



DIAB

DEEOIC INTERIM ADVISORY BOARD

Citizen Volunteers Providing Transparency & Accountability for EEOICPA Claimants

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SITE EXPOSURE MATRIX REVIEW

A COMPARISON BETWEEN SITE PROCESSES AND LABOR CATEGORIES

April 3, 2014

BACKGROUND

On October 30, 2000, a landmark piece of legislation, Energy Employee Occupational Illness Compensation Program Act (EEOICPA) was passed by a bi-partisan Congress. This legislation was intended to provide long-denied justice to Department of Energy's (DOE) nuclear weapons workers who had contracted occupational diseases through their exposure to the thousands of radioactive and other hazardous materials.

EEOICPA was reformed in 2004 and responsibility for determining whether a claimant's occupational disease qualified for medical benefits, wage loss and/or whole body impairment was given to the Department of Labor's Division of Energy Employees Occupational Illness Compensation (DEEOIC). To implement this program DEEOIC developed a data base, the Site Exposure Matrix (SEM) whose purpose is to link labor categories with processes, labor categories with buildings, labor categories with toxic substances, and toxic substances with health effects.

In 2010, the Government Accountability Office (GAO) issued a report on EEOICPA, <http://1.usa.gov/1hsM5cC>. One of their findings was that "...though Labor employs a contractor and a small team of internal experts to update its Part E database of work sites, toxins, and their associated diseases, the composition of this database lacks external review to ensure that it is as comprehensive and scientifically sound as possible."

DEEOIC contracted with the National Academies of Sciences' Institute of Medicine (IOM) to review SEM and to make recommendations to improve the database, <http://bit.ly/XgHjJd>. IOM also noted that there was no external review of SEM. Both GAO and IOM recommended that an advisory board be created to review DEEOIC's implementation of EEOICPA. Legislation was introduced to create such a board but movement on this has stalled.

A decision to create a shadow board was made. The DEEOIC Interim Advisory Board (DIAB) is comprised of volunteers from the advocate community, including former nuclear weapons workers, sick worker family members, and members from various professions who are familiar with the EEOICPA program. DIAB also has a number of experts who have volunteered to review DIAB's reports.

EXECUTIVE SUMMARY

As part of DIAB's self-imposed responsibilities, DIAB will review SEM in detail. As SEM covers over 100 DOE facilities, DIAB will review small segments of the database at a time. As an example, this report provides a comparison between four commonly understood site processes – welding, grounds keeping, painting and administrative work – and the corresponding labor categories listed in SEM for twenty facilities. Many of the processes and job categories are site specific. For instance the process of “rocket and payload assembly” shown for the Kauai Test Facility would not be expected to be found at the Dana Heavy Water Plant. However, the four processes addressed in this report are common to all twenty of the facilities.

FACILITIES REVIEWED COMPARING PROCESSES TO LABOR CATEGORIES LISTED IN SEM

1. Canoga
2. Clarksville
3. Connecticut Aircraft Nuclear Engine Laboratory
4. Dana Heavy Water Plant
5. Dayton Project
6. Desoto Avenue Facility
7. Downey Facility
8. Electro Metallurgical
9. GE Evendale
10. High Energy Rate Forging Facility
11. Iowa Ammunition Plant
12. Kauai Test Facility
13. Middlesex Sampling Plant
14. Pacific Proving Ground
15. Peek Street Facility
16. Piqua Organic Moderated Reactor
17. Reduction Pilot Plant (Huntington)
18. Sacandaga Facility
19. SAM Laboratories – Columbia University
20. Separations Process Research Unit (Knolls Atomic Power Laboratory)

I. Process and Job Categories Appear Inaccurate Based on Records in DOL's Possession

At the outset, DIAB's review uncovered problems with reporting processes and labor categories. Welding, grounds keeping and painting processes were listed in multiple sites. However, many of those sites did not list the corresponding labor category. Ironically, the opposite was found to be true for administrative workers. The majority of the SEM sites reviewed showed there was a labor category which reflected the administrative occupations; however few SEM sites reflected this as a process.

SEM is utilized by a variety of groups. Department of Labor's Claims Examiners and Final Adjudication Branch hearing officers use this data base as a tool to adjudicate claims. Workers or their survivors as well as authorized representatives rely on this data base to develop their claims. Using a database that is incomplete or inaccurate can delay a claims disposition or even possibly cause a claim to be denied based upon missing SEM information. DIAB understands that the CE can, and quite often does, use other SEM filters to determine the labor category for the claimant. However, this extra research would not be necessary if the correct information was entered into SEM. And the inequities that result from sporadic use of SEM filters could be avoided with a complete and accurate database. It is noteworthy to mention that claimants or their authorized representatives do not have access to these filters.

WELDING

DIAB reviewed "welding" as a process and job category because it is a common occupation in the metal industry and would be expected to be a process at the DOE facilities. The review determined that out of the twenty sites, seventeen showed "welding" as a process, though it is likely the remaining three also had a welding process on site. It is difficult to imagine how a facility could function without a welder. At the very least cut off work would have needed to be performed during the construction and decommissioning eras.

In fact, page 213 of this document concerning the Piqua Reactor, <http://bit.ly/1lySQzr>, clearly shows that the welding process was required to fabricate the spent fuel shipping casks. DIAB also quickly located a document concerning the Pacific Proving Grounds, <http://bit.ly/1f1l5UZ>. Page 14 of this document describes a steel platform that was used to house sensor equipment for the Mike shot. A reading of this document implies that the steel platform was erected on site and thus would require the expertise of a welder.

SITES WHERE WELDING IS LISTED AS A PROCESS

1. Canoga Street Facility
2. Clarksville
3. Connecticut Aircraft Nuclear Engine Lab
4. Dana Heavy Water Project
5. Dayton Project
6. DeSoto Avenue Facility
7. Downey
8. Electro Metallurgical
9. GE Evendale
10. High Energy Rate forging Facility
11. Iowa Ammunition Plant
12. Kauai Test Facility
13. Middlesex Sampling Plant
14. Piqua Organic Moderated Reactor
15. Reduction Pilot Plant (Huntington)
16. Sacandaga Facility
17. SAM Laboratories – Columbia University

A far greater discrepancy was revealed when the match between job categories and processes was viewed. Of the seventeen sites reporting “welding”, only six list “welder” as a job category:

FACILITIES WHERE SEM SHOWS WELDING AS A PROCESS AND ALSO LISTS WELDER AS A JOB CATEGORY

1. Dana Heavy Water Project
2. Iowa Ammunition Plant
3. Kauai Test Facility
4. Middlesex Sampling Plant
5. Reduction Pilot Plant (Huntington)
6. SAM Laboratories – Columbia University

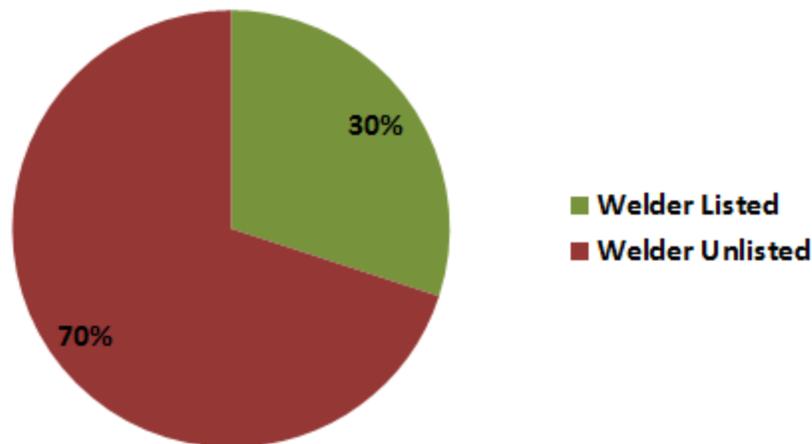
This represents only 35% of the job categories that should have been included, excluding more than half of the welding workers’ fundamental information. If the three sites that were likely to have welding on site, Piqua, Pacific Proving Grounds and the Separation Process Research Unit, the accuracy rates falls to a dismal 15%.

The concern with the inconsistent date is obvious. If a claimant provides his job description as a welder at one of the seventeen facilities, his claim is likely to receive inappropriate treatment. It is very likely that the claims examiner (CE), after checking SEM labor category only, would defer developing the claim because “welder” is not listed in SEM. This is a serious setback for a worker needing approval to receive basis services and it violates both common sense and the basic need for accurate information within the claims system.

Table 1. Process and Job Categories Reported or Missing for Welding

	Plant Name	Welding: process reported (17/20)	Welding: Job Category Reported (6/17)	Potentially Missing "Process"*	Likely Missing Job Category (11/17)**	Likely Sufficient Information on Welding (6/20)****
1	Canoga	X			X	
2	Clarksville	X			X	
3	Connecticut Aircraft Nuclear Engine Laboratory	X			X	
4	Dana Heavy Water Plant	X	X			X
5	Dayton Project	X			X	
6	Desoto Avenue Facility	X			X	
7	Downey Facility	X			X	
8	Electro Metallurgical	X			X	
9	GE Evendale	X			X	
10	High Energy Rate Forging Facility	X			X	
11	Iowa Ammunition Plant	X	X			X
12	Kauai Test Facility	X	X			X
13	Middlesex Sampling Plant	X	X			X
14	Pacific Proving Ground			X	?	
15	Peek Street Facility			X	?	
16	Piqua Organic Moderated Reactor	X			X	
17	Reduction Pilot Plant (Huntington)	X	X			X
18	Sacandaga Facility	X			X	
19	SAM Laboratories - Columbia University	X	X			X
20	Separations Process Research Unit (Knolls Atomic Power Laboratory)			X	?	
	* Process was likely but not reported			3		
	** Process but not job category reported				11+	
	*** Both process & job reported					6

Percent of Welder Labor Category Listed in Sample Sites in SEM



GROUNDS KEEPING

Another process checked both because it apparently was prevalent at most sites and because it is a commonly understood process is “grounds keeping”. Of the twenty sites, seventeen show that “ground keeping” was performed at the facility.

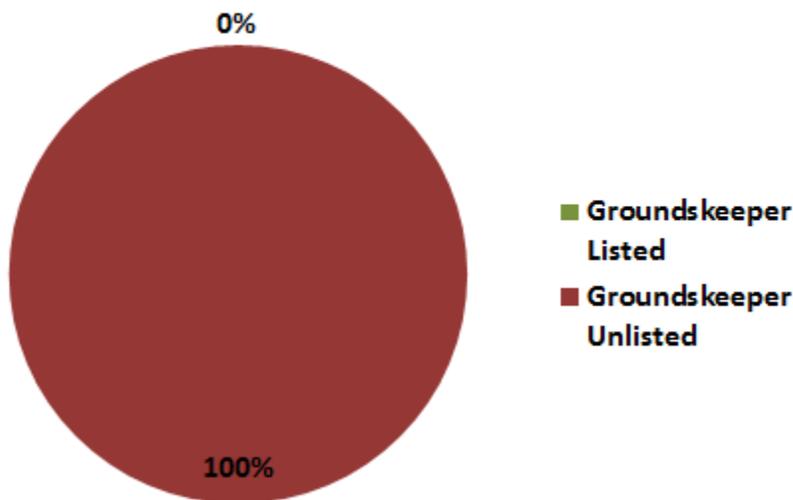
FACILITIES WHERE SEM SHOWS GROUNDS KEEPING AS A PROCESS

1. Canoga
2. Clarksville
3. Connecticut Aircraft Nuclear Engine Laboratory
4. Dana Heavy Water Plant
5. Dayton Project
6. Desoto Avenue Facility
7. Downey Facility
8. Electro Metallurgical
9. GE Evendale
10. High Energy Rate Forging Facility
11. Iowa Ammunition Plant
12. Kauai Test Facility
13. Middlesex Sampling Plant

- 14. Pacific Proving Ground
- 15. Reduction Pilot Plant (Huntington)
- 16. Sacandaga Facility
- 17. Separations Process Research Unit (Knolls Atomic Power Laboratory)

However, SEM does not show any labor category that would have performed this duty for any of the facilities. Under “Process” the description for “ground keeping” shows that the employee would have been responsible for fertilizer and herbicide application, grass mowing and gasoline engine powered equipment use, and pesticide application and handling. These workers would have been exposed to a variety of toxic substances and if the CE stopped developing the claim when “groundskeeper”, “gardener” or “grounds maintenance” couldn’t be found under “Labor Category”, the claim could be delayed and potentially denied.

Percent of Groundskeeper Labor Category Listed in Sample Sites in SEM



PAINTING

A review of the painting process and job category produced similar results. Of the twenty facilities, sixteen show “painting” as a process but only six facilities have “painter” listed in the SEM as a labor category.

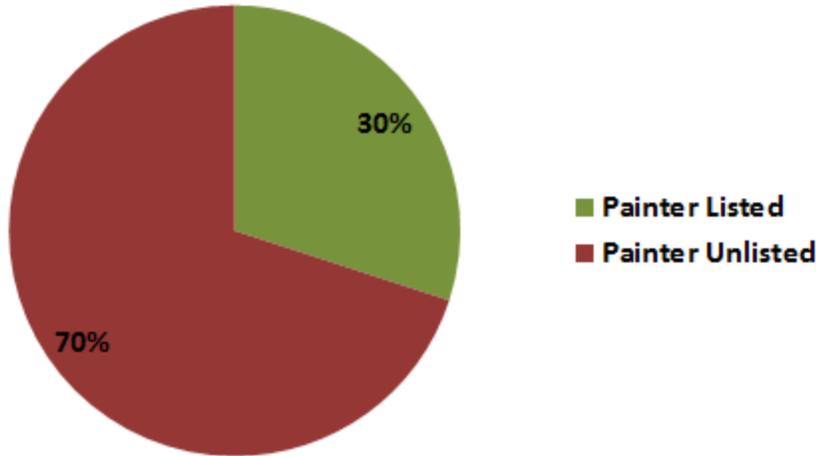
FACILITIES WHERE SEM SHOWS PAINTING AS a PROCESS

1. Canoga
2. Clarksville
3. Connecticut Aircraft Nuclear Engine Laboratory
4. Dana Heavy Water Facility
5. Dayton Project
6. De Soto Street Facility
7. Downey Facility
8. Electro Metallurgical
9. High Energy Rate Forging Facility
10. Iowa Ammunition Plant
11. Kauai Test Facility
12. Middlesex Sampling Plant
13. Pacific Proving Grounds
14. Piqua Organic Moderator Reactor
15. Reduction Pilot Plant
16. SAM Laboratories – Columbia University

FACILITIES WHERE SEM SHOWS PAINTING AS A PROCESS AND ALSO LISTS PAINTER AS A JOB CATEGORY

1. Canoga
2. Dana Heavy Water Facility
3. High Energy Rate Forging Facility
4. Iowa Ammunition Plant
5. Kauai Test Facility
6. Middlesex Sampling Plant

Percent of Painter Labor Category Listed in Sample Sites in SEM



ADMINISTRATIVE WORK

Administrative work (accounting, clerical, secretarial) is a little more complicated. Although one would assume every facility would have this type of work performed at the site, only four sites have this “process” listed in SEM – Dana, High Energy, Kauai and Middlesex. Of those four, only High Energy and Middlesex have a corresponding labor category. However, while the other sixteen sites do not have any type of administrative work listed as a process, eleven lists some sort of labor category that would be involve in administrative work.

FACILITIES WHERE SEM SHOWS ADMINISTRATIVE WORK AS A PROCESS

1. Dana Heavy Water Plant
2. High Energy Rate Forging Facility
3. Kauai Test Facility
4. Middlesex Sampling Plant

FACILITIES WHERE ADMINISTRATIVE WORK IS SHOWN AS PROCESS IN SEM AND HAS CORRESPONDING LABOR CATEGORY

1. High Energy Rate Forging Facility

2. Middlesex Sampling Plant

**FACILITIES WHERE SEM SHOWS ADMINISTRATIVE LABOR CATEGORIES
BUT WHICH HAVE NO CORRESPONDING PROCESS**

1. Canoga
2. Clarksville
3. Connecticut Aircraft Nuclear Engine Laboratory
4. Dayton Project
5. Iowa Ammunition Plant
6. Peek Street Facility
7. Piqua Organic Moderated Reactor
8. Reduction Pilot Plant (Huntington)
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II. DOL's Job Category Information is Clearly Incorrect

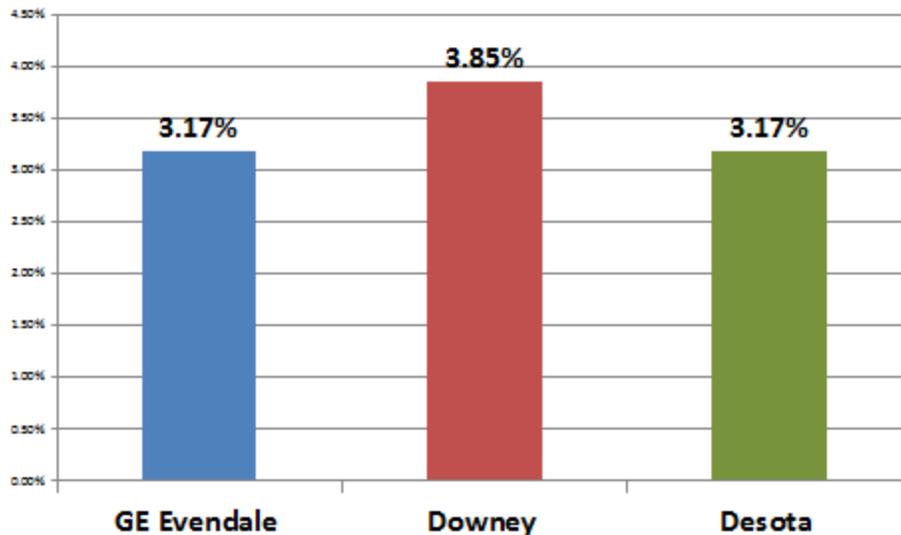
DIAB has determined that SEM lists multiple processes for three sites at which they only list one or two job categories. This is clearly not accurate.

SITES WITH NUMEROUS PROCESSES BUT LESS THAN 3 LABOR CATEGORIES

1. Desoto Avenue Facility – 56 processes, 1 labor category
2. Downey Facility - 26 processes, 1 labor category
3. GE Evendale – 63 processes , 2 labor categories

Although DEEOIC hired a contractor to provide documentation of the processes linked to the job categories this link has not been made. Neither the contractor nor the DEEOIC has carried out essential work of providing the job categories for these sites.

Percent of SEM Labor Categories per SEM Processes at Three Facilities



III. Failure to Develop any SEM

There are thirty nine sites which entirely lack a SEM, as shown in Table 2 below. DEEOIC has falsely claimed in their SEM training material for the Cleveland District Office that this is because not many claims have been filed for those locations. (Source <http://bit.ly/1dhif8y>)

This is clearly not true. Seven of these sites have over 100 claims to date. This represents over 700 people who don't have the assistance they need for their claims under this program. Since the work carried out at many of these plants was relatively recent (see Table 2 below, especially the uranium mills), there is no doubt that the health problems will increase in coming years and timely claims processing will be required.

Just as compelling from an administrative and accuracy perspective is the fact that facilities with recent operations have better information access and that should be taken advantage of before the information is lost. SEMs can be developed more efficiently and accurately now than in 20 years when claims increase, but information is lost.

The complete lack of information available to the CEs unquestionably results in delays if not downright denials. Claimants are required to provide documentation on the processes and the

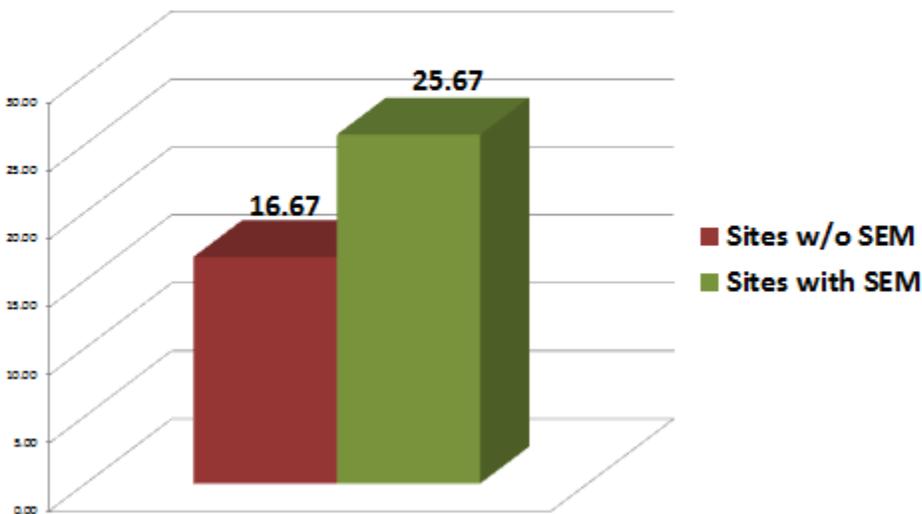
job categories. This occurs in situations where claimants' health is deteriorating and imposing this burden on the former nuclear worker and their families is particularly onerous and entirely unnecessary.

Table 2. FACILITIES WITH NO SITE EXPOSURE MATRIX AS OF 2/28/14

Facility	Years Operational	E Claims Filed	E Claims Paid
Albuquerque Operations Office	1942-present	116	20
Associated Aircraft	1994-1995	4	1
Baker Brothers	1995	1	1
Bonus Reactor	1964-1968	3	1
CH Schnorr	1994	2	0
Climax Uranium Mill	12/88-8/94	8	2
Clinton Engineer Works	1943-1949	121	16
Colonie Site	1984-1998	5	2
Elk River Reactor	1962-1968	1	1
Environmental Measurements Lab	1946-2003	3	3
Grand Junction Operations Center	1943-present	188	17
Hallam Sodium Graphite Reactor	1960-1971	8	5
Herring Hall Marvin Safe Co.	1994-1995	20	1
Hood Building	1946-1963	6	4
Kirtland Air Force Base hanger 481	3/1989-2/1996	9	0
Kirtland Operations Office	1964-present	21	2
Laboratory for Biomedical + Environmental Sciences	1947-present	0	0
Laboratory for Energy-Related Health Research	1958-1989; 1991 present	4	2
Laboratory of Radiobiology and Environmental Health-University of California	1951-1999	0	0
Lacrosse Boiling Water Reactor	1967-1969	3	0
Los Alamos Medical Center	1952-1963	33	7
New Brunswick Laboratory	1948-1977	11	0

New Uranium Mill in Rifle	9/1988-9/1989; 4/1992-10/1996	2	0
Oak Ridge Hospital	1943-1959	89	25
Old Uranium Mill in Rifle	9/1988-9/1989; 4/1992-10/1996	1	0
Puerto Rico Nuclear Center	1957-1976; 1987	4	0
Seymour Specialty Wire	1992-1993	0	0
St. Louis Airport Storage Site	1/3/1947 -1973; 1984-1998	42	1
The Mill at Moab Utah	2001-present	0	0
Uranium Mill and Disposal Cell in Lakeview	1986-1989	0	0
Uranium Mill at Shiprock	10/1984-11/1986	0	0
Uranium Mill in Lowman	1992; 1994-present	0	0
Uranium Mill in Mexican Hat	5/1995-9/1998	2	0
Uranium Mill in Tuba City	1985-2/1986; 1988- 4/1990	2	0
Uranium Mill No. 1 in Slick Rock (East)	1995-1996	0	0
Uranium Mill No. 2 in Slick Rock (West)	1995-1996	0	0
Weldon Spring Raffinate Pits	1955-2002	1	0
Weldon Spring Quarry	1958-2002	0	0
Winchester Engineering and Analytical Center	1952-1961	5	2

**Comparison of Part E Payments at Facilities
with and without SEM through February 2014**



RECOMMENDATIONS

DIAB cannot emphasize enough the need for an accurate SEM. An accurate SEM will expedite the work of the CEs and provide an essential resource to the workers (or their survivors) who provided services to their country during a time of critical need.

In order to correct the serious problems outlined above, DIAB urges DEEOIC to do the following:

1. Instruct their SEM contractor to quickly and cost effectively review SEMs to determine whether site processes have a corresponding labor category for each site.
2. Instruct the SEM contractor to link unclassified documents in the contractor's possession for each individual site.
3. Instruct their SEM contractor to consult with facility experts when updating SEM. An understanding of the processes performed and descriptions of job responsibilities is vital so that SEM can be utilized as an efficient tool in the claims process.

The following individuals are members of DIAB or members of the expert advisory team. They have all supported nuclear worker justice. However, listing here does not indicate review of agreement with every statement made by DIAB

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