EEOICPA Part E Review

A private citizen’s perspective of Current DOL Review Processes, Discussion of Database Shortcomings (Site Exposure Matrices and Haz-Map) for Determinations of Significant Toxic Substance Exposure, and Greater than 50% Probability of Aggravating, Contributing to, or Causing Covered Illnesses

Maxine Pennington (mpennington@kc.rr.com)       March 28, 2016
Background Information

Kansas City Plant 1949-2014

- Non-nuclear components production facility of DOE/NNSA
- 3 million ft$^2$ secure perimeter within a Federal Complex of 310 acres on Bannister Rd, KC, MO
- Electrical components & assemblies, Mechanical products, Special Material production, supporting processes like plating, machining, painting, welding, lab analysis “all under one roof”

Maxine Pennington

- Retired KCP chemist, technical manager and R&D Program Manager
- 1981-2013. As analytical chemist, work assignments often included analyzing legacy toxics substances and chemical interactions both in weapon products and in the KCP work environment
- Worked with colleagues across the DOE weapon’s complex
- After retiring, sought by EEOICPA claimants to provide help on their claims reviews. Volunteer since 2014.
EEOICPA Summary

- EEOICPA enacted October 2000 (ionizing radiation, Beryllium, Silica causants)
  - Administered by DOL. Information and decisions by DOE. Cancer determinations by HHS via dose reconstruction methodology, special cohort class investigations, Radiation Advisory Board.
- Part B effective July 31, 2001
- Part E enacted October 31, 2004 (amendment adds toxic substances to causants of illness or death)
  - Administered by DOL AND Decisions by DOL. DOE provides information to DOL.
    - At least as likely as not that exposure caused covered illness AND
    - At least as likely as not that exposure was related to employment at DOE facility
- FY 15 Appropriations Bill (Dec 14, 2014) enacted formation of a Toxic Substances Advisory Board for Part E
  - Call for nominations July 2015
  - Comments due on nominations Nov 2015
  - Named by Secretary of Labor—March 2016
2004 Amendment to EEOICPA Created Process Gaps that Still Exist

These Process were in place for Part B ionizing radiation, Be, Si causants with involvement of NIOSH and DOE. DOL processes were not in place on Nov 1, 2004 for “toxic substance” causants

1. Toxic Substances Dose Reconstruction Methodology ?
2. Special Exposure Cohort class ?
3. Toxic Substances Advisory Board ?

2. Process has not been established to date. Not under consideration as far as I know.
DOL Review Process for Part E

Employment Standards Administration
Office of Workers’ Compensation Programs
Division of Energy Employees Occupational Illness Compensation
Washington, D.C. 20210

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:

From Procedures Manual: At least as likely as not that the toxic substance aggravated, contributed to, caused the covered illness

- “at least as likely as not” defined as greater than 50% probability
- “Denial is not based on Site Exposure Matrix (SEM)”
- Reviewer instructions: SEM is the only source of links between toxic substances and covered illnesses. SEM information derived from Haz-Map database of Hazardous Chemicals and Occupational Diseases (NIH). Link to Haz-Map for claimants, not reviewer, use. If reviewer has not enough information to make a decision, then can ask claimant for addition information or refer a specific question to Industrial Hygienist or Toxicologist from the National Office
- If SEM has a match for Site, Job Description, disease linked to chemical and chemical linked to site, then reviewer can make a favorable decision

In practice, reviewers generally deny claim on basis of no link between claimed toxics and Medical Diagnosis with suggestion that claimant can provide peer-reviewed research literature as evidence if they disagree
Haz-Map provides a wealth of information about EEOICPA covered cancers and potential chemical causes with research study citations. Also shows IARC and NTP conclusions regarding human carcinogenicity (suspected and reasonably expected). It appears that SEM is populated only with links that are definite causes, ignoring literature and highly regarded sister agency decisions regarding “possibly contributing to” and “aggravating”. Haz-Map has caveat that cancers are not linked to jobs, industries or findings!!
Conclusions --- toxic links to disease

DOL procedure for determining link between toxic exposure and disease

- Is repeatable
- Can result in some favorable decisions (based on historical epidemiology that accepts 100% cause and effect, like asbestos causes lung problems in mine workers)
- Does not give recognition to any SEC that might appear to DOE cold war legacy workers and be due to hazardous substance(s)
- Does not support EEOICPA provisions
  - Aggravating or Contributing to
  - Claimant favorable when applying review procedure
  - As least as likely as not (50-99.9%)
- Is based on SEM, contrary to DOL claims
At least as likely as not that exposure was *related to employment* at DOE site

- “at least as likely as not” defined as greater than 50% probability
- “Denial is not based on Site Exposure Matrix (SEM)”
- Reviewer instructions “good place to start is Job Classification in the SEM”
- Job Classification and Work Process fields have contradictory, incomplete information for KCP (and other NNSA sites)

*In practice, if the claimant’s job classification is not included in that field in the SEM, the claim is denied as “no evidence that your job title had any potential exposures at KCP” regardless of how many documents, statements, and other testimonies are given in the individual’s case file.*
Link to Employment Examples

Using search text request, these results were obtained for “weld” and “molding”
From SEM

86 toxics match hazardous chemicals potentially related to molding operations at KCP.

2 searches give contradictory information regarding whether Molding was a process linked to KCP and also listing hazardous chemicals potentially related to molding.
Molding Operations SEM (cont’d)

Labor categories performing this site work process/activity obviously incomplete. Process Engineers, Product Engineers, Production Planners, Accountants, HS&E professionals, among others had daily, weekly, or other periodic assignments to work in the area for directing the Fabricators and Assemblers, for troubleshooting, tracking orders, taking inventory, providing area monitoring, determining PPE, etc.

DOL reviewers are very specific in using labor categories as a basis for verifying (AND DENYING) claims.
Entry has KCP process, chemical substance linked to bladder cancer, but otherwise incomplete.

Buildings in which this site—none listed even though in supplemental information sent in an individual case is the “MOCA decontamination project” circa 1973 that lists decontamination occurring in at least 10 departments in main building 1st floor and mezzanine.

Historical data incomplete in SEM leading to inaccurate reviews and decisions for claimants.
Contradiction in SEM

Previous slide shows that Adiprene/MOCA preparation, mixing, and potting process is linked to KCP.

Not shown in this screen shot, but in the SEM is also the inaccuracy that “engineer” is not listed as a job classification with potential exposure.
Conclusions ---linking exposure to employment

DOL procedure for determining link between potential toxic exposure and employment

- May be repeatable???
- Can result in some favorable decisions (based on match of claimant work history with job classification and work process and hazardous substance and health problem link)
- Does not support EEOICPA provisions
  - Claimant favorable when applying review procedure
    - As least as likely as not (50-99.9%) exposed
  - Is based on SEM, contrary to DOL Procedure Manual statements
Conclusions - SEM ???

- SEM is incomplete--especially for the first 50 years of KCP
- Incomplete results in inaccurate conclusions and decisions by DOL reviewers
- Search Contradictions exist in SEM
- Physical facility and Administrative Changes are very complex & difficult to represent in the database
- Job classification and incidents fields are especially misleading

Regardless of job classification, most employees were potentially exposed (50% or greater) to most hazardous substances used at KCP prior to 1993
Is it *possible* to reconstruct any person’s toxic chemical exposure history? (the SEC question)

- Historical records do not exist that can substantiate KCP employee exposures
  - Continuous environmental air and surface monitoring was not performed in most areas of the facility including main traffic routes used by all employees to report to work, walk to cafeterias, walk to/from meetings, and walk around for exercise breaks. Awareness of Departmental Hazards and training not implemented until 1993.
  - Individuals were not monitored for hazardous chemical exposure
  - Hazards were not recognized at time of potential exposures that have long latency periods so PPE was generally not recognized as required
  - Physical access inside the KCP was not limited except by Q clearance until mid 1990s. Any job classification with a Q could work/travel through nearly any area of KCP.
  - The SEM does not reflect any of these common, daily practices at KCP

*Regardless of job classification, most employees were potentially exposed (50% or greater) to most hazardous substances used at KCP prior to 1993*
Path forward ??

- Provide information to the Toxic Substances Advisory Board
- Regardless of DOL stating that SEM is not used to deny claims, it is.
  - Can we reconcile this?
- SEM is incomplete leading to inaccurate DOL decisions
  - Related to above, and in addition can/should we champion major updating of KCP SEM data?
- Ask ourselves: Is it possible to reconstruct potential hazardous material exposures to Bannister KCP facility from 1949 to ?? (department hazard assessments and documents began in 1993, access control by badge readers - later 2 tiers first late 1990s then around 2005, etc).
  - Can DOE high-performance computers be used to model the KCP toxic substance history so that we could “simulate and analyze” for a quantitative toxic substance reconstruction analogous to the NIOSH radiation reconstruction methodology