

DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit A-1. Labor Categories and Occupation Codes.

The following is a list of the Occupation Codes that are reported with each individual's dose record to the DOE Radiation Exposure Monitoring System (REMS) in accordance with DOE Order 231.1B. Occupation Codes are grouped into Labor Categories for the purposes of analysis and summary in this report. The occupation codes are listed in the REMS Reporting Guide, Table 7, and represent a subset of the occupations listed in the Department of Commerce's Standard Occupational Classification (SOC) Manual (1980).

Labor Category	Occupation Code	Occupation Name
Agriculture	562	Groundskeepers
	570	Forest Workers
	580	Misc. Agriculture
Construction/Repair	610	Mechanics/Repairers
	641	Masons
	642	Carpenters
	643	Electricians
	644	Painters
	645	Pipe Fitter
	650	Miners/Drillers
	660	Misc. Repair/Construction
Laborers	850	Handlers/Laborers/Helpers
Management	110	Manager - Administrator
	400	Sales
	450	Admin. Support and Clerical
Misc.	910	Military
	990	Miscellaneous
Production	681	Machinists
	682	Sheet Metal Workers
	690	Operators, Plant/System/Utility
	710	Machine Setup/Operators
	771	Welders and Solderers
	780	Misc. Precision/Production
Professional	160	Engineer
	170	Scientist
	184	Health Physicist
	200	Misc. Professional
	260	Doctors and Nurses
Service Workers	512	Firefighters
	513	Security Guards
	521	Food Service Employees
	524	Janitors
	525	Misc. Service
Technicians	350	Technicians
	360	Health Technicians
	370	Engineering Technicians
	380	Science Technicians
	383	Radiation Monitors/Techs.
	390	Misc. Technicians
Transport Workers	820	Truck Drivers
	821	Bus Drivers
	825	Pilots
	830	Equipment Operators
	840	Misc. Transport
Unknown	1	Unknown

DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit A-2. Organizations Reporting to DOE REMS, 2010-2014.

The following is a list of all organizations reporting to the DOE REMS from 2010-2014. The list provides the Site groupings used in this report as well as the organization reporting code and name.

Site	Organization Code	Organization Name	Year Reported *					
			2010	2011	2012	2013	2014	
Ames Laboratory	1000503	Ames Laboratory (Iowa State)	●	●	●	●	●	
Argonne National Laboratory (ANL)	1000703	Argonne National Laboratory	●	●	●	●	●	
Brookhaven National Laboratory (BNL)	1001003	Brookhaven National Laboratory	●	●	●	●	●	
DOE Headquarters	1500000	DOE Headquarters		●				
	1504001	DOE Headquarters			●	●	●	
	1523016	SPRU-NY (Building remediation)	●	●	●	●	●	
Energy Technology Engineering Center	8001003	Boeing North America, Inc. - Research	●	●	●	●	●	
Fermi National Accelerator Lab. (FERMI)	1002503	Fermilab	●	●	●	●	●	
Hanford	4700805	Bechtel National Corporation	●	●	●	●	●	
	4701001	DOE, Office of River Protection	●	●	●	●	●	
	4702004	Advance Technology Laboratories	●	●	●	●	●	
	4707104	Washington River Protection Solutions, LLC	●	●	●	●	●	
	NA-2000	NNSA - Visitors				●	●	
	NA-2100	NNSA - Management and Support Personnel	●	●	●	●	●	
	NA-2101	NNSA - Mgmt. & Support Personnel: MELE Assoc.	●	●	●	●	●	
	NA-2110	NNSA - North and South America	●	●	●	●	●	
	NA-2120	NNSA - Europe, Africa and the Middle East	●	●	●	●	●	
	NA-2130	NNSA - Asia and Members of the Former Soviet	●	●	●	●	●	
	7500503	Battelle - PNNL	●	●	●	●	●	
	7500605	Washington Closure Hanford	●	●	●	●	●	
	7502504	AdvanceMed Hanford	●	●	●	●	●	
	7505004	Fluor Hanford, Inc.	●	●				
	7505055	Lockheed Martin Services, Inc.				●		
	7505214	Mission Support Alliance (MSA)	●	●	●	●	●	
	7505304	CH2M Hill Plateau Remediation Company	●	●	●	●	●	
	7506001	DOE-Richland Field Office	●	●	●	●	●	
	Idaho Site	3004001	Idaho Field Office	●				●
		3004402	BBWI - AMWTP	●	●			
3004404		BBWI Service Subs					●	
3005003		INL - BEA, LLC - Research		●	●	●	●	
3005004		INL - BEA, LLC - Services	●	●	●	●	●	
3005009		INL - BEA, LLC - Security		●	●	●	●	
3005012		INL - BEA, LLC - Production		●	●	●	●	
3005016		ICP - BBWI - Construction Subs	●					
3006002		INL - CWI - Projects	●	●	●	●	●	
3006004		ICP - CWI - Subcontractors	●	●	●	●	●	
3006005		ICP - CWI - Support	●	●	●	●		
3006016		ICP - CWI - Construction Subs	●	●	●	●		
Kansas City Plant		0531002	Honeywell FM & T/KC Production	●	●	●	●	●
Lawrence Berkeley National Lab. (LBNL)	8003003	Lawrence Berkeley National Laboratory	●	●	●	●	●	
Lawrence Livermore National Lab. (LLNL)	0580403	Lawrence Livermore National Laboratory	●	●	●	●	●	
	8004003	Lawrence Livermore National Laboratory	●	●				
	0580701	LLNL - DOE Site Office	●	●	●	●	●	
	0580503	LLNL - Nevada	●	●	●	●	●	
Los Alamos National Lab. (LANL)	0540001	NNSA Los Alamos Site Office	●	●	●	●	●	
	0544003	Los Alamos National Laboratory	●	●	●	●	●	
	0544809	Protection Technologies Los Alamos	●	●	●	●	●	
	0544904	Johnson Controls, Inc.	●	●	●	●	●	
National Renewable Energy Laboratory	2806003	National Renewable Energy Laboratory	●	●	●	●	●	
Nevada National Security Site	0501001	NNSA Service Center		●	●	●	●	
	0520001	NNSA Nevada Site Office		●	●	●	●	
	0521104	Bechtel Nevada - Amador Valley	●	●	●	●	●	
	0521204	Bechtel Nevada - Las Vegas	●	●	●	●	●	
	0521304	Bechtel Nevada - Los Alamos	●	●	●	●	●	
	0521405	Bechtel Nevada - NTS	●	●	●	●	●	

Site	Organization Code	Organization Name	Year Reported *				
			2010	2011	2012	2013	2014
	0521416	Bechtel Nevada - NTS - subcontractors	●	●	●	●	●
	0521503	Bechtel Nevada - Special Tech Lab.	●	●	●	●	●
	3500000	National Security Technologies, LLC (NSTec)	●	●			
	3501204	Bechtel Nevada - Las Vegas	●	●			
	3501405	NSTec - NTS	●	●			
	3501503	NSTec - Special Tech. Laboratory	●				
	3501604	NSTec - Washington Aerial Measurement	●				
	3507514	Nevada Miscellaneous Contractors - NSTec	●	●			
	3508004	Nye County Sheriff - NSTec	●	●	●	●	●
	3508703	SAIC - NV		●	●	●	
	3509009	Wackenhut Services, Inc. - NSTec	●	●			
	9700000	Yucca Mountain Project - NSTec	●	●			
New Brunswick Laboratory	1004031	New Brunswick Laboratory - Research	●	●	●	●	●
Oak Ridge Site	4004203	Oak Ridge Inst. For Science & Educ. (ORISE)	●	●	●	●	●
	4004501	Oak Ridge Office	●	●	●		
	4004525	SEC Oak Ridge	●	●		●	
	4004526	LATA Sharp	●	●		●	
	4003602	UT-Battelle: ORNL-Isotek	●	●	●	●	●
	4004602	UT-Battelle: Foster Wheeler	●	●	●		
	4004602	Wastren Advantage, Inc.				●	●
	4005104	USEC: Oak Ridge, K25	●	●	●	●	●
	4006002	Bechtel-Jacobs Co., LLC-ETTP	●				
	4006002	UCOR		●	●	●	●
	4006105	UT-Battelle - Materials & Energy Corp.	●				
	4006503	UT-Battelle - ORNL	●	●	●	●	●
	4006510	Bechtel Jacobs - ORNL	●	●	●		
	4006510	UCOR					●
	4007509	Wackenhut Services	●	●	●		
	4007509	UCOR		●	●	●	●
	4007509	National Strategic Protective Services				●	
	4008010	Bechtel-Jacobs, Y-12	●	●	●		
	4008010	UCOR		●	●	●	●
	4018102	BWXT LLC, Y-12	●	●	●		
4018102	CNS, LLC, Y-12					●	
Paducah Gaseous Diff. Plant (PGDP)	4007002	Swift & Staley, UDS - Paducah					
	4007002	Swift & Staley Team	●		●	●	●
	6203004	LATA Environmental Services				●	●
	6203004	Paducah Remediation Services	●	●	●		
	6203005	LATA Kentucky	●				
	6203106	Uranium Disposition Services - Paducah Sub	●	●	●	●	
	6203106	B&W Conversions Services, LLC				●	●
	6203204	Swift & Staley Mech Contr, Inc. - Paducah	●	●			
Pantex Plant (PP)	0510001	B & W Pantex - PXSO/NNSA and DOE Couriers	●	●	●	●	
	0510001	CNS Pantex					●
	0514004	Battelle - Pantex	●	●	●	●	
	0514004	CNS Pantex					●
	0515002	B & W Pantex	●	●	●	●	
	0515002	CNS Pantex					●
	0515006	B & W Pantex - Subcontractors	●	●	●	●	
	0515006	CNS Pantex					●
	0515009	B & W Pantex - Security Forces	●	●	●	●	
	0515009	CNS Pantex					●
Portsmouth Gaseous Diff. Plant (PORTS)	6202106	Uranium Disposition Services - Portsmouth Sub	●	●	●	●	●
	6202204	Theta Pro2Serve Management Co. - Portsmouth	●				
	6202204	Wastren - Portsmouth Services		●	●	●	●
	6202304	FLUOR B & W Portsmouth		●	●	●	●
	6202304	LATA/Parralax Portsmouth LLC	●				
Princeton Plasma Physics Laboratory	1005003	Princeton Plasma Physics Laboratory	●	●	●	●	●
Sandia National Laboratories (SNL)	0578003	Sandia National Laboratories	●	●	●	●	●
Savannah River Site (SRS)	8500505	Bechtel Construction - SR	●	●	●	●	●

Site	Organization Code	Organization Name	Year Reported *				
			2010	2011	2012	2013	2014
	8500516	Miscellaneous SRS Construction Subs	●	●	●	●	●
	8501002	Savannah River Nuclear Solutions, Inc.	●	●			
	8501014	Westinghouse S.R. Subcontractors	●				
	8501042	SRR Operations	●	●	●	●	●
	8501044	SRR Service Subs	●	●	●	●	●
	8505501	Savannah River Field Office	●	●	●	●	●
	8505504	Misc. DOE Contractors - SR	●	●	●	●	●
	8505525	Savannah River Nuclear Solutions, Inc.		●		●	
	8505526	SR Construction - Parsons Subcontractors	●	●	●	●	●
	8507004	Miscellaneous DOE Contractors - SR	●				
	8509003	Univ. of Georgia Ecology Laboratories	●	●		●	●
	8509509	Wackenhut Services, Inc. - SRNS	●	●	●	●	●
	8511002	Savannah River Nuclear Solutions, Inc.	●	●	●	●	●
	8511004	SRNS Service Subs	●	●	●	●	●
	8511005	SRNS Construction	●	●	●	●	●
	8511006	SRNS Construction Subs	●	●	●	●	●
Separations Process Research Unit	1522005	DeNuke Services: SPRU LA	●	●	●		
	1523016	NY SPRU	●	●	●	●	●
SLAC National Accelerator Facility	8008003	Stanford Linear Accelerator Center	●	●	●	●	
Thomas Jefferson National Accelerator Facility	1509521	Jefferson Laboratory - DOE Employees					●
	1509503	Thomas Jefferson National Accelerator Facility					●
	4004501	Jefferson Laboratory			●	●	
	4009503	Thomas Jefferson National Accelerator Facility	●	●	●	●	
Uranium Mill Tailings Remediation Action Project	3260645	Uranium Mill Tailings Remedial Action - Moab	●	●	●	●	
Waste Isolation Pilot Plant	0590001	Washington TRU Solutions LLC-WIPP	●				
	0701001	Carlsbad Field Office	●	●			
	0702003	LANL - WIPP		●			
	0703104	Washington TRU Solutions LLC-WIPP	●	●	●	●	●
	0703109	Santa Fe Protective Services - WIPP		●			
	0703114	WTS Subcontractors - WIPP	●	●			
	0703124	WTS - Small Subs		●			
	0704003	Sandia National Laboratories - WIPP		●			
West Valley Project	4539004	West Valley Nuclear Services, Inc. (WVNS)	●	●	●	●	●
Pittsburg Naval Reactor Office	6007504	PNR - BAPL & BPMI-P	●	●	●	●	●
	6008003	Pittsburg Naval Reactor	●				
	6008003	PNR - BAPL & BPMI-P		●	●	●	●
	6009003	PNR - Bechtel Bettis, Inc.	●				
	6009003	Naval Reactors - Idaho		●	●	●	●
Schenectady Naval Reactor Office	9004003	LM-KAPL - Kesselring	●				
	9004003	Knolls Atomic Power Laboratory		●	●	●	●
	9005003	LM-KAPL - Knolls	●				
	9005003	Knolls Atomic Power Laboratory		●	●	●	●
	9005004	LM-KAPL - Knolls Service Subs	●				
	9005004	Knolls Atomic Power Laboratory		●	●	●	●

DOE Occupational Radiation Exposure: 2014 Annual Report

Exhibit A-3. Facility Type Codes.

The following is a list of Facility Type Codes reported to REMS in accordance with the REMS Reporting Guide. A facility type code is reported with each individual's dose record and indicates the facility type where the majority of the individual's dose was accrued during the monitoring year.

Facility Type Code	Description
10	Accelerator
21	Fuel/Uranium Enrichment
22	Fuel Fabrication
23	Fuel Processing
40	Maintenance and Support (Site-Wide)
50	Reactor
61	Research, General
62	Research, Fusion
70	Waste Processing/Mgmt.
80	Weapons Fab. and Testing
99	Other

DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-1. Site Dose Data - 2012.

Site	Collective TED (person-rem)	Percent Change - Coll. TED	Number with Meas. Dose	Percent Change - # with Meas. Dose	Avg. Meas. TED (rem)	Percent Change - Avg. Meas. TED	Percentage of Coll. TED above 0.500 rem	Percent Change - Coll. TED above 0.500 rem
Ames Laboratory	0.820		25		0.033			
Argonne National Laboratory	21.212	-28% ▼	122	-31% ▼	0.174	4% ▲	52% ▲	7% ▲
Brookhaven National Laboratory	7.981	-38% ▼	171	-1% ▼	0.047	-37% ▼	7% ▲	-71% ▼
Energy Technology Engineering Center	0.227		55		0.004			
Fermi National Accelerator Laboratory	15.980	58% ▲	207	34% ▲	0.077	19% ▲	4% ▲	
Hanford - Hanford Site	58.349	-38% ▼	926	-37% ▼	0.063	-2% ▼	7% ▲	
Hanford - Office of River Protection	21.528	-15% ▼	413	-17% ▼	0.052	2% ▲		
Hanford - Pacific Northwest National Laboratory	17.779	-20% ▼	240	-7% ▼	0.074	-15% ▼	16% ▲	-28% ▼
Idaho Site	61.292	-52% ▼	1,257	-47% ▼	0.049	-8% ▼		
Kansas City Plant	0.021		6		0.004			
Lawrence Berkeley National Laboratory	0.497		10		0.050			
Lawrence Livermore National Laboratory	13.037	-23% ▼	131	13% ▲	0.100	-32% ▼	22% ▲	-58% ▼
Los Alamos National Laboratory	140.148	10% ▲	1,438	-2% ▼	0.097	12% ▲	34% ▲	57% ▲
National Renewable Energy Laboratory	0.020		4		0.005			
Nevada National Security Site	4.284	56% ▲	100	28% ▲	0.043	22% ▲		
New Brunswick Laboratory	0.039		2		0.020			
Oak Ridge - East Tennessee Technology Park	0.306		14		0.022			
Oak Ridge - Oak Ridge Institute for Science and Education	0.124		23		0.005			
Oak Ridge - Oak Ridge National Laboratory	78.790	18% ▲	763	5% ▲	0.103	13% ▲	15% ▲	114% ▲
Oak Ridge - Y-12 National Security Complex	58.643	-1% ▼	1,413	-8% ▼	0.042	8% ▲	1% ▲	-2% ▼
Paducah Gaseous Diffusion Plant	5.984	48% ▲	113	45% ▲	0.053	2% ▲		
Pantex Plant	33.118	14% ▲	339	9% ▲	0.098	5% ▲	9% ▲	32% ▲
Portsmouth Gaseous Diffusion Plant	7.092	211% ▲	135	187% ▲	0.053	8% ▲		
Princeton Plasma Physics Laboratory	0.334		43		0.008			
Sandia National Laboratory	4.315	-38% ▼	122	-3% ▼	0.035	-36% ▼		
Savannah River Site	145.443	-3% ▼	2,044	-19% ▼	0.071	19% ▲	5% ▲	-11% ▼
Separations Process Research Unit	0.584		23		0.025			
SLAC National Accelerator Laboratory	0.315		15		0.021			
Thomas Jefferson National Accelerator Facility	1.963	-69% ▼	85	49% ▲	0.023	-79% ▼		
Uranium Mill Tailings Remedial Action Project	7.673	-49% ▼	87	-54% ▼	0.088	12% ▲		
Waste Isolation Pilot Plant	0.298		18		0.017			
West Valley Demonstration Project	9.312	-82% ▼	86	-65% ▼	0.108	-48% ▼		
Site Office Personnel*	1.395	181% ▲	31	35% ▲	0.045	109% ▲		
Totals	718.903	-17% ▼	10,461	-19% ▼	0.069	3% ▲	13% ▲	3% ▲

* Includes personnel at NNSA Albuquerque complex and Oak Ridge, in addition to several smaller facilities not associated with a DOE site.
Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-2. Site Dose Data - 2013.

Site	Collective TED (person-rem)	Percent Change - Coll. TED	Number with Meas. Dose	Percent Change - # with Meas. Dose	Avg. Meas. TED (rem)	Percent Change - Avg. Meas. TED	Percentage of Coll. TED above 0.500 rem	Percent Change - Coll. TED above 0.500 rem
Ames Laboratory	0.730		24		0.030			
Argonne National Laboratory	13.091	-38% ▼	74	-39% ▼	0.177	2% ▲	61% ▲	18% ▲
Brookhaven National Laboratory	6.988	-12% ▼	194	13% ▲	0.036	-23% ▼		
Energy Technology Engineering Center	0.479		57		0.008			
Fermi National Accelerator Laboratory	19.750	24% ▲	175	-15% ▼	0.113	46% ▲	8% ▲	70% ▲
Hanford: Hanford Site	50.081	-14% ▼	715	-23% ▼	0.070	11% ▲	29% ▲	299% ▲
Hanford: Office of River Protection	18.228	-15% ▼	448	8% ▲	0.041	-22% ▼		
Hanford: Pacific Northwest National Laboratory	14.550	-18% ▼	403	68% ▲	0.036	-51% ▼		
Idaho National Laboratory	71.814	17% ▲	1,437	14% ▲	0.050	2% ▲		
Kansas City Plant	0.001		1		0.001			
Lawrence Berkeley National Laboratory	0.623		9		0.069			
Lawrence Livermore National Laboratory	8.475	-35% ▼	103	-21% ▼	0.082	-17% ▼	28% ▲	25% ▲
Los Alamos National Laboratory	138.734	-1% ▼	1,703	18% ▲	0.081	-16% ▼	15% ▲	-56% ▼
National Renewable Energy Laboratory	0.068		5		0.014			
Nevada National Security Site	3.218	-25% ▼	89	-11% ▼	0.036	-16% ▼		
New Brunswick Laboratory	0.012		1		0.012			
Oak Ridge: East Tennessee Technology Park	0.040		4		0.010			
Oak Ridge: Oak Ridge Institute for Science and Education	0.083		6		0.014			
Oak Ridge: Oak Ridge National Laboratory	74.531	-5% ▼	642	-16% ▼	0.116	12% ▲	15% ▲	-1% ▼
Oak Ridge: Y-12 National Security Complex	50.136	-15% ▼	1,337	-5% ▼	0.037	-10% ▼	1% ▲	33% ▲
Paducah Gaseous Diffusion Plant	6.450	8% ▲	92	-19% ▼	0.070	32% ▲		
Pantex Plant	21.829	-34% ▼	330	-3% ▼	0.066	-32% ▼		
Portsmouth Gaseous Diffusion Plant	8.634	22% ▲	102	-24% ▼	0.085	61% ▲		
Princeton Plasma Physics Laboratory	0.339		58		0.006			
Sandia National Laboratories	4.335	0%	123	1% ▲	0.035	0%		
Savannah River Site	88.536	-39% ▼	1,471	-28% ▼	0.060	-15% ▼	4% ▲	-28% ▼
Separations Process Research Unit	2.927	401% ▲	50	117% ▲	0.059	131% ▲		
SLAC National Accelerator Laboratory	0.281		10		0.028			
Thomas Jefferson National Accelerator Facility	1.503	-23% ▼	48	-44% ▼	0.031	36% ▲		
Uranium Mill Tailings Remedial Action Project	7.407	-3% ▼	55	-37% ▼	0.135	53% ▲		
Waste Isolation Pilot Plant	0.552		32		0.017			
West Valley Demonstration Project	12.901	39% ▲	101	17% ▲	0.128	18% ▲	4% ▲	
Service Center Personnel*	0.035		3		0.012			
Totals	627.361	-13% ▼	9,902	-5% ▼	0.063	-8% ▼	10% ▲	-22% ▼

* Includes personnel at NNSA Albuquerque complex and Oak Ridge, in addition to several smaller facilities not associated with a DOE site.
Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-3. Site Dose Data - 2014.

Site	Collective TED (person-rem)	Percent Change - Coll. TED	Number with Meas. Dose	Percent Change - # with Meas. Dose	Avg. Meas. TED (rem)	Percent Change - Avg. Meas. TED	Percentage of Coll. TED above 0.500 rem	Percent Change - Coll. TED above 0.500 rem
Ames Laboratory	0.873		33		0.026			
Argonne National Laboratory	16.492	26% ▲	84	14% ▲	0.196	11% ▲	67%	10% ▲
Brookhaven National Laboratory	7.282	4% ▲	129	-34% ▼	0.056	57% ▲		
Energy Technology Engineering Center	0.489		69		0.007			
Fermi National Accelerator Laboratory	11.070	-44% ▼	193	10% ▲	0.057	-49% ▼		
Hanford: Hanford Site	40.715	-19% ▼	659	-8% ▼	0.062	-12% ▼	19%	-36% ▼
Hanford: Office of River Protection	14.653	-20% ▼	412	-8% ▼	0.036	-13% ▼		
Hanford: Pacific Northwest National Laboratory	14.634	1% ▲	479	19% ▲	0.031	-15% ▼	5%	
Idaho National Laboratory	86.202	20% ▲	1,174	-18% ▼	0.073	47% ▲	11%	
Kansas City Plant	0.022		11		0.002			
Lawrence Berkeley National Laboratory	0.463		8		0.058			
Lawrence Livermore National Laboratory	8.353	-1% ▼	108	5% ▲	0.077	-6% ▼	7%	-74% ▼
Los Alamos National Laboratory	95.436	-31% ▼	1,401	-18% ▼	0.068	-16% ▼	13%	-14% ▼
National Renewable Energy Laboratory	0.107		7		0.015			
Nevada National Security Site	5.638	75% ▲	116	30% ▲	0.049	34% ▲		
New Brunswick Laboratory	0.023		2		0.012			
Oak Ridge: East Tennessee Technology Park	0.004		1		0.004			
Oak Ridge: Oak Ridge Institute for Science and Education	0.210		23		0.009			
Oak Ridge: Oak Ridge National Laboratory	71.304	-4% ▼	618	-4% ▼	0.115	-1% ▼	19%	30% ▲
Oak Ridge: Y-12 National Security Complex	59.296	18% ▲	1,326	-1% ▼	0.045	19% ▲	3%	125% ▲
Paducah Gaseous Diffusion Plant	10.306	60% ▲	139	51% ▲	0.074	6% ▲		
Pantex Plant	31.084	42% ▲	305	-8% ▼	0.102	54% ▲	10%	
Portsmouth Gaseous Diffusion Plant	10.302	19% ▲	95	-7% ▼	0.108	28% ▲	11%	
Princeton Plasma Physics Laboratory	0.693		123		0.006			
Sandia National Laboratories	6.072	40% ▲	93	-24% ▼	0.065	85% ▲		
Savannah River Site	92.820	5% ▲	1,584	8% ▲	0.059	-3% ▼		
Separations Process Research Unit	9.338	219% ▲	76	52% ▲	0.123	110% ▲		
SLAC National Accelerator Laboratory	0.246		9		0.027			
Thomas Jefferson National Accelerator Facility	4.452	196% ▲	42	-12% ▼	0.106	239% ▲	12%	
Uranium Mill Tailings Remedial Action Project	7.756	5% ▲	61	11% ▲	0.127	-6% ▼	14%	
Waste Isolation Pilot Plant	0.034		3		0.011			
West Valley Demonstration Project	13.424	4% ▲	112	11% ▲	0.120	-6% ▼		
Service Center Personnel*	0.103		6		0.017			
Totals	619.896	-1% ▼	9,501	-4% ▼	0.065	3% ▲	10%	2% ▲

* Includes personnel at NNSA Albuquerque complex and Oak Ridge, in addition to several smaller facilities not associated with a DOE site.

Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-4. Internal Dose by Site, 2012-2014.

Site	No. of Individuals with Measurable CED*			Collective CED Dose (person-rem)			Average Measurable CED		
	2012	2013	2014	2012	2013	2014	2012	2013	2014
Argonne National Laboratory	9	8	9	0.231	0.242	0.179	0.026	0.030	0.020
Hanford: Hanford Site	8	5		0.040	0.012		0.005	0.002	
Hanford: Pacific Northwest National Laboratory	2	2	4	0.002	0.008	0.113	0.001	0.004	0.028
Idaho National Laboratory	9	10	9	0.147	0.275	0.266	0.016	0.028	0.030
Lawrence Livermore National Laboratory	3	2	5	0.035	0.024	0.208	0.012	0.012	0.042
Los Alamos National Laboratory	12	10	17	0.259	1.804	0.143	0.022	0.180 ◀	0.008
Oak Ridge: East Tennessee Technology Park	11	1		0.265	0.012		0.024	0.012	
Oak Ridge: Oak Ridge National Laboratory	1	1	9	0.017	0.012	0.764	0.017	0.012	0.085 ◀
Oak Ridge: Y-12 National Security Complex	1,223 ◀	1,115 ◀	1,078 ◀	47.127 ◀	39.221 ◀	49.000 ◀	0.039 ◀	0.035	0.045
Paducah Gaseous Diffusion Plant	3		2	0.071		0.039	0.024		0.020
Pantex Plant	7	10	8	0.037	0.014	0.014	0.005	0.001	0.002
Savannah River Site	22	12	8	0.095	0.051	0.164	0.004	0.004	0.020
Uranium Mill Tailings Remedial Action Project	50	45	48	1.916	2.925	2.974	0.038	0.065	0.062
Waste Isolation Pilot Plant			1			0.011			0.011
Service Center Personnel*	1			0.011			0.011		
Totals	1,361	1,221	1,198	50.253	44.600	53.875	0.037	0.037	0.045

*The number of internal depositions represents the number of internal dose records with positive results reported for each individual.
 Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-5. Neutron Dose Distribution by Site, 2014.

Site	No. Meas. Dose	Meas < 0.1	0.1 - 0.25	0.25 - 0.5	0.5 - 0.75	0.75 - 1.0	1-2	>2	Total Monitored *	No. of Individuals with Meas. Dose	% of Individuals with Meas. Dose	Collective Neutron Dose (person-rem)	Avg. Meas. Neutron Dose (rem)
Ames Laboratory	162								162				
Argonne National Laboratory	1,893	5							1,898	5	0%	0.130	0.026
Brookhaven National Laboratory	2,625	5							2,630	5	0%	0.048	0.010
Energy Technology Engineering Center	129								129				
Fermi National Accelerator Laboratory	1,272								1,272				
Hanford: Hanford Site	3,867	453	11	2					4,333	466	11% ◀	9.626	0.021
Hanford: Office of River Protection	2,041	12							2,053	12	1%	0.349	0.029
Hanford: Pacific Northwest National Laboratory	2,438								2,438				
Idaho National Laboratory	6,195	77	3	1					6,276	81	1%	2.734	0.034
Kansas City Plant	72								72				
Lawrence Berkeley National Laboratory	699								699				
Lawrence Livermore National Laboratory	9,908	38	9	1					9,956 ◀	48	0%	2.619	0.055
Los Alamos National Laboratory	8,348	544	89	45	4				9,030	682 ◀	8%	45.752 ◀	0.067
National Renewable Energy Laboratory	16								16				
Nevada National Security Site	2,537	5	1						2,543	6	0%	0.331	0.055
New Brunswick Laboratory	34								34				
Oak Ridge: East Tennessee Technology Park	605								605				
Oak Ridge: Oak Ridge Institute for Science and Education	132								132				
Oak Ridge: Oak Ridge National Laboratory	3,564	269	30	2	2				3,867	303	8%	16.246	0.054
Oak Ridge: Y-12 National Security Complex	5,796	3							5,799	3	0%	0.044	0.015
Paducah Gaseous Diffusion Plant	1,481	26	10						1,517	36	2%	2.221	0.062
Pantex Plant	3,255	44	3						3,302	47	1%	2.469	0.053
Portsmouth Gaseous Diffusion Plant	2,437	8	5						2,450	13	1%	1.234	0.095
Princeton Plasma Physics Laboratory	361								361				
Sandia National Laboratories	2,297	7							2,304	7	0%	0.304	0.043
Savannah River Site	5,956	81	32	20					6,089	133	2%	15.215	0.114 ◀
Separations Process Research Unit	187								187				
SLAC National Accelerator Laboratory	2,147								2,147				
Thomas Jefferson National Accelerator Facility	1,348								1,348				
Uranium Mill Tailings Remedial Action Project	128								128				
Waste Isolation Pilot Plant	786								786				
West Valley Demonstration Project	336								336				
Service Center Personnel*	549								549				
Totals	73,601	1,577	193	71	6				75,448	1,847	2%	99.322	0.054

Note: Boxed values (gray background) indicate the greatest value in each column.

*Represents the total number of monitoring records. The number of individuals specifically monitored for neutron radiation cannot be determined.

**Includes personnel at NNSA Albuquerque complex and Oak Ridge, in addition to several smaller facilities not associated with a DOE site.

DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-6a. Distribution of TED by Facility Type - 2012.

Total Effective Dose (TED)

Number of Individuals Receiving Radiation Doses in Each Dose Range (rem)

Facility Type	Less than Meas	Meas 0 - 0.10	0.10 - 0.25	0.25 - 0.50	0.50 - 0.75	0.75 - 1.00	1 - 2	2 - 3	3 - 4	4 - 5	>5	Total Monitored	Percent of Monitored with Meas. TED	No. with Meas. TED	Collective TED (Person-rem)	Avg. Meas. TED (rem)
Accelerator	6,549	338	60	12	2							6,961	6%	412	23.083	0.056
Fuel/Uranium Enrichment	1,681	40										1,721	2%	40	0.661	0.017
Fuel Processing	567	182	23	7								779	27%	212	10.648	0.050
Maintenance and Support	11,597	1,790	276	136	51	15	7					13,872	16%	2,275	195.820 ◀	0.086 ◀
Reactor	101	25	6	1								133	24%	32	2.124	0.066
Research, General	27,544	1,949	329	135	18	10	8					29,993 ◀	8%	2,449 ◀	183.711	0.075
Research, Fusion	335	44										379	12%	44	0.344	0.008
Waste Processing/Management	5,506	1,687	353	157	10	2						7,715	29% ◀	2,209	167.445	0.076
Weapons Fabrication and Testing	9,033	1,525	215	58	6							10,837	17%	1,804	92.544	0.051
Other	9,669	863	98	23								10,653	9%	984	42.523	0.043
Totals	72,582	8,443	1,360	529	87	27	15					83,043	13%	10,461	718.903	0.069

Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-6b. Distribution of TED by Facility Type - 2013.

Total Effective Dose (TED)

Number of Individuals Receiving Radiation Doses in Each Dose Range (rem)

Facility Type	Less than Meas	Meas 0 - 0.10	0.10 - 0.25	0.25 - 0.50	0.50 - 0.75	0.75 - 1.00	1 - 2	2 - 3	3 - 4	4 - 5	>5	Total Monitored	Percent of Monitored with Meas. TED	No. with Meas. TED	Collective TED (Person-rem)	Avg. Meas. TED (rem)
Accelerator	6,423	271	48	28	1	1						6,772	5%	349	26.426	0.076
Fuel/Uranium Enrichment	880	21										901	2%	21	0.329	0.016
Fuel Processing	585	120	16	9	2							732	20%	147	11.100	0.076
Maintenance and Support	11,126	1,987	341	127	25	15	7					13,628	18%	2,502	193.249	0.077
Reactor	81	13	4	1								99	18%	18	1.296	0.072
Research, General	24,546	2,533	383	159	14	12	2					27,649	11%	3,103	204.329	0.066
Research, Fusion	337	59										396	15%	59	0.349	0.006
Waste Processing/Management	4,048	1,215	242	72	5							5,582	27%	1,534	103.804	0.068
Weapons Fabrication and Testing	7,679	1,496	188	23	1							9,387	18%	1,708	72.688	0.042
Other	6,055	435	24	2								6,516	7%	461	13.791	0.030
Totals	61,760	8,150	1,246	421	48	28	9					71,662	14%	9,902	627.361	0.063

Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-6c. Distribution of TED by Facility Type - 2014.

Total Effective Dose (TED)

Number of Individuals Receiving Radiation Doses in Each Dose Range (rem)

Facility Type	Less than Meas	Meas 0 - 0.10	0.10 - 0.25	0.25 - 0.50	0.50 - 0.75	0.75 - 1.00	1 - 2	2 - 3	3 - 4	4 - 5	>5	Total Monitored	Percent of Monitored with Meas. TED	No. with Meas. TED	Collective TED (Person-rem)	Avg. Meas. TED (rem)
Accelerator	6,500	277	63	14	1							6,855	5%	355	22.339	0.063
Fuel/Uranium Enrichment	1,030	40										1,070	4%	40	0.156	0.004
Fuel Processing	664	181	12	1								858	23%	194	7.127	0.037
Maintenance and Support	11,511	1,938	256	94	23	7						13,829	17%	2,318	149.037	0.064
Reactor	61	15	6	4								86	29%	25	2.703	0.108 ◀
Research, General	27,597	2,283	426	169	38	8	6					30,527 ◀	10%	2,930 ◀	225.209 ◀	0.077
Research, Fusion	285	125										410	30% ◀	125	0.743	0.006
Waste Processing/Management	3,891	1,145	262	104	2							5,404	28%	1,513	113.069	0.075
Weapons Fabrication and Testing	8,289	1,391	211	58	8							9,957	17%	1,668	90.897	0.054
Other	6,119	313	20									6,452	5%	333	8.616	0.026
Totals	65,947	7,708	1,256	444	72	15	6					75,448	13%	9,501	619.896	0.065

Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-7a. Collective TED by Site and Facility Type - 2012.

Site	Accelerator	Fuel/Uranium Enrichment	Fuel Fabrication	Fuel Processing	Maintenance and Support	Reactor	Research, General	Research, Fusion	Waste Processing/Management	Weapons Fabrication and Testing	Other	Totals
Ames Laboratory							0.820					0.820
Argonne National Laboratory							21.212					21.212
Brookhaven National Laboratory	4.335				2.244	0.615	0.173		0.614			7.981
Energy Technology Engineering Center											0.227	0.227
Fermi National Accelerator Laboratory	15.980											15.980
Hanford: Hanford Site					46.314						12.035	58.349
Hanford: Office of River Protection					0.401				14.186		6.941	21.528
Hanford: Pacific Northwest National Laboratory					0.315		13.391				4.073	17.779
Idaho National Laboratory							33.335		13.917		14.040	61.292
Kansas City Plant										0.021		0.021
Lawrence Berkeley National Laboratory							0.497					0.497
Lawrence Livermore National Laboratory							13.037					13.037
Los Alamos National Laboratory	0.048				138.417		0.306				1.377	140.148
National Renewable Energy Laboratory							0.020					0.020
Nevada National Security Site					4.284							4.284
New Brunswick Laboratory											0.039	0.039
Oak Ridge: East Tennessee Technology Park		0.306										0.306
Oak Ridge: Oak Ridge Institute for Science and Education							0.124					0.124
Oak Ridge: Oak Ridge National Laboratory							78.790					78.790
Oak Ridge: Y-12 National Security Complex										58.643		58.643
Paducah Gaseous Diffusion Plant		0.344					5.640					5.984
Pantex Plant										33.118		33.118
Portsmouth Gaseous Diffusion Plant							7.092					7.092
Princeton Plasma Physics Laboratory								0.334				0.334
Sandia National Laboratories	0.442				0.373	1.509	0.608	0.010	0.505	0.426	0.442	4.315
Savannah River Site				10.648	3.472		7.282		120.356	0.336	3.349	145.443
Separations Process Research Unit									0.584			0.584
SLAC National Accelerator Laboratory	0.315											0.315
Thomas Jefferson National Accelerator Facility	1.963											1.963
Uranium Mill Tailings Remedial Action Project									7.673			7.673
Waste Isolation Pilot Plant									0.298			0.298
West Valley Demonstration Project									9.312			9.312
Service Center Personnel*		0.011					1.384					1.395
Totals	23.083	0.661		10.648	195.820	2.124	183.711	0.344	167.445	92.544	42.523	718.903

* Includes personnel at NNSA Albuquerque complex and Oak Ridge.

Note: Boxed values (gray background) indicate the greatest value in each column.

**DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-7b. Collective TED by Site and Facility Type - 2013.**

Site	Accelerator	Fuel/Uranium Enrichment	Fuel Fabrication	Fuel Processing	Maintenance and Support	Reactor	Research, General	Research, Fusion	Waste Processing/Management	Weapons Fabrication and Testing	Other	Totals
Ames Laboratory							0.730					0.730
Argonne National Laboratory							13.091					13.091
Brookhaven National Laboratory	4.530				1.850	0.035	0.121		0.452			6.988
Energy Technology Engineering Center											0.479	0.479
Fermi National Accelerator Laboratory	19.750 ◀											19.750
Hanford: Hanford Site					42.908						7.173 ◀	50.081
Hanford: Office of River Protection					3.872				11.903		2.453	18.228
Hanford: Pacific Northwest National Laboratory							14.550					14.550
Idaho National Laboratory							71.814					71.814
Kansas City Plant										0.001		0.001
Lawrence Berkeley National Laboratory							0.623					0.623
Lawrence Livermore National Laboratory							8.475					8.475
Los Alamos National Laboratory	0.122				136.881 ◀		0.209				1.522	138.734 ◀
National Renewable Energy Laboratory							0.068					0.068
Nevada National Security Site					3.218							3.218
New Brunswick Laboratory							0.012					0.012
Oak Ridge: East Tennessee Technology Park		0.040										0.040
Oak Ridge: Oak Ridge Institute for Science and Education							0.083					0.083
Oak Ridge: Oak Ridge National Laboratory							74.531 ◀					74.531
Oak Ridge: Y-12 National Security Complex										50.136 ◀		50.136
Paducah Gaseous Diffusion Plant		0.289 ◀					6.161					6.450
Pantex Plant										21.829		21.829
Portsmouth Gaseous Diffusion Plant							8.634					8.634
Princeton Plasma Physics Laboratory								0.339 ◀				0.339
Sandia National Laboratories	0.240				0.147	1.261 ◀	0.654	0.010	0.305	0.573	1.145	4.335
Savannah River Site				11.100 ◀	4.373		4.550		67.345 ◀	0.149	1.019	88.536
Separations Process Research Unit									2.927			2.927
SLAC National Accelerator Laboratory	0.281											0.281
Thomas Jefferson National Accelerator Facility	1.503											1.503
Uranium Mill Tailings Remedial Action Project									7.407			7.407
Waste Isolation Pilot Plant									0.552			0.552
West Valley Demonstration Project									12.901			12.901
Service Center Personnel*							0.023		0.012			0.035
Totals	26.426	0.329		11.100	193.249	1.296	204.329	0.349	103.804	72.688	13.791	627.361

* Includes personnel at NNSA Albuquerque complex and Oak Ridge.

Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-7c. Collective TED by Site and Facility Type - 2014.

Site	Accelerator	Fuel/Uranium Enrichment	Fuel Fabrication	Fuel Processing	Maintenance and Support	Reactor	Research, General	Research, Fusion	Waste Processing/Management	Weapons Fabrication and Testing	Other	Totals
Ames Laboratory							0.873					0.873
Argonne National Laboratory							16.492					16.492
Brookhaven National Laboratory	6.146				0.714	0.032	0.051		0.339			7.282
Energy Technology Engineering Center											0.489	0.489
Fermi National Accelerator Laboratory	11.070											11.070
Hanford: Hanford Site					38.977						1.738	40.715
Hanford: Office of River Protection	0.010				3.835				7.914		2.894	14.653
Hanford: Pacific Northwest National Laboratory							14.634					14.634
Idaho National Laboratory							86.202					86.202
Kansas City Plant										0.022		0.022
Lawrence Berkeley National Laboratory							0.463					0.463
Lawrence Livermore National Laboratory							8.353					8.353
Los Alamos National Laboratory	0.010				94.007		0.063				1.356	95.436
National Renewable Energy Laboratory							0.107					0.107
Nevada National Security Site					5.638							5.638
New Brunswick Laboratory							0.023					0.023
Oak Ridge: East Tennessee Technology Park		0.004										0.004
Oak Ridge: Oak Ridge Institute for Science and Education							0.210					0.210
Oak Ridge: Oak Ridge National Laboratory							71.304					71.304
Oak Ridge: Y-12 National Security Complex										59.296		59.296
Paducah Gaseous Diffusion Plant		0.152					10.154					10.306
Pantex Plant										31.084		31.084
Portsmouth Gaseous Diffusion Plant							10.302					10.302
Princeton Plasma Physics Laboratory								0.693				0.693
Sandia National Laboratories	0.405				0.576	2.671	0.721	0.050	0.934	0.240	0.475	6.072
Savannah River Site				7.127	5.290		5.154		73.330	0.255	1.664	92.820
Separations Process Research Unit									9.338			9.338
SLAC National Accelerator Laboratory	0.246											0.246
Thomas Jefferson National Accelerator Facility	4.452											4.452
Uranium Mill Tailings Remedial Action Project									7.756			7.756
Waste Isolation Pilot Plant									0.034			0.034
West Valley Demonstration Project									13.424			13.424
Service Center Personnel*							0.103					0.103
Totals	22.339	0.156		7.127	149.037	2.703	225.209	0.743	113.069	90.897	8.616	619.896

* Includes personnel at NNSA Albuquerque complex and Oak Ridge.

Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-8. Distribution of TED by Facility Type Listed in Descending Order of Average Measurable TED for Accelerator Facilities, 2014.

ACCELERATORS

Number of Individuals Receiving Radiation Doses in Each Dose Range (rem)

Site/Contractor	Less than Meas	Meas 0 - 0.10	0.10 - 0.25	0.25 - 0.50	0.50 - 0.75	0.75 - 1.00	1 - 2	2 - 3	3 - 4	4 - 5	>5	Total Monitored	Percent of Monitored with Meas. TED	No. with Meas. TED	Collective TED (Person-rem)	Avg. Meas. TED (rem)
Thomas Jefferson Natl. Accel. Facil.	1,300	28	8	5	1							1,342	3%	42	4.452	0.106 ◀
Brookhaven National Laboratory	1,588	70	17	5								1,680	5%	92	6.146	0.067
Fermi National Accelerator Lab	1,079	151	38	4								1,272	15%	193 ◀	11.070 ◀	0.057
SLAC National Accelerator Laboratory	2,138	9										2,147 ◀	0%	9	0.246	0.027
Sandia National Laboratories	354	16										370	4%	16	0.405	0.025
Washington River Protection Solutions LLC		1										1	100% ◀	1	0.010	0.010
Los Alamos National Laboratory	35	2										37	5%	2	0.010	0.005
Thomas Jefferson Site Office-DOE Employees	6											6	0%	0	0.000	0.000
Totals	6,500	277	63	14	1							6,855	5%	355	22.339	0.063

Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report

Exhibit B-9. Distribution of TED by Facility Type Listed in Descending Order of Average Measurable TED for Fuel Facilities, 2014.

FUEL FACILITIES

Number of Individuals Receiving Radiation Doses in Each Dose Range (rem)

Site/Contractor	Less than Meas.	Meas. 0 - 0.10	0.10 - 0.25	0.25 - 0.50	0.50 - 0.75	0.75 - 1.00	1 - 2	2 - 3	3 - 4	4 - 5	>5	Total Monitored	Percent of Monitored with Meas. TED	No. with Meas. TED	Collective TED (Person-rem)	Avg. Meas. TED (rem)
ENRICHMENT																
Swift and Staley Team	349	39										388	10% ◀	39 ◀	0.152 ◀	0.004 ◀
URS/CH2MHill - Oak Ridge (UCOR): ETPP	604	1										605 ◀	0%	1	0.004	0.004 ◀
URS/CH2MHill - Oak Ridge (UCOR): NSPS	77											77	0%	0	0.000	0.000
Totals	1,030	40										1,070	4%	40	0.156	0.004
FABRICATION																
PROCESSING																
Savannah River Field Office	18	3										21	14%	3	0.017	0.006
Savannah River Nuclear Solutions	499	168	12	1								680 ◀	27% ◀	181 ◀	7.009 ◀	0.039 ◀
SRNS Construction Subs	2											2	0%	0	0.000	0.000
SRNS Service Subs	26	3										29	10%	3	0.027	0.009
Wackenhut Services Inc. - SR	119	7										126	6%	7	0.074	0.011
Totals	664	181	12	1								858	23%	194	7.127	0.037

Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report

Exhibit B-10. Distribution of TED by Facility Type Listed in Descending Order of Average Measurable TED for Maintenance and Support, 2014.

MAINTENANCE AND SUPPORT																
Number of Individuals Receiving Radiation Doses in Each Dose Range (rem)																
Site/Contractor	Less than Meas	Meas 0 - 0.10	0.10 - 0.25	0.25 - 0.50	0.50 - 0.75	0.75 - 1.00	1 - 2	2 - 3	3 - 4	4 - 5	>5	Total Monitored	Percent of Monitored with Meas. TED	No. with Meas. TED	Collective TED (Person-rem)	Avg. Meas. TED (rem)
SRR Operations	5	5	7	1								18	72% ◀	13	1.642	0.126 ◀
Sandia National Laboratories	374	6		1								381	2%	7	0.576	0.082
CH2M Hill Plateau Remediation Company (CHPRC)	811	346	60	27	7	4						1,255	35%	444	35.394	0.080
Los Alamos National Laboratory	4,729	1,086	164	62	16	3						6,060 ◀	22%	1,331 ◀	93.790 ◀	0.070
Protection Technologies Los Alamos	59	2										61	3%	2	0.140	0.070
NSTec - NTS	1,017	34	2	3								1,056	4%	39	2.698	0.069
NSTec - Las Vegas	777	54	3									834	7%	57	2.298	0.040
NNSA Nevada Site Office	186	14										200	7%	14	0.504	0.036
Savannah River Nuclear Solutions	261	93	7									361	28%	100	3.496	0.035
Mission Support Alliance	932	105	8									1,045	11%	113	3.583	0.032
Navarro-Intera LLC	45	2										47	4%	2	0.060	0.030
NSTec - Special Tech. Lab	21	1										22	5%	1	0.027	0.027
Brookhaven National Laboratory	864	26	2									892	3%	28	0.714	0.026
Washington River Protection Solutions LLC	439	130	2									571	23%	132	3.391	0.026
Advanced Technologies and Laboratories Intl	16	17	1									34	53%	18	0.444	0.025
Savannah River Field Office	36	4										40	10%	4	0.091	0.023
NSTec - NTS subcontractors	67	3										70	4%	3	0.051	0.017
Johnson Controls Inc.	18	1										19	5%	1	0.016	0.016
NNSA Los Alamos Site Office	104	4										108	4%	4	0.061	0.015
SRNS Service Subs	91	3										94	3%	3	0.042	0.014
Wackenhut Services Inc. - SR	20	1										21	5%	1	0.011	0.011
SRNS Construction Subs	9	1										10	10%	1	0.008	0.008
Argonne National Laboratory	4											4	0%	0	0.000	0.000
Battelle - Pantex	24											24	0%	0	0.000	0.000
BATTELLE - PNNL	25											25	0%	0	0.000	0.000
Centerra-Nevada	251											251	0%	0	0.000	0.000
Centerra-Nevada Subcontractors	2											2	0%	0	0.000	0.000
Centerra-Nevada Subcontractors Lockheed	27											27	0%	0	0.000	0.000
DOE Headquarters	159											159	0%	0	0.000	0.000
DOE-Richland Field Office	5											5	0%	0	0.000	0.000
Misc. DOE Contractors - SR	52											52	0%	0	0.000	0.000
Misc. S.R.S. Const. Subcontractors	2											2	0%	0	0.000	0.000
NNSA Albuquerque Complex	24											24	0%	0	0.000	0.000
NSTec - Livermore Operations	9											9	0%	0	0.000	0.000
NSTec - Los Alamos	19											19	0%	0	0.000	0.000
Nye County Sheriff	6											6	0%	0	0.000	0.000
Office of River Protection	1											1	0%	0	0.000	0.000
SRR Service Subs	7											7	0%	0	0.000	0.000
UT-Batelle ORNL	9											9	0%	0	0.000	0.000
Washington Closure Hanford LLC (WCH)	4											4	0%	0	0.000	0.000
Totals	11,511	1,938	256	94	23	7						13,829	17%	2,318	149.037	0.064

Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report

Exhibit B-11. Distribution of TED by Facility Type Listed in Descending Order of Average Measurable TED for Reactor Facilities, 2014.

REACTOR FACILITIES

Number of Individuals Receiving Radiation Doses in Each Dose Range (rem)

Site/Contractor	Less than Meas	Meas 0 - 0.10	0.10 - 0.25	0.25 - 0.50	0.50 - 0.75	0.75 - 1.00	1 - 2	2 - 3	3 - 4	4 - 5	>5	Total Monitored	Percent of Monitored with Meas. TED	No. with Meas. TED	Collective TED (Person-rem)	Avg. Meas. TED (rem)
Sandia National Laboratories	46	13	6	4								69	33%	23	2.671	0.116
Brookhaven National Laboratory	15	2										17	12%	2	0.032	0.016
Totals	61	15	6	4								86	29%	25	2.703	0.108

Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report

Exhibit B-12. Distribution of TED by Facility Type Listed in Descending Order of Average Measurable TED for Research, General, 2014.

RESEARCH, GENERAL																
Number of Individuals Receiving Radiation Doses in Each Dose Range (rem)																
Site/Contractor	Less than Meas	Meas 0 - 0.10	0.10 - 0.25	0.25 - 0.50	0.50 - 0.75	0.75 - 1.00	1 - 2	2 - 3	3 - 4	4 - 5	>5	Total Monitored	Percent of Monitored with Meas. TED	No. with Meas. TED	Collective TED (Person-rem)	Avg. Meas. TED (rem)
Argonne National Laboratory	1,810	58	9	6	3	2	6					1,894	4%	84	16.492	0.196
Wastren Advantage Inc. - TWPC	66	105	59	49	10							289	77%	223	37.300	0.167
INL - BEA LLC - Security	46	3	5	1								55	16%	9	1.226	0.136
B & W Conversion Services LLC - Paducah	200	40	29	13								282	29%	82	10.020	0.122
BWCS-Portsmouth	158	34	15	5	2							214	26%	56	6.747	0.120
ICP - CWI - Subcontractors	244	38	5	7	2							296	18%	52	5.766	0.111
ICP - CWI - Projects	574	203	34	25	11	2						849	32%	275	27.905	0.101
Lawrence Livermore National Laboratory Nevada	180	4	4									188	4%	8	0.791	0.099
UT-Battelle ORNL	2,991	261	37	26	8	4						3,327	10%	336	31.105	0.093
Fluor/B&W - Portsmouth	2,033	24	15									2,072	2%	39	3.555	0.091
ICP - CWI - Construction Subs	26	3	3									32	19%	6	0.467	0.078
INL - BEA LLC - Research	224	19	11	1								255	12%	31	2.431	0.078
Lawrence Livermore National Laboratory	9,396	73	23	3	1							9,496	1%	100	7.562	0.076
BBWI Service Subs	667	166	50	2								885	25%	218	14.860	0.068
INL - BEA LLC - Services	2,673	387	75	16								3,151	15%	478	29.073	0.061
Lawrence Berkeley Laboratory	691	7	1									699	1%	8	0.463	0.058
Sandia National Laboratories	356	10	3									369	4%	13	0.721	0.055
Battelle -PNNL- Subs	325	30	1	1	1							358	9%	33	1.756	0.053
SRNS Service Subs	51	10	1	1								63	19%	12	0.611	0.051
URS/CH2MHill - Oak Ridge (UCOR): ORNL	183	50	8	1								242	24%	59	2.899	0.049
INL - BEA LLC - Production	329	62	8	1								400	18%	71	3.432	0.048
ICP - CWI - Support	123	20		1								144	15%	21	0.834	0.040
Savannah River Field Office	7	2										9	22%	2	0.069	0.035
URS/CH2MHill - Oak Ridge (UCOR): NSPS	99	1										100	1%	1	0.033	0.033
BATTELLE - PNNL	1,589	402	21	10								2,022	21%	433	12.762	0.029
Savannah River Nuclear Solutions	504	143	9									656	23%	152	4.355	0.029
Ames Laboratory (Iowa State)	129	33										162	20%	33	0.873	0.026
Brookhaven National Laboratory	6	2										8	25%	2	0.051	0.026
Los Alamos National Laboratory	53	3										56	5%	3	0.063	0.021
Wackenhut Services Inc. - SR	58	5										63	8%	5	0.083	0.017
Idaho Field Office	196	13										209	6%	13	0.208	0.016
National Renewable Energy Laboratory	9	7										16	44%	7	0.107	0.015
SRNS Construction Subs	1	1										2	50%	1	0.015	0.015
Isotek (Bldg 3019)	58	5										63	8%	5	0.070	0.014
New Brunswick Laboratory - Research	32	2										34	6%	2	0.023	0.012
Oak Ridge Institute for Science & Education	109	23										132	17%	23	0.210	0.009
Pacific Northwest Site Office	16	13										29	45%	13	0.116	0.009
FLUOR PADUCAH DEACTIVATION PROJECT	482	10										492	2%	10	0.082	0.008
Univ. of Georgia Ecology Laboratory	347	8										355	2%	8	0.052	0.007
LATA Environmental Services of Kentucky	9	3										12	25%	3	0.021	0.007
Bechtel Construction - SR	1											1	0%	0	0.000	0.000
Lawrence Livermore National Laboratories	272											272	0%	0	0.000	0.000
Misc. DOE Contractors - SR	3											3	0%	0	0.000	0.000
SRR Operations	3											3	0%	0	0.000	0.000
SRR Service Subs	2											2	0%	0	0.000	0.000
USEC - Oak Ridge	102											102	0%	0	0.000	0.000
Wastren - Portsmouth Services	164											164	0%	0	0.000	0.000
Totals	27,597	2,283	426	169	38	8	6					30,527	10%	2,930	225.209	0.077

Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report

Exhibit B-13. Distribution of TED by Facility Type Listed in Descending Order of Average Measurable TED for Research, Fusion, 2014.

RESEARCH, FUSION

Number of Individuals Receiving Radiation Doses in Each Dose Range (rem)

Site/Contractor	Less than Meas	Meas 0 - 0.10	0.10 - 0.25	0.25 - 0.50	0.50 - 0.75	0.75 - 1.00	1 - 2	2 - 3	3 - 4	4 - 5	>5	Total Monitored	Percent of Monitored with Meas. TED	No. with Meas. TED	Collective TED (Person-rem)	Avg. Meas. TED (rem)
Sandia National Laboratories	42	2										44	5%	2	0.050	0.025
Princeton Plasma Physics Laboratory	238	123										361	34%	123	0.693	0.006
Los Alamos National Laboratory	5											5	0%	0	0.000	0.000
Totals	285	125										410	30%	125	0.743	0.006

Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-14. Distribution of TED by Facility Type Listed in Descending Order of Average Measurable TED for
Waste Processing, 2014.

WASTE PROCESSING

Number of Individuals Receiving Radiation Doses in Each Dose Range (rem)

Site/Contractor	Less than Meas	Meas 0 - 0.10	0.10 - 0.25	0.25 - 0.50	0.50 - 0.75	0.75 - 1.00	1 - 2	2 - 3	3 - 4	4 - 5	>5	Total Monitored	Percent of Monitored with Meas. TED	No. with Meas. TED	Collective TED (Person-rem)	Avg. Meas. TED (rem)
Sandia National Laboratories	55	5		2								62	11%	7	0.934	0.133 ◀
Energy Solutions - UMTRA Project - Moab	67	33	17	9	2							128	48%	61	7.756	0.127
SPRU-NY (Building remediation)	111	39	26	11								187	41%	76	9.338	0.123
West Valley Nuclear Services Inc.	224	58	44	10								336	33%	112	13.424	0.120
Savannah River Nuclear Solutions	441	156	29	23								649	32%	208	15.995	0.077
SRR Operations	858	350	85	30								1,323 ◀	35%	465 ◀	34.475 ◀	0.074
Bechtel Construction - SR	170	214	36	19								439	61% ◀	269	18.691	0.069
Brookhaven National Laboratory	28	4	1									33	15%	5	0.339	0.068
Wackenhut Services Inc. - SR	184	40	4									228	19%	44	2.470	0.056
Savannah River Field Office	39	2										41	5%	2	0.088	0.044
SRR Service Subs	64	12	2									78	18%	14	0.622	0.044
Washington River Protection Solutions LLC (W	650	194	15									859	24%	209	7.723	0.037
Advanced Technologies and Laboratories Int'l	27	6										33	18%	6	0.191	0.032
SRNS Service Subs	100	28	3									131	24%	31	0.983	0.032
Washington TRU Solutions LLC-WIPP	758	3										761	0%	3	0.034	0.011
Misc. DOE Contractors - SR	14	1										15	7%	1	0.006	0.006
BECHTEL NATIONAL CORPORATION	2											2	0%	0	0.000	0.000
Carlsbad Field Office	24											24	0%	0	0.000	0.000
CH2M Hill Plateau Remediation Company (CHPRC)	1											1	0%	0	0.000	0.000
Los Alamos National Laboratory	5											5	0%	0	0.000	0.000
Misc. S.R.S. Const. Subcontractors	34											34	0%	0	0.000	0.000
Mission Support Alliance	1											1	0%	0	0.000	0.000
NNSA Los Alamos Site Office	1											1	0%	0	0.000	0.000
Santa Fe Protective Services (WIPP)	25											25	0%	0	0.000	0.000
SR construction - Parsons Subcontractors	2											2	0%	0	0.000	0.000
SRNS Construction	2											2	0%	0	0.000	0.000
SRNS Construction Subs	4											4	0%	0	0.000	0.000
Totals	3,891	1,145	262	104	2							5,404	28%	1,513	113.069	0.075

Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-15. Distribution of TED by Facility Type Listed in Descending Order of Average Measurable TED for Weapons Fabrication, 2014.

WEAPONS FABRICATION																
Number of Individuals Receiving Radiation Doses in Each Dose Range (rem)																
Site/Contractor	Less than Meas	Meas 0 - 0.10	0.10 - 0.25	0.25 - 0.50	0.50 - 0.75	0.75 - 1.00	1 - 2	2 - 3	3 - 4	4 - 5	>5	Total Monitored	Percent of Monitored with Meas. TED	No. with Meas. TED	Collective TED (Person-rem)	Avg. Meas. TED (rem)
CNS, LLC - Pantex	2,894	202	61	37	5							3,199	10%	305	31.084	0.102 ◀
CNS, LLC - Y-12	4,382	1,152	150	21	3							5,708 ◀	23% ◀	1,326 ◀	59.296 ◀	0.045
Sandia National Laboratories	464	12										476	3%	12	0.240	0.020
Savannah River Nuclear Solutions	309	14										323	4%	14	0.255	0.018
Kansas City Plant	61	11										72	15%	11	0.022	0.002
CNS, LLC - Security	12											12	0%	0	0.000	0.000
CNS, LLC - Subcontractors	61											61	0%	0	0.000	0.000
Los Alamos National Laboratory	1											1	0%	0	0.000	0.000
PXSO/NNSA and DOE Couriers	6											6	0%	0	0.000	0.000
Savannah River Field Office	5											5	0%	0	0.000	0.000
SRNS Construction Subs	1											1	0%	0	0.000	0.000
SRNS Service Subs	2											2	0%	0	0.000	0.000
URS/CH2MHill - Oak Ridge (UCOR): Y-12	91											91	0%	0	0.000	0.000
Totals	8,289	1,391	211	58	8							9,957	17%	1,668	90.897	0.054

Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report

Exhibit B-16. Distribution of TED by Facility Type Listed in Descending Order of Average Measurable TED for Other, 2014.

OTHER																
Number of Individuals Receiving Radiation Doses in Each Dose Range (rem)																
Site/Contractor	Less than Meas	Meas 0 - 0.10	0.10 - 0.25	0.25 - 0.50	0.50 - 0.75	0.75 - 1.00	1 - 2	2 - 3	3 - 4	4 - 5	>5	Total Monitored	Percent of Monitored with Meas. TED	No. with Meas. TED	Collective TED (Person-rem)	Avg. Meas. TED (rem)
Office of River Protection	93	3	2									98	5%	5	0.426	0.085
SRNS Service Subs	53	9	2									64	17%	11	0.694	0.063
Washington River Protection Solutions LLC (W	358	32	9									399	10%	41	2.468	0.060
Sandia National Laboratories	520	12	1									533	2%	13	0.475	0.037
Mission Support Alliance	40	2										42	5%	2	0.072	0.036
Savannah River Nuclear Solutions	412	28	3									443	7%	31	0.932	0.030
Los Alamos National Laboratory	2,615	56	2									2,673	2%	58	1.356	0.023
DOE-Richland Field Office	519	9										528	2%	9	0.202	0.022
Misc. S.R.S. Const. Subcontractors		1										1	100%	1	0.020	0.020
Washington Closure Hanford LLC (WCH)	1,160	59										1,219	5%	59	1.018	0.017
CH2M Hill Plateau Remediation Company (CHPRC)	178	31	1									210	15%	32	0.446	0.014
Savannah River Field Office	9	2										11	18%	2	0.018	0.009
Boeing North America Inc. - Research	60	69										129	53%	69	0.489	0.007
Advanced Technologies and Laboratories Int'l	12											12	0%	0	0.000	0.000
BATTELLE - PNNL	4											4	0%	0	0.000	0.000
BECHTEL NATIONAL CORPORATION	43											43	0%	0	0.000	0.000
CSC Hanford Occupational Health Services	23											23	0%	0	0.000	0.000
Misc. DOE Contractors - SR	7											7	0%	0	0.000	0.000
NNSA Los Alamos Site Office	2											2	0%	0	0.000	0.000
Protection Technologies Los Alamos	2											2	0%	0	0.000	0.000
SRNS Construction Subs	3											3	0%	0	0.000	0.000
SRR Operations	5											5	0%	0	0.000	0.000
Wackenhut Services Inc. - SR	1											1	0%	0	0.000	0.000
Totals	6,119	313	20									6,452	5%	333	8.616	0.026

Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-17. Internal Dose by Facility Type and Nuclide, 2012-2014.

Facility Type	Nuclide*	No. of Individuals with Measurable CED*			Collective CED Dose (person-rem)			Average Measurable CED (rem)		
		2012	2013	2014	2012	2013	2014	2012	2013	2014
Accelerator	Total									
Fuel Fabrication	Total									
Fuel Processing	Plutonium	1	4	3	0.003	0.013	0.011	0.003	0.003	0.004
	Total	1	4	3	0.003	0.013	0.011	0.003	0.003	0.004
Fuel/Uranium Enrichment	Uranium	12	1		0.276	0.012		0.023	0.012	
	Total	12	1		0.276	0.012		0.023	0.012	
Maintenance and Support	Americium	2			0.126			0.063		
	Hydrogen-3	8	5	3	0.018	0.005	0.007	0.002	0.001	0.002
	Plutonium	4	5	2	0.025	1.697	0.095	0.006	0.339 ◀	0.048
	Uranium	2	2	11	0.115	0.106	0.040	0.058	0.053	0.004
	Total	16	12	16	0.284	1.808	0.142	0.018	0.151	0.009
Other	Americium	1	3		0.010	0.008		0.010	0.003	
	Hydrogen-3	1			0.001			0.001		
	Plutonium	10			0.105			0.011		
	Uranium			1			0.001			0.001
	Total	12	3	1	0.116	0.008	0.001	0.010	0.003	0.001
Reactor	Total									
Research, Fusion	Total									
Research, General	Americium	3	11	16	0.085	0.299	0.417	0.028	0.027	0.026
	Californium	1	1	1	0.023	0.032	0.010	0.023	0.032	0.010
	Hydrogen-3	2	2	4	0.002	0.008	0.010	0.001	0.004	0.003
	Mixed	1	1	4	0.011	0.012	0.274	0.011	0.012	0.069 ◀
	Other	1	1	2	0.046	0.012	0.089	0.046	0.012	0.045
	Plutonium	6	6	2	0.129	0.186	0.113	0.022	0.031	0.057
	Uranium	5	1	10	0.064	0.012	0.659	0.013	0.012	0.066
	Total	19	23	39	0.360	0.561	1.572	0.019	0.024	0.040
Waste Processing/Management	Americium			2			0.035			0.018
	Hydrogen-3	1			0.004			0.004		
	Plutonium	19	1	2	0.126	0.003	0.120	0.007	0.003	0.060
	Uranium	50	45	48	1.916	2.925	2.974	0.038	0.065	0.062
	Total	70	46	52	2.046	2.928	3.129	0.029	0.064	0.060
Weapons Fabrication and Testing	Hydrogen-3	1	7	1	0.004	0.035	0.006	0.004	0.005	0.006
	Mixed	36	44	48	0.779	0.394	1.277	0.022	0.009	0.027
	Plutonium	1			0.005			0.005		
	Thorium	2			0.220			0.110 ◀		
	Uranium	1,191 ◀	1,081 ◀	1,038 ◀	46.160 ◀	38.841 ◀	47.737 ◀	0.039	0.036	0.046
	Total	1,231	1,132	1,087	47.168	39.270	49.020	0.038	0.035	0.045
	Totals	1,361	1,221	1,198	50.253	44.6	53.875	0.037	0.037	0.045

*Intakes grouped by nuclide. Intakes involving multiple nuclides were grouped into "mixed." Nuclides where fewer than 10 individuals had intakes were grouped as "other."

Note: Boxed values (gray background) indicate the greatest value in each column.

**DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-18a. Distribution of TED by Labor Category - 2012.**

Total Effective Dose (TED)

Number of Individuals Receiving Radiation Doses in Each Dose Range (rem)

Labor Category	Less than Meas	Meas 0 - 0.10	0.10 - 0.25	0.25 - 0.50	0.50 - 0.75	0.75 - 1.00	1 - 2	2 - 3	3 - 4	4 - 5	>5	Total Monitored	Percent of Monitored with Meas. TED	No. with Meas. TED	Collective TED (Person-rem)	Avg. Meas. TED (rem)
Agriculture	87	2										89	2%	2	0.105	0.052
Construction	3,664	806	143	25	3							4,641	21%	977	53.758	0.055
Laborers	1,359	263	73	16	2							1,713	21%	354	25.520	0.072
Management	8,452	670	51	17	2		1					9,193	8%	741	31.084	0.042
Miscellaneous	6,992	1,059	176	69	5	1	3					8,305	16%	1,313	89.711	0.068
Production	2,466	1,126	248	98	15	3						3,956	38% ◀	1,490	122.870	0.082
Scientists	20,557	1,736	174	48	7	4	1					22,527 ◀	9%	1,970 ◀	89.878	0.046
Service	3,027	217	12	3								3,259	7%	232	7.507	0.032
Technicians	6,785	1,413	294	152	44	13	10					8,711	22%	1,926	193.686 ◀	0.101 ◀
Transport	1,313	91	28	18	1							1,451	10%	138	13.524	0.098
Unknown	17,880	1,060	161	83	8	6						19,198	7%	1,318	91.260	0.069
Totals	72,582	8,443	1,360	529	87	27	15					83,043	13%	10,461	718.903	0.069

Note: Boxed values (gray background) indicate the greatest value in each column.

**DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-18b. Distribution of TED by Labor Category - 2013.**

Total Effective Dose (TED)

Number of Individuals Receiving Radiation Doses in Each Dose Range (rem)

Labor Category	Less than Meas	Meas 0 - 0.10	0.10 - 0.25	0.25 - 0.50	0.50 - 0.75	0.75 - 1.00	1 - 2	2 - 3	3 - 4	4 - 5	>5	Total Monitored	Percent of Monitored with Meas. TED	No. with Meas. TED	Collective TED (Person-rem)	Avg. Meas. TED (rem)
Agriculture	61		1									62	2%	1	0.147	0.147 ◀
Construction	3,021	953	142	40	2	1						4,159	27%	1,138	63.352	0.056
Laborers	986	242	54	7								1,289	24%	303	17.652	0.058
Management	6,948	628	52	19	1							7,648	9%	700	28.653	0.041
Miscellaneous	4,443	577	79	34		1						5,134	13%	691	39.259	0.057
Production	2,062	1,057	212	56	7	5	6					3,405	39% ◀	1,343	103.059	0.077
Scientists	18,776	1,817	130	48	6	6						20,783 ◀	10%	2,007 ◀	87.649	0.044
Service	3,448	420	20	3								3,891	11%	443	14.857	0.034
Technicians	6,309	1,416	331	124	32	14	3					8,229	23%	1,920	175.675 ◀	0.091
Transport	1,083	67	20	9								1,179	8%	96	8.678	0.090
Unknown	14,623	973	205	81		1						15,883	8%	1,260	88.380	0.070
Totals	61,760	8,150	1,246	421	48	28	9					71,662	14%	9,902	627.361	0.063

Note: Boxed values (gray background) indicate the greatest value in each column.

**DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-18c. Distribution of TED by Labor Category - 2014.**

Total Effective Dose (TED)

Number of Individuals Receiving Radiation Doses in Each Dose Range (rem)

Labor Category	Less than Meas	Meas 0 - 0.10	0.10 - 0.25	0.25 - 0.50	0.50 - 0.75	0.75 - 1.00	1 - 2	2 - 3	3 - 4	4 - 5	>5	Total Monitored	Percent of Monitored with Meas. TED	No. with Meas. TED	Collective TED (Person-rem)	Avg. Meas. TED (rem)
Agriculture	56	1										57	2%	1	0.050	0.050
Construction	3,348	903	164	59	5	2						4,481	25%	1,133	76.127	0.067
Laborers	1,010	237	52	17	6							1,322	24%	312	24.592	0.079
Management	6,374	587	39	14	1							7,015	9%	641	24.144	0.038
Miscellaneous	8,783	654	111	19	3	1						9,571	8%	788	42.451	0.054
Production	2,035	937	215	90	14	3						3,294	38% ◀	1,259	106.103	0.084
Scientists	18,419	1,705	147	23	3	3						20,300 ◀	9%	1,881 ◀	73.307	0.039
Service	4,027	407	23	6								4,463	10%	436	14.810	0.034
Technicians	6,048	1,337	344	129	25	6	6					7,895	23%	1,847	168.022 ◀	0.091
Transport	1,087	47	14	13	2							1,163	7%	76	8.872	0.117 ◀
Unknown	14,760	893	147	74	13							15,887	7%	1,127	81.418	0.072
Totals	65,947	7,708	1,256	444	72	15	6					75,448	13%	9,501	619.896	0.065

Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-19. Internal Dose by Labor Category, 2012-2014.

Labor Category	No. of Individuals with Measurable CED*			Collective CED Dose (person-rem)			Average Measurable CED		
	2012	2013	2014	2012	2013	2014	2012	2013	2014
Construction	208	232	224	4.827	6.695	8.657	0.023	0.029	0.039
Laborers	88	53	59	5.820	3.134	4.227	0.066 ◀	0.059	0.072
Management	121	106	95	4.618	3.714	3.581	0.038	0.035	0.038
Miscellaneous	23	15	20	0.477	0.836	0.649	0.021	0.056	0.032
Production	343 ◀	338 ◀	329 ◀	18.233 ◀	15.073 ◀	20.191 ◀	0.053	0.045	0.061
Scientists	172	176	166	4.039	4.109	5.044	0.023	0.023	0.030
Service	48	43	36	1.764	1.684	1.621	0.037	0.039	0.045
Technicians	146	119	119	5.571	5.264	4.520	0.038	0.044	0.038
Transport	38	30	27	1.493	2.026	2.214	0.039	0.068 ◀	0.082 ◀
Unknown	174	109	123	3.411	2.065	3.171	0.020	0.019	0.026
Totals	1,361	1,221	1,198	50.253	44.600	53.875	0.037	0.037	0.045

*Only included intakes that occurred during the monitoring year. Individuals may be counted more than once.
 Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-20. Dose Distribution by Labor Category and Occupation, 2014.

Labor Category	Occupation	Less than Meas	Meas 0 - 0.10	0.10 - 0.25	0.25 - 0.50	0.50 - 0.75	0.75 - 1.00	1 - 2	2 - 3	3 - 4	4 - 5	>5	Total Monitored	Percent of Monitored with Meas. TED	No. with Meas. TED	Collective TED (Person-rem)	Avg. Meas. TED (rem)
Agriculture	Groundskeepers	56	1										57	2%	1	0.050	0.050
Construction	Carpenters	225	83	19	13	3							343	34%	118	11.676	0.099
	Electricians	944	283	27	7		1						1,262	25%	318	14.415	0.045
	Masons	14	6										20	30%	6	0.279	0.047
	Mechanics/Repairers	840	106	24	13								983	15%	143	11.329	0.079
	Miners/Drillers	74											74				
	Misc. Repair/Construction	849	299	52	12		1						1,213	30%	364	21.809	0.060
	Painters	92	30	4	4								130	29%	38	2.569	0.068
	Pipe Fitter	310	96	38	10	2							456	32%	146	14.050	0.096
Laborers	Handlers/Laborers/Helpers	1,010	237	52	17	6							1,322	24%	312	24.592	0.079
Management	Admin. Support & Clerical Sec.	1,509	60	8	2								1,579	4%	70	3.466	0.050
	Manager - Administrator	4,863	527	31	12	1							5,434	11%	571	20.678	0.036
	Sales	2											2				
Miscellaneous	Military	102	2										104	2%	2	0.079	0.040
	Miscellaneous	8,681	652	111	19	3	1						9,467	8%	786	42.372	0.054
Production	Machine Setup/Operators	111	135	48	9	2							305	64%	194	16.269	0.084
	Machinists	80	22	3									105	24%	25	1.231	0.049
	Misc. Precision/Production	336	160	31	12	2							541	38%	205	14.869	0.073
	Operators, Plant/ System/Util.	1,286	572	126	66	10	3						2,063	38%	777	70.362	0.091
	Sheet Metal Workers	195	41	6	3								245	20%	50	2.862	0.057
	Welders and Solderers	27	7	1									35	23%	8	0.510	0.064
Scientists	Engineer	5,705	559	39	6	2	2						6,313	10%	608	22.793	0.037
	Health Physicist	383	54	6	4								447	14%	64	4.050	0.063
	Misc. Professional	6,828	617	73	10	1							7,529	9%	701	29.351	0.042
	Scientist	5,441	474	29	3		1						5,948	9%	507	17.109	0.034
	Doctors and Nurses	62	1										63	2%	1	0.004	0.004
Service	Firefighters	486	25	1	1								513	5%	27	0.761	0.028
	Food Service Employees	6	1										7	14%	1	0.048	0.048
	Janitors	400	20	2	1								423	5%	23	0.962	0.042
	Misc. Service	1,655	194	10	3								1,862	11%	207	7.519	0.036
	Security Guards	1,480	167	10	1								1,658	11%	178	5.520	0.031
Technicians	Health Technicians	157	53	4	2								216	27%	59	2.666	0.045
	Technicians	1,090	220	55	26	8	1						1,400	22%	310	31.168	0.101
	Science Technicians	469	144	15	2	1	1						632	26%	163	8.214	0.050
	Misc. Technicians	1,863	202	58	30	5	2	6					2,166	14%	303	36.627	0.121
	Engineering Technicians	1,588	150	29	8								1,775	11%	187	11.552	0.062
	Radiation Monitors/Techs.	881	568	183	61	11	2						1,706	48%	825	77.795	0.094
Transport	Bus Drivers	6											6				
	Equipment Operators	228	22	5	9	2							266	14%	38	5.606	0.148
	Misc. Transport	389	7	1									397	2%	8	0.306	0.038
	Pilots	20											20				
	Truck Drivers	444	18	8	4								474	6%	30	2.960	0.099
Unknown	Unknown	14,760	893	147	74	13							15,887	7%	1,127	81.418	0.072
Totals		65,947	7,708	1,256	444	72	15	6					75,448	13%	9,501	619.896	0.065

Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-21. Internal Dose Distribution by Site and Nuclide, 2014.

Site	Nuclide	Number of Individuals Receiving Doses in Each Dose Range											Total Indiv. with Meas. CED	Collective CED (person-rem)	Avg. CED (rem)	
		Meas. 0-0.02	0.02-0.10	0.10-0.25	0.25-0.50	0.50-0.75	0.75-1.00	1.0-2.0	2.0-3.0	3.0-4.0	4.0-5.0	>5.0				
Argonne National Laboratory	Californium	1												1	0.010	0.010
Argonne National Laboratory	Plutonium	1												1	0.018	0.018
Argonne National Laboratory	Americium	3	4											7	0.151	0.022
Hanford: Pacific Northwest National Laboratory	Hydrogen-3	3												3	0.007	0.002
Hanford: Pacific Northwest National Laboratory	Mixed			1										1	0.106	0.106 ◀
Idaho National Laboratory	Americium	4	5											9	0.266	0.030
Lawrence Livermore National Laboratory	Mixed	1	1	1										3	0.168	0.056
Lawrence Livermore National Laboratory	Uranium	1	1											2	0.040	0.020
Los Alamos National Laboratory	Uranium	12												12	0.041	0.003
Los Alamos National Laboratory	Hydrogen-3	3												3	0.007	0.002
Los Alamos National Laboratory	Plutonium		2											2	0.095	0.048
Oak Ridge: Oak Ridge National Laboratory	Plutonium		1											1	0.095	0.095
Oak Ridge: Oak Ridge National Laboratory	Uranium		4	2										6	0.580	0.097
Oak Ridge: Oak Ridge National Laboratory	Other	1	1											2	0.089	0.044
Oak Ridge: Y-12 National Security Complex	Mixed	27	9	4										40	1.263	0.032
Oak Ridge: Y-12 National Security Complex	Uranium	480	420	122	14	2								1,038 ◀	47.737 ◀	0.046
Pantex Plant	Mixed	1	1											2	0.039	0.020
Savannah River Site	Americium	8												8	0.014	0.002
Savannah River Site	Hydrogen-3		1											1	0.024	0.024
Savannah River Site	Plutonium	2												2	0.009	0.004
Uranium Mill Tailings Remedial Action Project	Uranium	4		1										5	0.131	0.026
Waste Isolation Pilot Plant	Americium	12	28	8										48	2.974	0.062
Totals		1												1	0.011	0.011

Note: Boxed values (gray background) indicate the greatest value in each column.

DOE Occupational Radiation Exposure: 2014 Annual Report
Exhibit B-22. Extremity Dose Distribution by Site, 2014.

Site	No. Meas. Dose	Meas. 0-0.1	0.10-1	1-5	5-10	10-20	20-30	>30	Total Monitored*	No. with Meas.	No. Above Monitoring Threshold (5 rems)**	Collective Extremity Dose (person-rem)	Avg. Meas. Extremity Dose (rem)
Ames Laboratory	159	3							162	3		0.120	0.040
Argonne National Laboratory	1,852	18	15	10	3				1,898	46	3	48.765	1.060
Brookhaven National Laboratory	2,592	11	22	4	1				2,630	38	1	23.590	0.621
Energy Technology Engineering Center	129								129				
Fermi National Accelerator Laboratory	1,271		1						1,272	1		0.100	0.100
Hanford: Hanford Site	4,152	57	77	41	5	1			4,333	181	6	158.414	0.875
Hanford: Office of River Protection	1,626	234	188	5					2,053	427		68.759	0.161
Hanford: Pacific Northwest National Laboratory	1,947	433	55	3					2,438	491		25.035	0.051
Idaho National Laboratory	5,047	892	284	49	4				6,276	1,229	4	236.061	0.192
Kansas City Plant	71	1							72	1		0.030	0.030
Lawrence Berkeley National Laboratory	670	18	3	6	1	1			699	29	2	41.103	1.417
Lawrence Livermore National Laboratory	9,921	8	23	4					9,956	35		15.543	0.444
Los Alamos National Laboratory	7,598	1,023	351	57	1				9,030	1,432	1	256.540	0.179
National Renewable Energy Laboratory	16								16				
Nevada National Security Site	2,534	7	2						2,543	9		0.490	0.054
New Brunswick Laboratory	34								34				
Oak Ridge: East Tennessee Technology Park	605								605				
Oak Ridge: Oak Ridge Institute for Science and Education	132								132				
Oak Ridge: Oak Ridge National Laboratory	3,740	30	60	28	7	2			3,867	127	9	170.699	1.344
Oak Ridge: Y-12 National Security Complex	5,735	24	30	10					5,799	64		31.178	0.487
Paducah Gaseous Diffusion Plant	1,516	1							1,517	1		0.018	0.018
Pantex Plant	3,156	39	68	36	3				3,302	146	3	115.452	0.791
Portsmouth Gaseous Diffusion Plant	2,450								2,450				
Princeton Plasma Physics Laboratory	361								361				
Sandia National Laboratories	2,304								2,304				
Savannah River Site	5,219	236	494	129	8	3			6,089	870	11	495.056	0.569
Separations Process Research Unit	187								187				
SLAC National Accelerator Laboratory	537	12							549	12		0.120	0.010
Thomas Jefferson National Accelerator Facility	2,147								2,147				
Uranium Mill Tailings Remedial Action Project	1,336	3	8	1					1,348	12		3.410	0.284
Waste Isolation Pilot Plant	128								128				
West Valley Demonstration Project	786								786				
Service Center Personnel*	317	9	10						336	19		1.840	0.097
Totals	70,275	3,059	1,691	383	33	7			75,448	5,173	40	1,692.323	0.327

* Represents the total number of monitoring records. The number of individuals provided extremity monitoring cannot be determined.

** All extremity doses above 5 rems were for the upper extremities (hands and forearms). DOE annual limit for extremities is 50 rems. 10 CFR 835.402(a)(1)(ii) requires extremity monitoring for a shallow dose equivalent to the skin or extremity of 5 rems or more in a year.

*** Includes personnel at NNSA Albuquerque complex and Oak Ridge.

Note: Boxed values (gray background) indicate the greatest value in each column.