation development such as medical and exposure evidence that might prove useful in reaching a causation decision based upon all of the other evidence of file. The CE reviews negative panel reports like any other piece of medical evidence in light of the weight of the evidence of file as a whole.

g. Evidentiary Requirements for Survivor Claims. The CE uses any and all of the medical evidence of file in order to develop for causation in a survivor claim. Not only must the evidence of file establish that it is at least as likely as not that toxic exposure caused, contributed to, or aggravated a covered illness, the evidence must also establish that the covered illness caused or contributed to the death of the covered employee.

h. Developing for Toxic Substance Exposure. When developing Part E cases the CE uses established development techniques in addition to certain other steps unique to the Part E adjudication process. The Final Adjudication Branch (FAB) develops medical conditions and employment where possible to avoid issuing a remand order for further development if such development can be conducted at the FAB with little additional effort.

(1) Development Using Existing Case File Materials. In many instances, a Part E claim has a corresponding Part B and/or D case file already in existence. When an existing Part B and/or D case file exists, the CE examines the case file materials for medical, employment, and exposure evidence to assist in the causation development process.

Under Part D, DOE collected exposure and employment data through DARs. The CE must examine all existing Part D case file material for DAR records and review all documentation presented with the new Part E claim filing and any corresponding Part B or D case file to render a causation determination. A filing under Part D is automatically considered a filing under Part E, without a requirement for the filing of another claim form.

(2) A General Rule about Reasonable Development. Given the complex nature of claim file development under Part E, it is necessary for the CE to judiciously determine whether or not the facts warrant issuing a decision or

whether additional development is necessary. As a general rule, the CE utilizes the tools outlined in this chapter to the fullest extent possible and issues a decision once all development avenues have been reasonably explored. While the CE issues decisions accepting claims for benefits as soon as the evidence support an acceptance and all statutory criteria are met, denial situations must be heavily weighed and decisions issued only when additional development is unlikely to produce the evidence needed to reach a decision. In essence, the CE evaluates all of the evidence of file to determine whether or not it is plausible that, given the evidence at hand, the claimed illness arose out of the claimed occupational exposure to a toxic substance at a covered facility.

When attempting to determine whether or not sufficient development has been conducted, the CE can look to the claimed condition and the evidence at hand to make an informed determination. If the claimed condition is generally a condition that arises out of occupational exposure, it is incumbent upon the CE to pursue additional development whenever possible. However, if the condition is one that is unlikely to be caused by occupational exposure, the CE can be more certain that additional development might not be necessary and a decision can be issued.

(3) Example. If the claimed illness is chronic silicosis, chronic beryllium disease (CBD), asbestosis, or another condition known to arise almost exclusively out of occupational exposure, but the evidence is not sufficient to accept the claim, the CE refrains from issuing a denial if additional development might establish the employee's claim for benefits.

However, if the claimed illness is heart disease, diabetes, arteriosclerosis, thrombosis, or another disease that often is caused by non-occupational risk factors, the CE can send a

development letter and allow the claimant an opportunity to present evidence. If no evidence is received, the CE may issue a decision after weighing the evidence as a whole and determining that no causal link exists between the claimed illness and the covered Part E employment.

3. Sources of Evidence. Establishing exposure to a toxic substance is a key element in developing claims filed under Part E. Developing for such exposure can be complex, and many tools are available to assist the CE in this endeavor.

a. DAR records, which are obtained from DOE, contain a wealth of employment and exposure evidence. They contain a mixture of employment, medical, and exposure evidence. The CE prepares a DAR to DOE pursuant to the guidance in paragraphs 5 and 6 below. If the site information contained in SEM is reasonably complete and sufficient to establish the claimed exposure, no further exposure information should be sought from DOE through a DAR. The DAR can be used to obtain specific information if a claimant is alleging an incident that might not have been captured in SEM.

b. The DOE Former Worker Program (FWP) is an ongoing effort to evaluate the effects of occupational exposures (e.g., to beryllium, asbestos, silica) on the health of DOE workers. These records contain employment, medical, and exposure data. Exposure information obtained from FWP work history interviews taken after the enactment of the EEOICPA, in October 2000, should be used only when corroborated by other evidence that supports the claimed exposure (i.e., DAR information, SEM).

c. The Center for Construction Research and Training (CPWR) can provide data for use in verifying contractor/subcontractor employment and exposure.

d. Employment and exposure evidence from the claimant or other sources, such as verified affidavits, facility records, is weighed along with the evidence as the whole.

e. The SEM (see paragraph 8 below) provides site-specific exposure information, information about toxic substances and employment processes at a given site, and some limited information concerning potential adverse health effects produced by exposure to certain toxic substances.

f. DOE Physician Panel findings are also a source of employment, medical, and exposure information.

g. Occupational History Questionnaire (OHQ) data obtained by the RC staff document the workplace exposure experienced by an employee. The OHQ is used as a piece of evidence to be evaluated along with the evidence of the file as a whole.

4. Document Acquisition Request. The DAR is the process by which the DO gathers DOE work records on a specified employee. The CE reviews the case file before deciding which documentation to request from the DOE on the DAR Questionnaire. The CE must carefully consider the specific data needs for the individual case. Information received in response to the DAR may vary from site to site, but will contain some or all of the following information:

a. Radiological Dose Records. These documents are radiation exposure records based on readings from dosimetry badges or similar personal recording devices. They are generally taken at regular intervals over the employee's employment.

b. Incident or Accident Reports. Any abnormal incidents or large plant accidental substance releases affecting the employee are documented in these types of documents.

c. Industrial Hygiene or Safety Records. Documents in these categories could contain periodic inspection reports for health and safety purposes.

d. Pay and Salary Records. These documents include an employee's pay, salary, any workers' compensation claim or other documents affecting wages.

Examples of records from the DOE database could include, but are not limited, to Official Personnel Files of Contractor Employees, Contractor Job Classification, Employee Awards Files, Notification of Personnel Actions, Classification Appraisals, Wage Survey Files, and Unemployment Compensation records.

The CE generally does not need these types of documents unless wage loss is either being claimed by the claimant or a wage-loss claim is obvious to the CE from the case file.

e. Job Descriptions. These are descriptions of the various employment positions at the plant and the duties required to perform the job.

f. Medical Records. These include personal medical histories of the employee if that employee visited the plant infirmary (e.g., Health Unit Control Files, Employee Medical Folder).

g. Other. This category includes any other documentation needed on a case-specific basis which does not fit into any of the other six categories. If this category is checked and a specific request is listed by the CE, DOE personnel may contact the DOL CE for clarification of the request.

5. Requesting the DAR. After reviewing the case file, including the OHQ from the RC, the CE requests the DAR information. This is done concurrently with FWP development. The process for collecting the information differs slightly depending on whether DOE or a corporate verifier (CV) is receiving the DAR. The CE must also review SEM to determine what exposure information already has been assembled from DOE records and other sources. If exposure information necessary to develop the claim already exists in SEM, the CE does not request such information in the DAR.

a. DAR Point of Contact (PoC) List. This list can be found on the NO shared drive and is divided into two sections: DOE DAR PoC and No Known Contact. Each District Director (DD) is responsible for updating and maintaining these records.

The DOE DAR PoC is similar to the current DOE Operations Center PoCs for employment verification. There are some differences, however, so the CE must use this list when requesting DAR documentation directly from the DOE. A DAR Cover Letter and DAR Questionnaire are sent only to a DOE DAR PoC.

b. Sites With No Known DAR PoC. For these sites, the CE undertakes alternate exposure development. Since no known contact exists, a DAR Questionnaire is not used.

6. Completion of DAR. When appropriate, the CE completes a DAR Cover Letter and Questionnaire asking for toxic exposure evidence. If a particular DOE site does not have the ability to scan and submit documentation digitally on a CD, the DOE submits paper documents.

a. Package to DOE. The package includes a cover letter (Exhibit 1) addressed to the DOE PoC, DAR Questionnaire (Exhibit 2) completed by the CE, and copies of Forms EE-1/EE-2 and EE-3.

(1) The CE prints or types the identifying information of the employee in Blocks 1 and 2 of the DAR. The CE annotates any maiden names in Block 1.

(2) The CE indicates the DOE facility on Form EE-3 in Block 3 of the DAR and any employer name information in Block 4. If the claimant indicates on Form EE-3 that he or she worked for multiple subcontractors at the same DOE facility, the CE completes a separate DAR Questionnaire for each subcontractor. This process helps distinguish between contractors or subcontractors for which DOE has records and those for which it does not.

Similarly, if the claimant claims multiple DOE sites on Form EE-3, the CE completes a separate DAR for each DOE site, as the DAR PoC may be different.

(3) After reviewing the case file, the CE requests the records that are relevant to the case by checking the appropriate box(es) in Block 5, "Types of Records Being Requested."

(4) If the CE has a specific question(s) that needs to be addressed which is not covered in the broader categories listed on the DAR request, the CE completes the "Site Specific Exposure Questions" section of the Questionnaire. The CE considers the condition(s) claimed as well as any specific alleged exposures.

For example, if the claim is for aplastic anemia, the CE may want to ask DOE if and when arsenic or benzene was used in a particular building at the site during a particular timeframe.

b. DAR Response. When DOE's response is received, the CE documents receipt of the DAR in ECS.

(1) DOE will have collected the documents requested in Block 5. The DOE checks the corresponding box in Block 6 immediately to the right of the requested category, either "Included on CD" or "Unavailable", depending on whether the DOE has any records related to that particular set of records. "Included on CD" also includes hard copy documentation in the event the DOE facility does not have imaging capability.

(2) Also, DOE will respond to any site-specific exposure questions posed by the CE in Block 8, confirming the exposure, denying the possibility of exposure, or indicating there is insufficient evidence to answer the question accurately. The DOE may attach a piece of evidence to the DAR which particularly answers a site-specific question or otherwise clarifies the DOE response to the question. In these instances, the DOE also checks the "SUP" or supplemental box signaling the special response.

(3) Once the DAR response is received, the CE reviews both the questionnaire and the contents

of the CD to confirm that all requested documents have been received and that the specific questions about exposure have been adequately answered. Any documents identified on the CD as material to the claim must be printed and placed in the case file.

c. Follow-up with DOE. If DOE does not respond to the RC's initial employment verification request or the DAR questionnaire, the CE contacts the DOE to determine the status of the request.

(1) The DOE is given 30 days to respond to the request (Form EE-5 or DAR). If the DOE does not respond within that time, the CE drafts an inquiry to the DOE, noting the date of the initial request and asking the DOE to respond as soon as possible. The CE provides his or her contact information so that the DOE can quickly respond.

7. DOE Remediation Employment. Since Part E provides coverage for DOE contractor/subcontractor employees and their eligible survivors, a claimant alleging DOE contractor/subcontractor employment due to remediation must prove that a contract/subcontract in fact did exist between the claimed employer and DOE/DOE contractor to conduct remediation activities for DOE at the facility in question during the time when DOE was conducting remediation. When developing for exposure in a remediation case, the CE should follow the same steps as is used to develop for DOE contractors and subcontractors.

8. Site Exposure Matrices (SEM). The SEM is a web-based tool designed to assist the CE in developing for exposure to a toxic substance. The SEM identifies the toxic substances that were commonly used in each DOE and RECA Section 5 facility, and contains two general categories of information that may be searched: chemical profiles and site-specific information tailored to the covered facility or site.

Under no circumstances is SEM used as a stand alone tool to deny a claim. Information in SEM can sometimes be used in

conjunction with other supporting case file evidence to approve a claim.

a. Site-Specific Data. For a given covered facility or site, SEM provides information about the nature and location of work processes performed (e.g., fuel separation, instrument maintenance, or welding); the work groups involved (e.g., first line supervisor, instrument mechanic, or welder); the toxic substances used (e.g., plutonium nitrate, arsenic, or mercury); and site-specific aliases and potential exposure information about work processes, work groups, toxic substances, buildings, and areas.

b. Potential Nature of Exposure. Data from SEM is interpreted to mean that a worker had a *potential* for exposure to a toxic substance. The CE must review the information yielded from DAR responses, DOE FWP records searches, and the OHQ to hone the SEM search.

c. Employment Data. The CE must obtain as much background as possible to determine the type of work or process the employee performed, the dates of such work or process, the building(s) or area(s) involved, and the toxic substance(s) alleged to have been present to determine through SEM the type of chemicals an employee could potentially have been exposed to while working in a particular building and/or performing a certain job or process. This information can be gathered from the OHQ, DAR, EE-5, or other sources.

d. Validity of SEM. All information in SEM is considered valid and factual. The toxic substance, work process, and facility information in SEM is deemed verified by DOE or other sources, and if a certain toxic substance is listed as present in a given building or facility, the data is accepted as fact and no additional confirmation from DOE or any other source is necessary.

e. Additions to SEM. The database is continually updated and does not contain 100% of the toxic substances potentially present at a given facility. As a result, simply because certain information is

absent from SEM does not warrant a claim denial and also does not warrant delaying adjudication until such information might be included in SEM. The CE conducts reasonable development by reviewing the evidence as a whole and issues decisions once such development allows the CE to adjudicate a claim.

9. SEM Policy and Management. The following paragraphs provide a basic outline of SEM and its use as a developmental tool. See the "Site Exposure Matrices Website User Reference Guide" (available on the Shared Drive, Part E folder, SEM subfolder, or accessed through the SEM menu) for complete and detailed instructions as to the use of SEM.

a. Policy. SEM is used as a tool to assist the CE in evaluating the evidence as a whole to determine the existence of a causal link between covered employment, exposure to a toxic substance during such covered employment, and a resultant illness arising out of such exposure.

As noted above, in certain cases it will be possible to accept a claim based upon the information contained in SEM if such information can be coupled with approved policy guidance as outlined below.

Under no circumstances is a claim for benefits denied solely due to a lack of information contained in SEM, because the data for each facility will never be 100% complete.

b. Management of SEM at NO. A NO SEM Point of Contact (PoC) manages all issues arising out of SEM usage. Implementation questions, requests for access/denial of access to SEM, and any new evidence that might warrant inclusion into SEM are forwarded to the NO SEM PoC.

(1) The NO SEM PoC has a counterpart in the DO SEM PoC, who, the DD appoints to interact with the NO.

When evidence of an exposure not listed in SEM is verified or strongly alleged (supported by

documentation) at a facility, the DO SEM PoC prepares a memorandum to the NO SEM PoC (for signature by the DD or designee) requesting IH review for possible inclusion of the toxic substance in SEM. All associated evidence of the presence of the toxic substance is attached to the memorandum.

The NO SEM PoC will review the evidence with the NO IH and other NO staff (i.e., Medical Director, Toxicologist, and Health Physicists) to determine whether the evidence should be included in SEM. If so, the NO PoC advises the Web Site Administrator or appropriate individual to add the information to the database.

In general, the DO SEM PoC interacts with the NO SEM PoC on all issues arising out of SEM operations.

(2) The DO SEM PoC obtains SEM access for DO staff by e-mailing the NO SEM PoC with a request that a staff member be granted access to the system and providing the employee's name, job title, and e-mail address. After review, the NO SEM PoC advises the Web Site Administrator by e-mail to grant access to the individual in question.

The Web Site Administrator contacts all individuals with newly granted access through e-mail, providing access information such as a user name and a temporary password.

(3) Access is disabled when an employee resigns or is terminated. The DO SEM PoC provides an e-mail to the NO SEM PoC with the name of the employee whose access is being disabled and the precise date upon which access must be denied. The NO SEM PoC e-mails the Web Site Administrator requesting that the access be disabled on the requested date, and access is terminated. Due to the sensitive nature of the information housed in SEM, it is important that the DO SEM PoC notify

the NO SEM PoC of the need to disable an account within 7 days of an employee's departure.

c. Additions to SEM. DEEOIC encourages claimants and other interested parties to submit new site-related scientific research, studies, or information concerning the presence of toxic substances at covered facilities for evaluation and possible inclusion in SEM. The SEM website at <https://dol-sem.com/Login.cfm> contains a link for individuals to provide comments or documentation of toxic substance use at a particular facility.

10. SEM Searches. The CE reviews all evidence of file to properly craft his or her SEM query. The CE reviews employment evidence for job description and facility. Also, employment and exposure evidence in the case file (e.g., facility records, DAR records, OHQ responses, NIOSH/PHS/DOJ data about RECA claims) is reviewed to determine as best as possible exactly where the employee worked and what processes or toxic substances were used in the building or area in which the employee worked. In order to effectuate a thorough and proper search, it is necessary for the CE to develop SEM queries from multiple criteria, including: labor category; process; and health effect. While labor category is the preferred field to begin a search, it is not the only field that should be investigated.

a. Data Fields. Various fields in SEM hold an array of valuable data viewable by site: the number of toxic substances present (with information about each substance); health effects or diseases known to be associated with a toxic substance; site history; buildings; processes; labor categories; known incidents; and exposure factors.

All fields contain references to the document utilized by SEM to provide the given information. The CE navigates the search fields based upon the known evidence of file, triangulating on the necessary information required to assist in the development and determination of causation.

A search based upon facility-wide information (e.g., all toxic substances known to have been present at the

Nevada Test Site) generally will not be specific enough without other qualifiers such as work category and/or work process, and may not produce usable information for a causation determination.

At a minimum, especially when searching DOE sites, the CE establishes the employee's job category, work process, and/or building/area or employment before performing a SEM search. The more information a CE has about an employee's occupational history when searching SEM, the more likely it is that the SEM search will prove useful in helping the CE determine causation.

b. Searches of Universal Information. This set of fields contains the most recent scientifically based evidence about toxic substances and their relation to illnesses. The occupational disease links in SEM are imported from the widely accepted and well rationalized medical science database called Haz-Map, a database of the National Library of Medicine (NLM). While the NLM database, Haz-Map, is often utilized in other circumstances as a resource, the CE must never use Haz-Map as a development or adjudicatory tool. Only SEM is acceptable for use in case file development and adjudication. It is unacceptable to base a decision, particularly a remand order, on any information contained in Haz-Map beyond the established links populated directly into SEM. Haz-Map serves many purposes for the public and medical professional fields and will often cite suggestive research that it has not accepted as a basis for finding a demonstrable link between a given substance and an occupational illness.

(1) The "Toxic Substance Information" field is useful when the evidence indicates the toxic substance(s) to which the claimant was potentially exposed. When a toxic substance is selected, SEM provides a "chemical profile" of the substance, including its Chemical Abstracts Service (CAS) number, which identifies the chemical, aliases for the substance name, chemical and physical properties (e.g., liquid or gas, odor, and color), and health hazard ratings

assigned by sources routinely used by industrial hygienists to evaluate workplace substances.

(2) The "Toxic Substance by Alias or Property" field is used to find a toxic substance using an unofficial name, or by a physical or chemical property. Using this link allows the CE to find the identity of toxic substances by keying in part or all of the name, unofficial name (alias), or description of a toxic substance using a physical or chemical property. The result may be no match, one match, or multiple matches. For example, searching for "yellow" will return a list which includes uranium dioxide, and searching for "yellowcake" will return a shorter list which still includes uranium dioxide.

(3) The "Toxic Substance by Chemical Category" field is used to find a toxic substance by category, such as gases or metals. If the claimant is not specific about the substance to which he or she was exposed, but describes it in general terms, this link will allow the CE to review a list of substances to which the employee may have potentially been exposed. After selecting a chemical category from the drop down menu (gases, metals, acids, etc.), a listing of all toxic substances within that category at the site is shown.

Example: The CE knows that the employee worked as a laborer in the pilot plant at the Feed Materials Production Center (Fernald) and is claiming chronic bronchitis. The OHQ indicates that the claimant does not recall exact exposures, but does recall a sharp, pungent odor and states that he "breathed in this gas all the time." The CE selects "Gasses" from the chemical category drop down menu and all gasses known to have been present at Fernald are listed. The CE searches each gas and finds that sulfur dioxide was present in the pilot plant and that laborers are a labor category of possible exposure and that the gas has a pungent odor and that chronic bronchitis is a health effect of exposure.

(4) SEM provides a list of known health effects produced by a given toxic substance. SEM can also be searched to determine whether or not a given facility contained a toxic substance that could produce the health effect claimed. When searching this way, the CE searches by the claimed illness (e.g., asthma, skin cancer) to determine what toxic substances at a given site could have potentially caused, contributed to, or aggravated the claimed condition.

(a) The "Toxic substance by health effect" section displays the toxic substances that could cause the health effect or disease.

For example, the above-described laborer from the Fernald Pilot Plant claims chronic sinusitis as a result of his or her employment at Fernald. A search of the condition "chronic sinusitis" shows that no toxic substances contained within the Fernald database match the search criteria, meaning that no known substances involved in a work process at Fernald could have induced chronic sinusitis.

While this is not sufficient evidence to deny causation, the CE must evaluate other evidence to determine whether or not the employee's condition was caused, contributed to, or aggravated by his or her employment.

(b) The CE also can search SEM for toxic substances that cause a health effect by searching with a disease or health effect alias. That is, if the CE does not know the official name of the disease (e.g., pulmonary disease, chronic obstructive, a general term for lung ailments that can include emphysema, chronic bronchitis, and in some cases asthma) the CE can search by the word "lung." This generates a search of all toxic substances present at a given facility that could affect lung function.

The CE can review the list of substances to determine if they were present in the employee's work process or building and whether these substances could potentially cause one of the lung diseases commonly referred to as COPD.

(c) The CE uses the "Disease or Health Effect by Alias" search if the organ affected by the disease is known. Using this link opens a page which allows the CE to find health effects or diseases by keying in all or a portion of the formal name of a health effect or disease. The SEM provides a list of health effects or diseases, which contain the search text in their formal names. For example, searching for "liver" returns *Hemangiosarcoma* of the liver.

c. Searches Specific to Selected Site. This section contains the most recent information about covered DOE facilities, uranium mines, uranium mills, and uranium transport operations. The CE searches these site fields for specific information about a facility, the work processes performed there (e.g., PUREX fuel separation, instrument maintenance, welding), and the toxic substances involved in those work processes, broken down by labor category (e.g., welder, yellow cake operator, electrician).

This group of searchable fields assists the CE in evaluating whether or not the employee's work history meets the presence and contact standard in the causation test for toxic substance exposure set out above. The CE searches site-specific fields when the CE knows the site of employment and also when the CE knows the building/area of employment, the work process performed and/or the labor category claimed.

(1) Site History. This section contains unclassified references from official DOE or DOE contractor web sites providing a description of the DOE facility or uranium mine or uranium mill. It provides dates of operation, known owners/operators, and historical reference data

about the site. This description is available in SEM for both DOE facilities and uranium mines and mills.

(2) Areas. This section is only displayed if the selected site has defined areas. All defined areas are viewable by selecting a drop down menu identifying each known area by number and/or title. This section is used when the CE knows the area in which the employee worked. Work processes, labor categories, toxic substances and incidents will be listed for each specified area at the site.

For example, the employee claims to have worked on the bull gang in Area 16 at the Nevada Test Site from 1966 to 1970 and is claiming occupational asthma. The CE searches the Nevada Test Site facility by Area and queries Area 16, which shows all known potential toxic substances in that area, all labor categories, and work processes.

A search of the toxic substances present at the time of the claimed employment shows that of all substances present, cobalt can cause occupational asthma. A further search indicates that the bull gang labor category, involved in the labor process of reentry and mineback operations, is shown as a risk factor for cobalt exposure during the time in which employment is claimed. Verification of the claimed employment by DOE is sufficient to establish potential exposure.

(3) Buildings. This section is searchable when the CE knows the official or unofficial name of the building in which the employee worked. This section lists all historical references to the building, hazardous chemicals present, the area where the building was located, work processes, labor categories, and known incidents involving the building. This search category is available only for DOE sites. Data for uranium mines and mills will simply state the site history, processes, and searchable labor categories.

(a) The building information subsection lists all the major buildings (by number and title) at the site (e.g. the K-33 Process Building within the K-25 East Tennessee Technology Park).

(b) The CE enters a building by alias, or common name, for a worksite that does not appear in the searchable buildings list (e.g., the K-33 Process Building above is also known as the "Cascade Building"). SEM lists the proper names and numbers of buildings to which the slang or common name could refer. This search capacity assists in locating a building when no formal building name is identified in the employment history.

(4) Processes. This section lists all known processes at the site (e.g., carpentry, ash crushing, crane operations) and contains the related labor categories, timeframes, and toxic substances. This category is searchable for DOE facilities and uranium mines and mills. When searching for a labor process, the CE may know the type of process in which the employee was involved (e.g., welding, drillback core sampling, solvent recovery), but not the specific labor category involved.

Knowing the work process can assist the CE in conducting a search for potential exposure to toxic substances, because sometimes several different job categories can be involved in one work process and a process might be spread out among several different buildings within a facility (e.g., a process operator at Portsmouth GDP involved in cascade operations could have worked in X-326, X-330 and X-333, all buildings in which the work process "cascade operations" took place).

(a) DOE facilities list all processes known to have occurred at the site. For instance, if the CE knows an employee worked in

Building 202-A at the Hanford Site, SEM indicates that the process in that building was PUREX fuel separation, lists all labor categories involved in this operation, and the toxic substance present when this operation took place.

This assists the CE in determining the toxic substances to which an employee could potentially have been exposed, based upon the process listed and the timeframes in which the employee may have been involved in such processes.

(b) For RECA mills, the following categories are examples of processes: laboratory, maintenance, and all other than laboratory and/or maintenance. Some mills did not have a laboratory component and therefore list fewer than three processes (e.g., Slick Rock in Colorado lists only maintenance and all processes other than maintenance). The CE must identify the labor sub category (actual work performed) whenever possible.

For example, if the CE knows that an employee worked as a bulldozer operator at Grand Junction in Colorado, the CE searches the labor subcategory field to identify that job title. Once it is identified, the CE clicks on the bulldozer labor subcategory and finds that a bulldozer operator is classified in the labor process "all other than laboratory and maintenance." All potential toxic substance exposure for that subcategory and labor process group is listed, and the CE can match the findings against the claimed/verified illness and exposure.

(c) Much of the work performed at RECA mines was fairly uniform and easily categorized with regard to process. While SEM does not list work processes for a RECA

mine, labor categories exist as outlined below. Only exposure arising from processes and work that actually took place at a uranium mine or mill is considered when evaluating a claim for causation.

(d) Individuals employed in the transport of uranium ore or vanadium-uranium ore to and/or from covered RECA mines or mills are covered under the EEOICPA. However, when developing exposure for an ore transporter, the CE only counts exposure that could potentially have taken place on the premises of a covered RECA mine or mill.

Exposure that could have potentially occurred when the ore transporter was *in transit* is not covered under the EEOICPA and is not considered by the CE when developing for causation. See EEOICPA PM 2-1100 for a more complete discussion of covered exposure under RECA.

(5) Labor Categories. The CE can search by labor category if the employee's job title or job title alias specific to a certain facility is known. It is important to narrow down employment verification requests and information obtained on Form EE-3 to determine the exact labor function performed by an employee if possible.

The RC staff must make certain to obtain the most specific employment information that is available from the employee/survivor and the employment verifier entity when conducting initial employment verification.

The CE must conduct additional development where necessary to further identify the exact definition of the employee's functions and the timeframe(s) of those functions at a given site, seeking the greatest specificity possible.

(a) Labor category information lists all

the labor classifications or work group titles at the site (e.g., electrician, crane operator, barrier operator).

(b) If the employee's job title does not appear on the drop down list of labor categories above, the entry on the claims form may be a slang or unofficial title. The CE may be able to find the official labor category, (e.g., maintenance mechanic) by keying in the slang or commonly used title (e.g., pipe fitter).

(c) Construction worker exposures are separated into two categories: those due to toxic substances inherent to the construction craft, and those caused by performing the construction work on a DOE site. The CE must consider both exposure categories when assessing exposure for construction workers.

Construction exposure is searched as its own category outside of the facility lists. As such, it does not matter where the construction took place. If the CE is searching SEM for a construction worker's claim, the CE searches by toxic substance and by work process (e.g., adhesive work, brazing, carpentry) and labor category (e.g., electrician, millwright, iron worker). Searches for construction trade exposures contain the same toxic substances, work processes, and labor categories for all covered facilities.

(d) For RECA mines, three labor categories are listed: prospecting, mining, and support/maintenance. The CE determines the duty performed (e.g., mining or maintenance) when searching SEM for information about a site listing more than one process. Some sites list only one possible work process and the CE need only confirm that employment is claimed or verified at the given site.

Once the work process is identified at the mine where employment took place, the CE can search a list of toxic substances to determine the one(s) to which an employee could have potentially been exposed while working at the mine.

For instance, the Arrowhead #1 mine in Eagle County, Colorado, lists "prospecting, no mining" as the only work process performed at that site. This means that the only work process performed at the Arrowhead #1 site was prospecting for uranium and that no actual uranium mining operations took place at that site.

The Bay Mule mine in San Miguel County, Colorado, lists "mining" as its only work process. A mixture of possible work processes will be listed for the RECA facilities depending upon what type of work activities actually occurred at the site.

(6) Incidents. The incident information field lists known major incidents and accidents experienced at the site. The entries provide a brief descriptive title of the incident, the year the incident occurred, and the location of the incident (building or area). An example would be: Uranium cylinder rupture and release, 1976, Building X-344.

(a) This information may assist in corroborating a claim if the claimant has referred to a particular accident or incident as having caused acute or extreme exposure to a toxic substance. Facility incident and accident information may be found in DAR responses, employment records, DOE FWP records, and OHQ summaries.

(b) The CE must evaluate incidents and accidents with regard to the evidence of file as a whole. Simply corroborating a claimed exposure is not sufficient to establish causation. The CE must review the

medical evidence and, if necessary, seek the opinion of an IH or CMC about the possibility as to whether or not the type of incident or high exposure event (as viewed in association with the evidence as a whole) could prove a significant factor in causing, contributing to, or aggravating the claimed illness. Further, certain incidences of high or extreme exposure should be considered when evaluating whether or not a required disease latency period can be eased or waived entirely.

(7) Exposure Factors. This section lists the safety programs, risk factors and timeframes used to gauge an employee's potential exposure as it relates to work process, labor category, building, and area.

(a) Safety programs serve as controls that may have reduced the likelihood of employee exposure to toxic substances (e.g., through use of respirators, protective clothing).

(b) Risk factors are conditions or practices that may have increased the likelihood of employee exposures to toxic substances, such as periods of time when employees were not properly protected.

(c) Timeframes reflect known periods within which a known correlation exists. For example, certain timeframes outline the period in which it is known that a certain toxic substance was present in a certain building (e.g., from 1956 to 1988 ammonium fluoride was present in Area 200 East and involved in the work process of PUREX fuel separation activities).

Also, timeframes outline periods in which certain safety programs or measures were in place at a given building or area. This information may assist the CE when

evaluating the likelihood that a claimant was exposed to a toxic substance.

Safety Control Example: In 1999, DOE enforced beryllium controls such that work could only be performed in certain buildings. The employee claims beryllium illness from beryllium exposure in 2000, yet the employment evidence shows that he or she worked in a building where beryllium was never present due to DOE controls. When dealing with beryllium, the CE must be aware of the potential for residual contamination, and in this instance it must be unequivocally verified that beryllium was never present at the facility in question.

d. Links Within Searchable Fields. Within SEM the various areas, facilities, buildings, processes, activities, labor categories, incidents and toxic substances which are known to have existed or occurred onsite are linked to one another. For example, such relationships expressed in the matrices might be:

(1) "Toxic xxx was in building aaa at some time;"

(2) "Activity bbb was performed by Labor Category ddd and involved work with Toxic yyy in Building 111;"

(3) "Activity bbb was performed during Labor Process ddd and involved work with Toxic zzz in Building 111;" and

(4) "Labor category ppp involved work at all parts of the site").

e. Sample SEM Search # 1. DOE verifies employment at the Portsmouth GDP from 1955 to 1960. Form EE-3 indicates that the employee worked as an instrument mechanic in Building X-333 from 1955 to 1960. The verified diagnosed medical condition is aplastic anemia.

A search of the SEM by Health Effect shows that aplastic anemia can be caused by arsenic, benzene, and plutonium exposure. The CE further consults the Haz-Map database link which provides a description of aplastic anemia and indicates that arsenic, benzene, and plutonium are among the hazardous agents that can cause the disease. A latency period of weeks to years is indicated.

The Building information for Building X-333 lists all known chemicals used at that site, and arsenic, benzene, and plutonium are among them. The SEM further shows that the Labor Process of Instrument Maintenance took place in Building X-333 from 1953 to 1957 and lists the Labor Category Instrument Mechanic as involved in this process during this timeframe.

The CE reviews the SEM findings as well as other relevant evidence (medical opinions provided by qualified physicians that opine a link between the occupational exposure and the aplastic anemia, DAR records showing definite arsenic and benzene exposure, DOE FWP records, and OHQ results supporting a finding of potential occupational exposure to benzene, arsenic and plutonium) to determine whether sufficient evidence exists to accept the claim. In this instance, the evidence as a whole supports acceptance.

f. Sample SEM Search # 2. An employee claims employment as a chemical operator in Building X-705 at the Portsmouth GDP from 1966 to 1982. DOE confirms the employment. The employee is claiming asthma and chronic bronchitis, and medical evidence diagnosing COPD has been received. The CE reviews the OHQ and finds that the claimant indicated in his interview that he does not know specifically what chemicals he was exposed to, but does recall working with an acidic substance with a sour, vinegar-like odor.

The CE reviews SEM, searching by labor category and building, and finds that acetic acid was used in the employee's work process in Building X-705 and that it has a sour, vinegar-like odor. A SEM search for health effects for acetic acid shows that it is known to be associated with occupational asthma. The DAR

record response does not show that the claimant worked with acetic acid in the course of his employment, but that he did come into contact with various solvents.

The CE should follow up with the treating physician to clarify the diagnosis. The CE may consider referral to a CMC to review the evidence and determine whether or not the potential for acetic acid exposure caused the claimant's lung condition. The CE will also want the CMC to try and specify the lung condition.

g. RECA SEM Searches. When searching for a specific RECA location (mine or mill), the CE locates the facility by the state in which it operated, by its name, or by its alias. For instance, the uranium mill "Durango" can be found by searching mills in Colorado, by the name "Durango," or by searching the site alias: Vanadium Corp of America, or VCA. RECA mines are also located in SEM by the county in which they operated. RECA mine and mill work process categories are more general than the DOE work process categories. The CE attempts to determine the exact labor category (specific job title or activity) whenever possible when conducting a SEM search about a RECA facility.

Uranium mines are categorized as being either underground or surface mines, and typical mining operations include the following: drilling; blasting; shovel/machine digging; and hauling materials.

11. SEM Inquiries. Whenever a SEM query is conducted, the CE must document the case file to show that a SEM search took place and updates ECS accordingly.

a. Recommended Decision. Prior to issuing a recommended decision (RD) denying benefits, the CE must ensure that the most updated version of the SEM data is contained in the case file and referenced properly in the decision.

(1) This is done by double checking the search initially conducted to make certain that an element not found in the initial search (i.e., a toxic substance) has not been added to the SEM

since the date of the initial search. The CE prints out the results of the new search immediately prior to issuing the RD.

(2) The CE must make certain that the SEM record is properly preserved in the case file for FAB review. SEM will show the latest date on which an update was made to the system that changes the data available about a given facility.

(3) If the date listed in SEM remains the same as it was when the original search was conducted, the CE will know that no new information has been added to SEM and no new search is required. However, if the date has been changed since the date of the last search, the CE must search SEM again to determine whether additions or changes will change the outcome of the SEM search and potentially affect the outcome of the adjudication.

b. Decisions Issued As Needed. Because SEM is a living document that is updated as data becomes available, the CE does not wait for information in SEM to be updated before issuing a decision. If a SEM search is conducted and no information is available, or the site is not yet complete or searchable in the database, the CE issues a decision after developing the case as completely as possible, pursuant to normal procedures.

c. FAB Review. FAB ensures that the SEM search was conducted, where applicable, during the FAB review of the recommended decision.

(1) FAB may remand the case to the DO if a SEM search was needed but not conducted, or if the search was conducted improperly in a way that materially affects the outcome of the RD, or if the SEM data relied upon by the DO was changed or updated significantly enough to warrant additional development or a potentially different adjudicatory outcome.

(2) Before issuing the FAB Final Decision (FD), the FAB must ensure that the SEM record is the most complete and updated data available in SEM and that no significant changes (additions of toxic substances or changes in work process definitions or timeframes) have been made since the issuance of the recommended decision.

(3) This checking of the SEM search data to determine whether or not a new data element was added that will alter the outcome of the decision is conducted in the same manner as set out in 11.a above for denied recommended decisions.

(4) The FAB CE/Hearing Representative (HR) does not print out a copy of the new SEM search **unless** the search result differs from the search conducted by the DO CE. In this case, the FAB CE/HR prints a copy of the SEM results and scans to OIS.

(5) If new evidence is uncovered that does alter the findings of the RD, a remand order may be necessary. However, if the SEM data is updated after the issuance of the recommended decision or the DO SEM search, and such update does not affect the outcome of the decision, a remand is not warranted.

(6) The FAB CE/HR must clearly indicate in all Remand Orders and FD's that the FAB conducted its own SEM search. In the discussion, the FAB is to state whether the search validates the findings of the DO or that the search produced results that differ from the DO search. If the results differ from the DO search, then FAB is to briefly explain its potential impact on the outcome of the claim (i.e. the results are the same as the DO CE results and has no impact on the outcome, or the search results differ but has no impact on the final outcome, or the results differ from the DO CE search and possibly changes the outcome of the claim).

d. Use of SEM Findings. When using SEM as a finding in an RD or a decision of the FAB, the CE/HR cites the technical document upon which the SEM data search result is founded, as well as SEM, in the decision. As always, the DO CE or FAB CE/HR clearly outlines the rationale for accepting or denying causation based upon all of the evidence weighed as a whole. Below is an example of the language approved for use when referencing SEM.

Decision Language Example: Source documents used to compile the U.S. Department of Labor Site Exposure Matrices (SEM) establish that a person in the labor category of "Operator" at the Savannah River Site could potentially be exposed to the toxic substance asbestos. The SEM lists asbestosis as a possible specific health effect of exposure to asbestos and contains a list of the buildings at the Savannah River Site where that particular toxic substance is or was present during the years that the claimant worked there. The employment record provided by the Department of Energy (DOE) contains several numbers that appear to reference the employee's work location including a number G160-235. The most comparable building listed in the SEM was 235F. Data contained in SEM for 235F establishes that asbestos was used in this building and that the labor category of "Operator" is associated with this building.

12. National Office Specialist Review. If the CE identifies an exposure issue that requires review by an IH, the CE alerts his or her supervisor. *Prior to seeking NO assistance, the CE must exhaust all reasonable exposure development pursuant to the guidance set out in this Chapter.*

If the supervisor grants approval for the referral, the CE prepares an e-mail to the Health Services Program Analyst (HSPA) requesting review. The HSPA forwards the e-mail to a Medical Health Science Unit (MHSU) specialist who reviews the contents and assigns the question to the appropriate specialist based upon their scientific discipline.

However, if the MHSU specialist determines that the issue does not warrant a referral, the e-mail is returned

instructing the CE to pursue further development. Once the issue is assigned to an IH for review, the IH conducts such review and responds to the CE in a timely manner.

a. Questions for IH. The CE outlines succinctly what information is known about the issue (e.g., the employee was a stainless steel welder at Savannah River from 1982 to 1985 who is diagnosed with asthma) and what is needed from the expert (could the employee have been exposed to nickel)? The CE uses the information in SEM and the case file as a whole to frame the question as carefully as possible based upon the claimed employment, process and illness. A Statement of Accepted Facts (SOAF) must accompany the referral to the IH.

(1) The facility in question (narrowed down to building and area where possible) and the work performed is always a critical factor when querying the IH about exposure. The CE uses SEM whenever possible to assist in this narrowing process, but if no information exists in SEM, the CE crafts the question as best as possible based upon whatever evidence is available in the case file.

(2) The CE may also forward a general question about a facility when information cannot be found in SEM and the facility in question is either not yet uploaded to SEM or the data is incomplete.

For instance, a CE may need to know whether asbestos was present as a general rule in the Clarksville facility. The CE may ask a general question such as this of the IH, but should include as much specificity in the query as possible, especially labor category, processes, and time periods.

b. IH Review. The IH reviews the issue framed by the CE and determines whether more information from the case file is required to answer the question, or if the entire case file is needed. The IH role is to anticipate, recognize, and evaluate hazardous

conditions in occupational environments, and to opine based upon his or her specialized knowledge. The IH strives to answer the question based upon the information outlined by the CE.

However, if additional information is required, the IH may request whatever documentation from the case file is necessary. If required, the IH requests the entire case file if individual pieces of information from the file will not suffice to answer the question posed by the CE.

(1) The IH mainly addresses issues about routes of exposure (e.g., whether or not a welder at a given facility could have been exposed to nickel). An IH also may verify whether or not a toxic substance was/could have been present during a certain work process (e.g., welding, or instrument maintenance) at a given site, or if a certain labor category (e.g., welder, or instrument mechanic) could have come into contact with a given toxic substance in the performance of his or her duty at the site.

The IH may also be asked to determine the *plausibility* that a certain toxic substance was present or that a claimed exposure could have occurred based upon the work history and/or accident/incident report.

(2) The IH also reviews SEM searches performed by the DO to determine whether or not they were performed correctly and accurately.

c. Request for Case File. If the IH requests the entire case file, the CE prepares the WS/WR memorandum for the DD's signature. The WS/WR memorandum is addressed to the Policy Branch Chief at NO. Upon receipt of the case file, the Policy Branch Chief forwards the case file to the IH for review.

d. IH Memorandum. The IH renders an expert opinion in the form of a memorandum that addresses the issue as specifically as possible. The IH's reply addresses the specific question posed by the CE in the e-

mail/SOAF/WS/WR memorandum, and employs his or her specialized training to make findings based upon the evidence of file and clearly rationalized science.

e. CMC Referrals to IH. In certain instances, a case forwarded to a CMC may not contain enough information regarding occupational toxic exposure for the CMC to render an expert opinion. In these situations, the CMC should refer the case to an IH through the DO.

(1) CMC referrals for causation which do not adequately identify a route and extent of exposure require the CMC to contact the Medical Scheduler (MS) via e-mail within 3 days of receipt of the referral package, and request an IH referral. If exposure data are inadequate due to an incomplete SEM profile, incomplete DOE records, or other missing information that makes a causation determination impossible without a clearer exposure evaluation, then an IH referral is warranted. If the Medical Scheduler is unavailable the CMC should then contact the assigned CE.

(2) The MS forwards the CMC's IH referral request via email to the assigned CE for review. A copy of this email is placed in the case file. Telephone requests for an IH referral must be documented ECS.

(3) Upon receipt of the email from the MS, the CE forwards the case file and Statement of Accepted Facts (SOAF) to the Supervisor/Senior CE for review. If the Supervisor/Senior CE concurs with the need for an IH referral, he or she sends an email with the SOAF attached to the Health Services Program Analyst (HSPA) located at the NO, requesting an IH review and places a copy of the SOAF and the sent email in the claimant's file. The CE enters correspondence in ECS to document that the case was sent to the Policy Branch for review. The correspondence entry ensures that the time taken for review by an IH

will not be counted as time necessary for CMC review.

(a) Upon receipt of the email from the Supervisor/Senior CE, the HSPA assigns the referral to an IH.

(b) The IH reviews the SOAF and any other relevant information that may be requested, and renders an expert opinion in the form of a memorandum based upon the facts of the claim, the information available through SEM, and professional judgment regarding the likelihood and extent of any exposure(s). The IH then emails a copy of the memorandum to the CE, Senior CE, and Supervisor.

(c) The IH has 15 days from receipt of the referral to complete the memorandum. If 15 or more days pass without receipt of the memo, the CE notifies the Senior CE/Supervisor, who then follows up with an email to the HSPA.

(d) When the IH memo is received the CE reviews the opinion to ensure that the question asked has been sufficiently answered, gives a copy of the memorandum to the MS, and places a copy in the claimant's file. The CE then enters the receipt date into ECS correspondence to indicate that the response was received from the Policy Branch.

(e) The MS will FedEx a copy of the IH memorandum to the CMC for review and notify the CE, Senior CE, and the Supervisor via e-mail of when this action was taken.

(4) The CE continues to monitor and track the file after the IH memorandum has been furnished to the CMC.

(a) The CMC has 21 days from the date of receipt of the IH memorandum to return a

completed report accompanied by a bill to the MS. If the CMC report is not received within 21 days from the date of the IH memorandum, the CE notifies the MS, who follows up with a phone call to the CMC. The call is documented in ECS.

(b) If, upon review of the IH memorandum, the CMC has questions, the CMC contacts the IH via email.

(5) If the Supervisor/Senior CE determines that the case does not warrant an IH referral after receiving the SOAF and file from the CE, the Supervisor/Senior CE returns the SOAF and case file to the CE with instructions to pursue further exposure development.

(a) The CE notifies the MS via email that further exposure development is needed, places a copy of the sent email in the case file, and mails an exposure development letter to the claimant. In the letter to the claimant, the CE advises that exposure development is needed for adjudication. Upon mailing the request to the claimant the CE enters a note in ECS describing the action and inserts a 30-day call-up.

(b) The MS notifies the CMC via phone that further exposure development is needed for the case. The call is documented in ECS.

(c) After 30 days has passed with no response from the claimant, the CE prepares a second letter to the claimant (accompanied by a copy of the initial letter), advising that following the initial letter, no additional information has been received. The CE advises that an additional period of 30 days will be granted for the submission of requested information, and if the information is not received a decision will be issued.

(d) The CE notifies the MS via email that the requested information has not been received, places a copy of the sent email in the case file.

(e) Upon receipt of the email from the CE the MS prepares a letter to the CMC notifying that the requested information has not been received. In the letter, the MS requests the CMC to return or destroy the case material. A copy of this letter is placed in the case file.

(f) If the claimant submits relevant exposure data in response to the CE's request, it must be reviewed to determine if it is of sufficient probative value to request an IH referral or return to the CMC. If the CE determines that there is insufficient evidence to warrant an IH referral, a decision can be issued. If the CE determines that the new information is sufficiently comprehensive to obviate the need for IH review, referral to the CMC can be completed.

f. Complex Referrals. Some referrals to NO will be so complex as to require IH and medical or possibly toxicology review. In these instances, the NO Medical Director and/or the NO Toxicologist may also review the case materials/case file to assist in addressing the CE's inquiry. The proper specialist will be determined by an MHSU specialist at NO upon review of the query and/or case file materials. The NO Medical Director and/or Toxicologist will provide expert opinions in such cases where a review is necessary by more than one specialist at the same time.

If an issue referred to the NO contains elements that might require expertise in the field of occupational exposure, medicine, and/or toxicology, it is forwarded to NO as outlined above with an initial e-mail query. The appropriate specialist(s) will review the query and determine what additional information (including

the case file) is necessary to resolve the issue at hand.

g. Synergistic or Additive Effect. In certain instances a physician might opine that a claimant's radiation and toxic substance exposure together worked in tandem to produce a synergistic or additive effect that brought about a cancer. DOL has not found scientific evidence to date establishing a synergistic or additive effect between radiation and exposure to a toxic substance, and if the physician presents this finding he or she must provide actual scientific or medical research evidence to support the finding before the CE may consider the assertion.

If a physician makes this assertion the CE requests that the physician provide medical evidence of a synergistic or additive effect and a clearly rationalized medical opinion as to whether or not the effect is of a significant nature to establish that the combination of the radiation and the exposure to a toxic substance was "at least as likely as not" a significant factor in aggravating, contributing to, or causing the cancer.

(1) If the physician provides rationalized scientific evidence revealing a synergistic or additive effect, the DO sends the case file to NO for review by a NO Health Physicist (HP) and/or the DEEOIC Medical Director. The HP reviews the physician report and all evidence of file and drafts a memorandum containing his or her professional opinion as to causation which is sent to the CE for use in issuing a determination in the case.

**U.S. DEPARTMENT OF LABOR**

EMPLOYMENT STANDARDS ADMINISTRATION  
OFFICE OF WORKERS' COMPENSATION PROGRAMS  
DIVISION OF ENERGY EMPLOYEES' OCCUPATIONAL  
ILLNESS COMPENSATION  
(District Office Address)



(Date)

EMPLOYEE NAME:  
CLAIM FILE NUMBER:

(DAR POC Address)

To Whom It May Concern:

A claim for benefits under the Energy Employees Occupational Illness Compensation Program Act (EEOICPA) has been submitted with respect to the employee named above, claiming employment at a Department of Energy facility. He or she is claiming that employment for the Department of Energy or one of its contractors or subcontractors has contributed to a covered illness. Your facility has been identified as having possession of or access to records which may identify employment and toxic substance exposure regarding this individual.

Included as an attachment to this cover letter is a copy of the claimant's EE-1 or EE-2 Claim for Benefits, the EE-3 Employment History and a Document Acquisition Request (DAR) Questionnaire. Marked on the attached DAR Questionnaire is the name of the employee, employee SSN, employer name and the facility where employment is alleged to have occurred as well as selected categories of documentation we hope you have at your facility.

Please conduct a reasonable search for the requested documentation and provide a copy of those records in digital PDF format on a compact disc (CD) if available. You may make as many copies of the DAR Questionnaire as necessary.

Please return the completed DAR Questionnaire, the CD and any hard copy documents to the address provided above. If you have received this request in error or if you have any other concerns, please feel free to contact me directly at \*\*\*-\*\*\*-\*\*\*\* or fax \*\*\*-\*\*\*-\*\*\*\*.

Sincerely,

Claims Examiner

Attachments:

EE-1/2 Claim for Benefits  
EE-3 Employment History

Part 2 - Claims

**Document Acquisition Request Form  
(DAR)**

**U.S. Department of Labor**  
Employment Standards Administration  
Office of Workers' Compensation  
Programs

This form is used to request specific documentation regarding DOE employees and DOE contractor employees at DOE covered facilities under the Energy Employees Occupational Illness Compensation Program Act (EEOICPA). The DOE Operations Center will request the records specified by DOL from each facility. The facility will transfer the documentation onto a compact disc (CD) in electronic PDF format and forward the completed DAR form and CD directly to the requesting District Office.

Employee Information (Completed by DOL)			
1. Name (Last, First, Middle Initial)	2. Social Security Number		
3. Department of Energy Facility	4. Employer Name (If a subcontractor employee)		
5. Types of Records Being Requested (Completed by DOL)		6. Record Availability	
		Included on CD	Unavailable
<input type="checkbox"/> Radiological Dose Records		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Incident Or Accident Reports		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Industrial Hygiene and Safety Records		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Pay and Salary Records		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Job Descriptions		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Medical Records		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Other: (specify)		<input type="checkbox"/>	<input type="checkbox"/>
7. Site Specific Exposure Questions (Completed by DOL)		8. DOE Response	
<i>Example: Was asbestos used in building X-333?</i>			
1. Do you have any classified documents regarding this employee we should be aware of?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> Unk <input type="checkbox"/> Sup
2.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> Unk <input type="checkbox"/> Sup
3.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> Unk <input type="checkbox"/> Sup
4.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> Unk <input type="checkbox"/> Sup
5.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> Unk <input type="checkbox"/> Sup
6.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> Unk <input type="checkbox"/> Sup
7.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> Unk <input type="checkbox"/> Sup
9. Certification (Completed by DOE)			
By signing this form, the DOE is acknowledging that it has conducted a reasonable search of available records and that the information provided on this sheet and the electronic documentation provided on a compact disc (CD) or hard copy accurately reflects the results of that search.			
Print Name:	Telephone No: ( )		
	Address:		
Signature:	Date:		

**Instruction Sheet for the Document Acquisition Request (DAR)**

**Block 1:** The Department of Labor (DOL) Claims Examiner (CE) completes this block by either typing or legibly writing the name of the employee using Last Name, First Name, and Middle Initial. The CE also lists a maiden name if known.

*Note:* Attach a copy of the EE-1/2 and EE-3

**Block 2:** The DOL CE types or legibly writes the Social Security Number (SSN) of the employee in this block.

**Block 3:** The DOL CE types or legibly writes the claimed Department of Energy (DOE) facility identified by the claimant on the submitted Employment History Form (EE-3) (i.e. Portsmouth Gaseous Diffusion Plant).

*NOTE:* If the claimant indicates employment at multiple DOE sites, a separate DAR Form is completed for each DOE site claimed.

**Block 4:** The DOL CE places the contractor or subcontractor name in this block if a subcontractor or contractor is identified on the EE-3 (i.e. Grinnell Corporation).

*NOTE:* If the claimant indicates employment at a DOE site with multiple subcontractors, a separate DAR Form is completed for each subcontractor.

**Block 5:** Types of Records Being Requested. The DOL CE determines from the case file documents (i.e. Occupational Health Questionnaire, EE-3, EE-4, medical evidence) which types of records are pertinent to the individual case and checks the appropriate block corresponding to the type of record needed.

Radiological Records: These documents are radiation exposure records based on readings from dosimetry badges or similar personal recording devices. They are generally taken at regular intervals over the employee's employment period.

Incident or Accident Reports specific to the employee: Any abnormal incidents or large plant accidental substance releases which effect the employee are documented in these types of documents (Safety and Security Records, unusual occurrence reports, off normal reports, effluent release information, Type A and Type B accident/investigation reports, etc).

Industrial Hygiene or Safety Records: Documents in these categories could contain periodical inspection reports for health and safety purposes pertaining to the employee (i.e. Occupational Injury Files, Investigation Records, Security Records, Individual Industrial Hygiene assessments, Health Hazard Inventories, etc).

Pay and Salary Records: These documents include an employee's pay, salary, any workers' compensation claim or other documents affecting wage. Examples of records that may contain this information include **but are not limited to** Official Personnel Files of Contractor Employees, Contractor Job Classification Manuals, Employee Awards Files, Notification of Personnel Actions, Classification Appraisals Files, Wage Survey Files and Unemployment Compensation Records.

Job Descriptions: These are descriptions of the various employment positions at the plant or site and the duties required to perform the job; they are employee specific.

Medical Records: Personal medical histories of the employee if that employee visited the plant infirmary (i.e. Health Unit Control Files, Employee Medical Folder, etc.).

Other. This category is reserved for any other documentation the CE may feel necessary to request on a claim specific basis which do not fit into any of the other six categories. If this category is checked and a specific request listed by the CE, DOE personnel may contact the DOL CE for clarification of the request if necessary.

**Block 6:** Record Availability. This block is completed by the DOE. The DOE DAR POC completing the form either checks the block "Included on CD" or check the block "Unavailable" depending on whether the DOE has any records related to that particular set of records. "Included on CD" also includes hard copy documentation in the event the DOE facility does not have imaging capability.

**Block 7:** Site Specific Exposure Questions. This block is completed by the DOL CE by posing specific toxic substance exposure questions to the DOE. These questions could be gleaned from the claimant's EE-3, other documents in the case file and/or the Occupational Health Questionnaire completed by the Resource Center and should be phrased in such a manner that DOE may provide a "yes or no" answer.

**Block 8:** DOE may check "yes" or "no" to each site specific question posed by the CE. If DOE cannot confirm the question either way, the DOE indicates that they have insufficient documentation to make a decision on the question by selecting the "unknown" block. There may be times the DOE may want to attach relevant documentation which may clarify an answer in this section. In this case, the DOE DAR POC checks "sup" (supplemental). This will signify additional documentation is attached to the DAR Questionnaire regarding that particular question.

**Block 9:** This block is completed by the DOE DAR POC certifying the results of the records search. The DOE DAR POC prints his or her name, address and telephone number on the form and signs and dates it in the appropriate spaces. Prior to certifying the results of the records search, the DOE ensures that any clarification regarding the types of records DOL is requesting should be made with the requesting DOL CE.

**Establishing Causation for Hearing Loss  
and Asbestosis**

**Asbestosis:** A Claims Examiner is to accept Part E causation for asbestosis once the following three criteria are satisfied.

1. Medical: A medical diagnosis of asbestosis.
2. Employment: The employee is a covered DOE contractor employee at a covered DOE or RECA section 5 facility and in the course of employment was exposed to asbestos while at the DOE or RECA section 5 facility.

Asbestos existed at all covered DOE and RECA section 5 facilities. Using the Site Exposure Matrices (SEM), along with an examination of pertinent exposure data maintained in the case, a CE is to determine if there is a reasonable basis to conclude that the employee had exposure to asbestos. Additionally, the CE should reference EEOICPA Circular 15-05, "Occupational Exposure Guidance Relating to Asbestos," for further guidance on asbestos exposure. If there is reason to doubt the employee's exposure to asbestos because of the type of work performed, or other contradictory evidence, he or she is to request the following information from the claimant:

- a. Contemporaneous medical evidence discussing the employee's work history and exposure to asbestos at the covered facility. The presence of pleural thickening, interstitial fibrosis, neoplasia, or other medical findings characteristic of asbestosis also helps establish the relationship between employment and exposure;

- b. Personnel or incident records disclosing exposure to asbestos; or
- c. Persuasive affidavits from other employees, with reason to know, attesting to the employee's asbestos exposure and other evidence such as independent studies of the facility or newspaper articles discussing asbestos exposure at the site.

Once the CE has collected all relevant exposure information, and he or she still cannot affirmatively conclude the extent or duration of employee's exposure to asbestos, an Industrial Hygiene referral is to occur.

3. Exposure/Causation: Causation will be presumed when the case file contains evidence that the employee was exposed to asbestos for at least 250 aggregate workdays, and there was a latency period of at least 10 years between the start of covered DOE or RECA section 5 employment and the onset of asbestosis.

In a claim for an employee that does not meet the requirements of presumed causation because the evidence does not establish 250 days of asbestos exposure, or the latency requirement, the CE is to undertake development to obtain an opinion on causation from either the claimant's treating physician or a Contract Medical Specialist (CMC).

**Hearing Loss**: Part E causation for hearing loss can be presumed without referral to National Office specialists if all three following conditions are satisfied:

1. Medical: The file contains a diagnosis of bilateral sensorineural hearing loss (conductive hearing loss is not known to be linked to toxic substance exposure).
2. Employment: The verified covered employment must be within at least one specified job category listed below

for a period of 10 consecutive years, completed prior to 1990. The labor categories are the following:

- Boilermaker
- Chemical Operator
- Chemist
- Electrician/Electrical Maintenance/Lineman
- Electroplater/Electroplating Technician
- Garage/Auto/Equipment Mechanic
- Guard/Security Officer/Security Patrol Officer (i.e., firearm cleaning activities)
- Instrument Mechanic/ Instrument Technician
- Janitor
- Laboratory Analyst/Aide
- Laboratory Technician/Technologist
- Lubricator
- Machinist
- Maintenance Mechanic
- Millwright
- Operator (most any industrial kind, the test being whether the operator position is one in which there is potential for solvent exposure)
- Painter
- Pipefitter
- Printer/Reproduction clerk
- Refrigeration Mechanic/HVAC Mechanic

- Sheet Metal Worker
- Utility Operator

3. Exposure: Evidence in the file must not only establish that the employee worked within a certain job category listed above, but that the employee was concurrently exposed to at least one of the specified organic solvents listed below:

- Toluene
- Styrene
- Xylene
- Trichloroethylene
- Methyl Ethyl Ketone
- Methyl Isobutyl Ketone
- Ethyl Benzene

Hearing loss claims supported by rationalized medical evidence asserting a causative link between covered employment and exposure to OTHER solvents not listed in this Exhibit should be forwarded to the NO for specialist review.

Challenges to the DEEOIC Conditions of Acceptance. This policy guidance represent the sole evidentiary basis a CE is to use in making a decision concerning whether it is "at least as likely as not" that an occupational exposure to a toxic substance was a significant factor in aggravating, contributing to or causing a diagnosed bilateral sensorineural hearing loss. Claims filed for hearing loss that do not satisfy the conditions for acceptance outlined in this procedure cannot be accepted, because these standards represent the only scientific basis for

establishing work-related hearing loss due to exposure to a toxic substance.

The CE is to undertake routine development (i.e., SEM, SEM mailbox, IH referral, etc.) on any hearing loss claim that does not meet the criteria described in this procedure, including communicating to the claimant the evidence necessary for a compensable hearing loss claim. As part of that development, the CE is to notify the claimant of his or her ability to challenge the scientific underpinnings of the DEEOIC hearing loss policy.

The claimant has the burden of establishing, through the submission of probative scientific evidence, that the criteria used by the program do not represent a reasonable consensus drawn from the body of available scientific data. If a claimant seeks to argue that the standard by which DEEOIC evaluates claims is not based on a correct interpretation of available scientific evidence, or that a toxic substance that is not listed as having a health effect of hearing loss exists, he or she will need to provide probative epidemiological data to support the claim. Any claimant submission of scientific documentation, including journals, periodicals, or other literature (including citations to literature) has to relate to the topic of the correlation between hearing loss and toxic substance exposure. Scientific evidence that does not relate to or reference hearing loss is insufficient.

With the receipt of compelling scientific data relating to a challenge to the DEEOIC conditions of acceptance for hearing loss, the CE is to prepare a referral of the documentation to the Policy Branch for examination by a Health Scientist who will respond to whether the evidence warrants a change to program policy regarding hearing loss.