

# **Occupational Information for Environmental Health & Safety Programs: Industry Demand, Wages, and Skills**

**A Report to Central Wyoming College**



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## Methodological Note

The tabulations for this project use common occupational (i.e., Standard Occupational Classification) and industrial (i.e., North American Industry Classification System) coding systems, and standard confidentiality edits to avoid disclosure of firms or persons.

Some of the data are drawn from employer sample-based survey estimations (see Table 1, page 4, and Table 3, page 7), while other data are based on a universe of employment by industry (see Table 4, page 28). Industry projections are based on all employees working all jobs in an industry and can be used to produce a great deal of highly accurate detail especially in the base year. In contrast, occupational projections are based on sample surveys of staffing patterns and are limited only to those occupations whose number (i.e., less than the universe) can be estimated reliably. Variations in tabulations between occupational and industry projections, therefore, are normal and to be expected. Variations also may be due to a difference in reference period.

The reader is cautioned not to compare the total occupational projections (shown in Table 3) with the estimated number of Environmental Health & Safety occupations within each industry (shown in Table 4). As noted above, the computations were developed from separate methodologies.

**Table 1: Environmental Health & Safety Job Titles Sorted by Standard Occupational Classification**

<b>Environmental Health &amp; Safety Job Title</b>	<b>Standard Occupational Classification Code</b>
Procurement Technician	13-1023
Compliance Specialist	13-1041
Environmental Compliance Technician	13-1041
Legislative Research Technician	13-1041
Permit Review Assistant	13-1041
Regulatory Compliance Information Technician	13-1041
Emergency Response Technician	13-1061
Emergency Spill Response Technician	13-1061
Environmental Property Assessor (for Real Estate Transactions)	13-2021
Cost-Recovery/Investment Recovery Technician	13-2099
Environmental Web Crawler	15-1071
Cartography/Mapping Technician	17-1021
GIS Technician	17-1021
Geotechnical Properties Technician	17-3022
Air Pollution Auditor	17-3025
Air Quality Technician	17-3025
Energy Analyst	17-3025
Energy Auditor	17-3025
Energy Specialist	17-3025
Green Power Technician	17-3025
Industrial Process Specialist	17-3026
Land Survey Technician	17-3031
Terrestrial Ecologist	19-1013
Environmental Marketing Specialist	19-3021
Biological/Microbiological Laboratory Technician	19-4021
Botany Technician	19-4021
Fisheries Technician	19-4021
Wildlife Technician	19-4021
Chemistry/Analytical Lab Technician	19-4031
Geological Technician	19-4041
Geology Technician	19-4041
Air Sampling & Monitoring Technician	19-4091
Drinking Water Technician	19-4091
Field Sampling Technician	19-4091
Ground Water Technician	19-4091
Hazardous Materials Analyst	19-4091
Hazardous Materials Technician	19-4091
Hydrology Technician	19-4091
Infectious Waste Technician	19-4091
Measurement & Verification Technician	19-4091
Mobile Lab Technician	19-4091
Process Environmental Technician	19-4091
Radon Inspector	19-4091
Sample Prep Technician	19-4091
Solid Waste Analyst	19-4091
Surface Water Technician	19-4091
Testing Technician	19-4091
Waste Management Technician	19-4091

*continued*

**Table 1: Environmental Health & Safety Job Titles Sorted by Standard Occupational Classification***continued*

<b>Environmental Health &amp; Safety Job Title</b>	<b>Standard Occupational Classification Code</b>
Waste/Materials Exchange Specialist	19-4091
Wastewater Analyst	19-4091
Water Analyst	19-4091
Forestry Technician	19-4093
Range Technician	19-4093
Rare/Endangered Species Specialist	19-4093
Soil Analyst	19-4093
Soil Conservation Technician	19-4093
Aquatic Ecologist	19-4099
Aquatic/Terrestrial Habitat Restoration Technician	19-4099
Biosolids Management Technician	19-4099
Ecologist Technician	19-4099
Energy & Conservation Technician	19-4099
Resource Conservation	19-4099
Waste Minimization Technician	19-4099
Facility Environmental Technician	29-9012
Hazardous Waste Technician	29-9012
Health & Safety Technician	29-9012
Health Physics Technician	29-9012
Industrial Ecology Technician	29-9012
Industrial Hygiene Technician	29-9012
Fire Management Technician	33-2021
Recreation Technician	39-9032
Solid Waste Landfill Technician	47-2073
Asbestos Abatement Worker/Supervisor/Inspector	47-4041
Decontamination Technician	47-4041
Lead Abatement Worker/Supervisor/Inspector	47-4041
Leaking Underground Storage Tank (LUST) Remover	47-4041
Remediation Technician	47-4041
Driller	47-5021
Industrial Process Equipment Maintenance & Operations Specialist	49-9041
Maintenance Technician	49-9041
Building Control Operator	51-8021
Building Control Technician	51-8021
Equipment & Controls Operator	51-8031
Industrial Waste Treatment Technician	51-8031
Instrument/Control Technician & Process Operator	51-8031
On-Site Wastewater Systems Technician	51-8031
System Technician	51-8031
Treatment, Storage, & Disposal Facility (TSDF) Technician	51-8031
Wastewater Treatment Operator	51-8031
Water Supply Technician	51-8031
Recycling Technician	53-7081
Solid Waste Technician	53-7081
Waste Transportation Technician	53-7081

For details on Standard Occupational Classification codes and descriptions, see <http://www.bls.gov/soc>.

Table by D. Hauf, Wyoming Department of Employment, Research & Planning, 5/29/08.

**Table 2: Average Median Hourly Wages, May 2007, for Environmental Health & Safety Job Titles Crosswalked to Standard Occupational Classification by Region<sup>a</sup>**

Standard Occupational Classification Code and Title	Region							Central Southeast
	Statewide	Casper <sup>b</sup>	Cheyenne <sup>b</sup>	Northwest	Southwest	Northeast	Southwest	
13-1023 Purchasing Agents, Except Wholesale, Retail, & Farm Products	\$21.60	\$25.32	\$22.35	\$16.73	\$19.73	\$21.88	\$22.07	
13-1041 Compliance Officers, Except Agriculture, Construction, Health & Safety, & Transportation	\$21.29	\$18.31	\$23.08	\$17.44	\$17.78	\$20.50	\$19.82	
13-1061 Emergency Management Specialists	\$20.78	ND	ND	\$20.68	\$18.53	\$18.81	\$19.97	
13-2021 Appraisers & Assessors of Real Estate	\$22.18	\$14.20	ND	\$15.48	ND	\$15.56	\$14.50	
13-2099 Financial Specialists, All Other	\$18.05	ND	\$21.81	ND	\$18.05	\$18.51	\$15.26	
15-1071 Network & Computer Systems Administrators	\$23.06	\$20.03	\$24.88	\$21.33	\$23.75	\$23.06	\$20.98	
17-1021 Cartographers & Photogrammetrists	\$19.91	ND	ND	ND	\$15.15	\$22.26	\$21.79	
17-3022 Civil Engineering Technicians	\$18.55	\$17.56	\$19.00	\$16.90	\$21.89	\$15.54	ND	
17-3025 Environmental Engineering Technicians	\$17.44	ND	ND	ND	ND	\$17.14	ND	
17-3026 Industrial Engineering Technicians	ND	ND	ND	ND	ND	ND	ND	
17-3031 Surveying & Mapping Technicians	\$16.09	\$14.93	ND	\$17.10	\$16.26	\$17.84	\$9.29	
19-1013 Soil & Plant Scientists	\$24.05	ND	ND	ND	ND	ND	ND	
19-3021 Market Research Analysts	\$21.11	\$20.68	\$20.00	\$22.40	\$22.57	\$15.05	\$28.98	
19-4021 Biological Technicians	\$16.02	ND	ND	\$15.55	ND	\$15.36	ND	
19-4031 Chemical Technicians	ND	\$16.87	ND	\$18.70	\$28.57	\$22.03	\$24.61	
19-4041 Geological & Petroleum Technicians	\$19.35	\$23.33	ND	ND	\$16.37	\$22.30	ND	
19-4091 Environmental Science & Protection Technicians, Including Health	\$16.10	ND	ND	ND	\$16.51	ND	ND	
19-4093 Forest & Conservation Technicians	\$14.78	ND	\$15.16	\$14.98	\$14.16	\$15.36	\$15.29	
19-4099 Life, Physical, & Social Science Technicians, All Other	\$20.34	ND	ND	\$22.98	\$21.25	\$15.92	\$19.84	
29-9012 Occupational Health & Safety Technicians	\$21.51	ND	ND	ND	\$29.74	\$15.19	ND	
33-2021 Fire Inspectors & Investigators	\$19.82	ND	ND	ND	\$19.18	ND	ND	
39-9032 Recreation Workers	\$9.38	\$12.59	\$8.82	\$9.40	\$10.53	\$9.67	\$10.37	
47-2073 Operating Engineers & Other Construction Equipment Operators	\$18.95	\$17.77	\$17.62	\$15.64	\$20.26	\$19.83	\$19.64	
47-4041 Hazardous Materials Removal Workers	ND	ND	ND	ND	ND	ND	ND	
47-5021 Earth Drillers, Except Oil & Gas	\$15.34	ND	ND	\$13.12	ND	ND	ND	
49-9041 Industrial Machinery Mechanics	\$23.85	\$20.00	\$24.72	\$19.63	\$29.99	\$21.92	\$21.52	
51-8021 Stationary Engineers & Boiler Operators	\$27.47	ND	ND	ND	\$29.53	ND	ND	
51-8031 Water & Liquid Waste Treatment Plant & System Operators	\$20.04	ND	ND	\$16.81	\$20.90	\$21.34	\$19.79	
53-7081 Refuse & Recyclable Material Collectors	\$14.75	ND	\$11.55	\$15.44	\$15.33	\$16.56	\$13.39	

<sup>a</sup>See page 5 of *Wages & Benefits in Wyoming 2008* ([http://doc.state.wy.us/LMI/OES\\_2008.pdf](http://doc.state.wy.us/LMI/OES_2008.pdf)) for the geography of regions.<sup>b</sup>Metropolitan Statistical Area (MSA).

ND = Nondisclosable due to confidentiality.

Table by D. Hauf, Wyoming Department of Employment, Research &amp; Planning, 5/29/08.

## Occupational Projections

Table 3 contains the 2007-2014 projections for the Environmental Health & Safety occupations (see Table 1, page 4). Data are provided for the entire state, regions, and metropolitan statistical areas. Total annual openings are estimated using both replacement need and anticipated occupational growth. Because the Environmental Health & Safety occupations often only represent part of the associated Standard Occupational Classification (SOC) occupation titles, the projections should be interpreted with some caution. For example, Solid Waste Landfill Technician is classified as SOC 47-2073 – Operating Engineers & Other Construction Equipment Operators. There are an expected 169 annual openings in the SOC occupation on the statewide level. However, because other job titles could also be classified as SOC 47-2073, one cannot assume that there will be 169 annual openings for Solid Waste Landfill Technicians. Additionally, Biological/Microbiological Laboratory Technician, Botany Technician, Fisheries Technician, and Wildlife Technician are all classified as SOC 19-4021 – Biological Technicians. The occupation is expected to have only three annual openings, which will have to be shared among all associated job titles.

**Replacement refers to demand created by retirement or other withdrawals from the labor market.**

**Table 3: Occupational Projections for Occupations Associated with Environmental Health & Safety Job Titles, Wyoming Statewide**

Standard Occupational Classification Title and Code	Estimated Employment 2007	Projected Employment 2014	Total Annual Openings Due to Growth and Replacement	Environmental Health & Safety Job Title
Purchasing Agents, Except Wholesale, Retail, & Farm Products 13-1023	305	346	13	Procurement Technician
Compliance Officers, Except Agriculture, Construction, Health & Safety, & Transportation 13-1041	155	175	6	Compliance Specialist Regulatory Compliance Information Technician Environmental Compliance Technician Legislative Research Technician Permit Review Assistant
Emergency Management Specialists 13-1061	26	31	1	Emergency Spill Response Technician Emergency Response Technician
Appraisers & Assessors of Real Estate 13-2021	376	451	18	Environmental Property Assessor (for Real Estate Transactions)
Financial Specialists, All Other 13-2099	201	233	8	Cost-Recovery/Investment Recovery Technician
Network & Computer Systems Administrators 15-1071	344	433	16	Environmental Web Crawler
Cartographers & Photogrammetrists 17-1021	37	43	2	Cartography/Mapping Technician GIS Technician
Civil Engineering Technicians 17-3022	205	239	9	Geotechnical Properties Technician
Environmental Engineering Technicians 17-3025	58	71	3	Energy Specialist Green Power Technician

*continued*

**Table 3: Occupational Projections for Occupations Associated with Environmental Health & Safety Job Titles, Wyoming Statewide***continued*

Standard Occupational Classification Title and Code	Estimated Employment 2007	Projected Employment 2014	Total Annual Openings Due to Growth and Replacement	Environmental Health & Safety Job Title
				Energy Auditor Energy Analyst Air Pollution Auditor Air Quality Technician
Industrial Engineering Technicians 17-3026	11	12	0	Industrial Process Specialist
Surveying & Mapping Technicians 17-3031	220	244	11	Land Survey Technician
Soil & Plant Scientists 19-1013	76	82	2	Terrestrial Ecologist
Market Research Analysts 19-3021	211	251	11	Environmental Marketing Specialist
Biological Technicians 19-4021	140	145	3	Biological/Microbiological Laboratory Technician Botany Technician Fisheries Technician Wildlife Technician
Chemical Technicians 19-4031	298	344	14	Chemistry/Analytical Lab Technician
Geological & Petroleum Technicians 19-4041	290	408	23	Geology Technician Geological Technician
Environmental Science & Protection Technicians, Including Health 19-4091	84	97	4	Measurement and Verification Technician Testing Technician Waste Management Technician Air Sampling and Monitoring Technician Field Sampling Technician Mobile Lab Technician Waste/Materials Exchange Specialist Hazardous Materials Analyst Sample Prep Technician Solid Waste Analyst Wastewater Analyst Water Analyst Hydrology Technician Process Environmental Technician Radon Inspector Hazardous Materials Technician Infectious Waste Technician Ground Water Technician Surface Water Technician Drinking Water Technician
Forest & Conservation Technicians 19-4093	400	406	10	Soil Analyst Forestry Technician Range Technician Rare/Endangered Species Specialist Soil Conservation Technician
Life, Physical, & Social Science Technicians, All Other 19-4099	376	426	16	Resource Conservation Aquatic Ecologist Aquatic/Terrestrial Habitat Restoration Technician

*continued*



**Table 3: Occupational Projections for Occupations Associated with Environmental Health & Safety Job Titles, Wyoming Statewide***continued*

Standard Occupational Classification Title and Code	Estimated Employment 2007	Projected Employment 2014	Total Annual Openings Due to Growth and Replacement	Environmental Health & Safety Job Title
				Ecologist Technician Energy & Conservation Technician Waste Minimization Technician Biosolids Management Technician
Occupational Health & Safety Technicians 29-9012	48	51	2	Facility Environmental Technician Industrial Ecology Technician Health Physics Technician Health and Safety Technician Industrial Hygiene Technician Hazardous Waste Technician
Fire Inspectors & Investigators 33-2021	20	20	1	Fire Management Technician
Recreation Workers 39-9032	660	752	27	Recreation Technician
Operating Engineers & Other Construction Equipment Operators 47-2073	2,814	3,543	169	Solid Waste Landfill Technician
Hazardous Materials Removal Workers 47-4041	6	8	1	Asbestos Abatement Worker/ Supervisor/Inspector Decontamination Technician Lead Abatement Worker/Supervisor/ Inspector Leaking Underground Storage Tank (LUST) Remover Remediation Technician
Earth Drillers, Except Oil & Gas 47-5021	618	936	59	Driller
Industrial Machinery Mechanics 49-9041	1,029	1,268	53	Industrial Process Equipment Maintenance and Operations Specialist Maintenance Technician
Stationary Engineers & Boiler Operators 51-8021	22	23	1	Building Control Operator Building Control Technician
Water & Liquid Waste Treatment Plant & System Operators 51-8031	323	375	18	Instrument/Control Technician and Process Operator Equipment and Controls Operator System Technician Treatment, Storage, & Disposal Facility (TSDF) Technician Industrial Waste Treatment Technician On-Site Wastewater Systems Technician Wastewater Treatment Operator Water Supply Technician
Refuse & Recyclable Material Collectors 53-7081	265	299	11	Recycling Technician Solid Waste Technician Waste Transportation Technician
<b>Total</b>	<b>9,618</b>	<b>11,712</b>	<b>512</b>	

Table by S. Jones, Wyoming Department of Employment, Research &amp; Planning, 5/29/08.

**Table 3a: Occupational Projections for Occupations Associated with Environmental Health & Safety Job Titles, Central Southeast Region**

Standard Occupational Classification Title and Code	Estimated Employment 2007	Projected Employment 2014	Total Annual Openings Due to Growth and Replacement	Environmental Health & Safety Job Title
Compliance Officers, Except Agriculture, Construction, Health & Safety, & Transportation 13-1041	10	11	4	Compliance Specialist Regulatory Compliance Information Technician Environmental Compliance Technician Legislative Research Technician Permit Review Assistant
Emergency Management Specialists 13-1061	6	7	2	Emergency Spill Response Technician Emergency Response Technician
Appraisers & Assessors of Real Estate 13-2021	9	10	3	Environmental Property Assessor (for real estate transactions)
Financial Specialists, All Other 13-2099	13	13	2	Cost-Recovery/Investment Recovery Technician
Network & Computer Systems Administrators 15-1071	23	28	9	Environmental Web Crawler
Cartographers & Photogrammetrists 17-1021	22	23	9	Cartography/Mapping Technician GIS Technician
Civil Engineering Technicians 17-3022	18	21	8	Geotechnical Properties Technician
Environmental Engineering Technicians 17-3025	41	51	22	Energy Specialist Green Power Technician Energy Auditor Energy Analyst Air Pollution Auditor Air Quality Technician
Industrial Engineering Technicians 17-3026	0	0	0	Industrial Process Specialist
Surveying & Mapping Technicians 17-3031	44	49	22	Land Survey Technician
Soil & Plant Scientists 19-1013	5	5	1	Terrestrial Ecologist
Market Research Analysts 19-3021	28	31	12	Environmental Marketing Specialist
Biological Technicians 19-4021	93	101	26	Biological/Microbiological Laboratory Technician Botany Technician Fisheries Technician Wildlife Technician
Chemical Technicians 19-4031	18	19	5	Chemistry/Analytical Lab Technician
Geological & Petroleum Technicians 19-4041	17	17	4	Geology Technician Geological Technician

*continued*

**Table 3a: Occupational Projections for Occupations Associated with Environmental Health & Safety Job Titles, Central Southeast Region***continued*

<b>Standard Occupational Classification Title and Code</b>	<b>Estimated Employment 2007</b>	<b>Projected Employment 2014</b>	<b>Total Annual Openings Due to Growth and Replacement</b>	<b>Environmental Health &amp; Safety Job Title</b>
Environmental Science & Protection Technicians, Including Health 19-4091	13	14	5	Measurement and Verification Technician
				Testing Technician
				Waste Management Technician
				Air Sampling and Monitoring Technician
				Field Sampling Technician
				Mobile Lab Technician
				Waste/Materials Exchange Specialist
				Hazardous Materials Analyst
				Sample Prep Technician
				Solid Waste Analyst
				Wastewater Analyst
				Water Analyst
				Hydrology Technician
				Process Environmental Technician
				Radon Inspector
Forest & Conservation Technicians 19-4093	118	131	45	Soil Analyst
				Forestry Technician
				Range Technician
				Rare/Endangered Species Specialist
				Soil Conservation Technician
Life, Physical, & Social Science Technicians, All Other 19-4099	59	63	19	Resource Conservation
				Aquatic Ecologist
				Aquatic/Terrestrial Habitat Restoration Technician
				Ecologist Technician
				Energy and Conservation Technician
				Waste Minimization Technician
Occupational Health & Safety Technicians 29-9012	3	4	2	Facility Environmental Technician
				Industrial Ecology Technician

*continued*

**Table 3a: Occupational Projections for Occupations Associated with Environmental Health & Safety Job Titles, Central Southeast Region***continued*

<b>Standard Occupational Classification Title and Code</b>	<b>Estimated Employment 2007</b>	<b>Projected Employment 2014</b>	<b>Total Annual Openings Due to Growth and Replacement</b>	<b>Environmental Health &amp; Safety Job Title</b>	
				Health Physics Technician Health and Safety Technician Industrial Hygiene Technician Hazardous Waste Technician	
Fire Inspectors & Investigators	33-2021	0	0	0	Fire Management Technician
Recreation Workers	39-9032	106	118	40	Recreation Technician
Operating Engineers & Other Construction Equipment Operators	47-2073	243	252	74	Solid Waste Landfill Technician
Hazardous Materials Removal Workers	47-4041	2	2	1	Asbestos Abatement Worker/ Supervisor/Inspector Decontamination Technician Lead Abatement Worker/ Supervisor/Inspector Leaking Underground Storage Tank (LUST) Remover Remediation Technician
Earth Drillers, Except Oil & Gas	47-5021	24	20	5	Driller
Industrial Machinery Mechanics	49-9041	64	53	14	Industrial Process Equipment Maintenance and Operations Specialist Maintenance Technician
Stationary Engineers & Boiler Operators	51-8021	58	57	11	Building Control Operator Building Control Technician
Water & Liquid Waste Treatment Plant & System Operators	51-8031	117	135	63	Instrument/Control Technician and Process Operator Equipment and Controls Operator System Technician Treatment, Storage, & Disposal Facility (TSDF) Technician Industrial Waste Treatment Technician On-Site Wastewater Systems Technician Wastewater Treatment Operator Water Supply Technician
Refuse & Recyclable Material Collectors	53-7081	91	102	38	Recycling Technician Solid Waste Technician Waste Transportation Technician
<b>Total</b>		<b>1,307</b>	<b>1,402</b>	<b>466</b>	

Table by S. Jones, Wyoming Department of Employment, Research &amp; Planning, 5/29/08.

**Table 3b: Occupational Projections for Occupations Associated with Environmental Health & Safety Job Titles, Northeast Region**

<b>Standard Occupational Classification Title and Code</b>	<b>Estimated Employment 2007</b>	<b>Projected Employment 2014</b>	<b>Total Annual Openings Due to Growth and Replacement</b>	<b>Environmental Health &amp; Safety Job Title</b>
Compliance Officers, Except Agriculture, Construction, Health & Safety, & Transportation 13-1041	49	67	36	Compliance Specialist Regulatory Compliance Information Technician Environmental Compliance Technician Legislative Research Technician Permit Review Assistant
Emergency Management Specialists 13-1061	8	9	3	Emergency Spill Response Technician Emergency Response Technician
Appraisers & Assessors of Real Estate 13-2021	29	35	14	Environmental Property Assessor (for real estate transactions)
Financial Specialists, All Other 13-2099	12	15	6	Cost-Recovery/Investment Recovery Technician
Network & Computer Systems Administrators 15-1071	31	41	18	Environmental Web Crawler
Cartographers & Photogrammetrists 17-1021	8	8	3	Cartography/Mapping Technician GIS Technician
Civil Engineering Technicians 17-3022	43	49	17	Geotechnical Properties Technician
Environmental Engineering Technicians 17-3025	22	26	10	Energy Specialist Green Power Technician Energy Auditor Energy Analyst Air Pollution Auditor Air Quality Technician
Industrial Engineering Technicians 17-3026	0	0	0	Industrial Process Specialist
Surveying & Mapping Technicians 17-3031	80	92	44	Land Survey Technician
Soil & Plant Scientists 19-1013	8	8	1	Terrestrial Ecologist
Market Research Analysts 19-3021	30	40	21	Environmental Marketing Specialist
Biological Technicians 19-4021	15	16	4	Biological/Microbiological Laboratory Technician Botany Technician Fisheries Technician Wildlife Technician
Chemical Technicians 19-4031	98	114	46	Chemistry/Analytical Lab Technician
Geological & Petroleum Technicians 19-4041	6	9	5	Geology Technician Geological Technician
Environmental Science & Protection Technicians, Including Health 19-4091	3	4	2	Measurement and Verification Technician Testing Technician

*continued*

**Table 3b: Occupational Projections for Occupations Associated with Environmental Health & Safety Job Titles, Northeast Region***continued*

<b>Standard Occupational Classification Title and Code</b>	<b>Estimated Employment 2007</b>	<b>Projected Employment 2014</b>	<b>Total Annual Openings Due to Growth and Replacement</b>	<b>Environmental Health &amp; Safety Job Title</b>	
				Waste Management Technician	
				Air Sampling and Monitoring Technician	
				Field Sampling Technician	
				Mobile Lab Technician	
				Waste/Materials Exchange Specialist	
				Hazardous Materials Analyst	
				Sample Prep Technician	
				Solid Waste Analyst	
				Wastewater Analyst	
				Water Analyst	
				Hydrology Technician	
				Process Environmental Technician	
				Radon Inspector	
				Hazardous Materials Technician	
				Infectious Waste Technician	
				Ground Water Technician	
				Surface Water Technician	
				Drinking Water Technician	
Forest & Conservation Technicians	19-4093	80	86	26	Soil Analyst
					Forestry Technician
					Range Technician
					Rare/Endangered Species Specialist
					Soil Conservation Technician
Life, Physical, & Social Science Technicians, All Other	19-4099	11	12	4	Resource Conservation
					Aquatic Ecologist
					Aquatic/Terrestrial Habitat Restoration Technician
					Ecologist Technician
					Energy & Conservation Technician
					Waste Minimization Technician
					Biosolids Management Technician
Occupational Health & Safety Technicians	29-9012	11	13	5	Facility Environmental Technician
					Industrial Ecology Technician
					Health Physics Technician
					Health and Safety Technician
					Industrial Hygiene Technician
					Hazardous Waste Technician

*continued*

**Table 3b: Occupational Projections for Occupations Associated with Environmental Health & Safety Job Titles, Northeast Region***continued*

<b>Standard Occupational Classification Title and Code</b>	<b>Estimated Employment 2007</b>	<b>Projected Employment 2014</b>	<b>Total Annual Openings Due to Growth and Replacement</b>	<b>Environmental Health &amp; Safety Job Title</b>	
Fire Inspectors & Investigators	33-2021	1	1	0	Fire Management Technician
Recreation Workers	39-9032	92	101	33	Recreation Technician
Operating Engineers & Other Construction Equipment Operators	47-2073	1218	1498	682	Solid Waste Landfill Technician
Hazardous Materials Removal Workers	47-4041	0	0	0	Asbestos Abatement Worker/ Supervisor/Inspector Decontamination Technician Lead Abatement Worker/ Supervisor/Inspector Leaking Underground Storage Tank (LUST) Remover Remediation Technician
Earth Drillers, Except Oil & Gas	47-5021	156	196	86	Driller
Industrial Machinery Mechanics	49-9041	365	497	250	Industrial Process Equipment Maintenance and Operations Specialist Maintenance Technician
Stationary Engineers & Boiler Operators	51-8021	17	17	3	Building Control Operator Building Control Technician
Water & Liquid Waste Treatment Plant & System Operators	51-8031	53	62	30	Instrument/Control Technician and Process Operator Equipment and Controls Operator System Technician Treatment, Storage, & Disposal Facility (TSDF) Technician Industrial Waste Treatment Technician On-Site Wastewater Systems Technician Wastewater Treatment Operator Water Supply Technician
Refuse & Recyclable Material Collectors	53-7081	34	46	24	Recycling Technician Solid Waste Technician Waste Transportation Technician
<b>Total</b>		<b>2,519</b>	<b>3,109</b>	<b>1,394</b>	

Table by S. Jones, Wyoming Department of Employment, Research &amp; Planning, 5/29/08.

**Table 3c: Occupational Projections for Occupations Associated with Environmental Health & Safety Job Titles, Northwest Region**

<b>Standard Occupational Classification Title and Code</b>	<b>Estimated Employment 2007</b>	<b>Projected Employment 2014</b>	<b>Total Annual Openings Due to Growth and Replacement</b>	<b>Environmental Health &amp; Safety Job Title</b>
Compliance Officers, Except Agriculture, Construction, Health & Safety, & Transportation 13-1041	32	35	11	Compliance Specialist Regulatory Compliance Information Technician Environmental Compliance Technician Legislative Research Technician Permit Review Assistant
Emergency Management Specialists 13-1061	6	7	2	Emergency Spill Response Technician Emergency Response Technician
Appraisers & Assessors of Real Estate 13-2021	28	36	15	Environmental Property Assessor (for real estate transactions)
Financial Specialists, All Other 13-2099	10	11	3	Cost-Recovery/Investment Recovery Technician
Network & Computer Systems Administrators 15-1071	43	56	23	Environmental Web Crawler
Cartographers & Photogrammetrists 17-1021	2	2	1	Cartography/Mapping Technician GIS Technician
Civil Engineering Technicians 17-3022	9	11	5	Geotechnical Properties Technician
Environmental Engineering Technicians 17-3025	0	0	0	Energy Specialist Green Power Technician Energy Auditor Energy Analyst Air Pollution Auditor Air Quality Technician
Industrial Engineering Technicians 17-3026	0	0	0	Industrial Process Specialist
Surveying & Mapping Technicians 17-3031	34	37	17	Land Survey Technician
Soil & Plant Scientists 19-1013	8	8	1	Terrestrial Ecologist
Market Research Analysts 19-3021	60	80	41	Environmental Marketing Specialist
Biological Technicians 19-4021	51	54	13	Biological/Microbiological Laboratory Technician Botany Technician Fisheries Technician Wildlife Technician
Chemical Technicians 19-4031	36	44	20	Chemistry/Analytical Lab Technician
Geological & Petroleum Technicians 19-4041	0	0	0	Geology Technician Geological Technician

*continued*



**Table 3c: Occupational Projections for Occupations Associated with Environmental Health & Safety Job Titles, Northwest Region***continued*

<b>Standard Occupational Classification Title and Code</b>	<b>Estimated Employment 2007</b>	<b>Projected Employment 2014</b>	<b>Total Annual Openings Due to Growth and Replacement</b>	<b>Environmental Health &amp; Safety Job Title</b>
Environmental Science & Protection Technicians, Including Health 19-4091	2	2	0	Measurement and Verification Technician
				Testing Technician
				Waste Management Technician
				Air Sampling and Monitoring Technician
				Field Sampling Technician
				Mobile Lab Technician
				Waste/Materials Exchange Specialist
				Hazardous Materials Analyst
				Sample Prep Technician
				Solid Waste Analyst
				Wastewater Analyst
				Water Analyst
				Hydrology Technician
				Process Environmental Technician
				Radon Inspector
				Hazardous Materials Technician
Infectious Waste Technician				
Ground Water Technician				
Surface Water Technician				
Drinking Water Technician				
Forest & Conservation Technicians 19-4093	145	158	51	Soil Analyst
				Forestry Technician
				Range Technician
				Rare/Endangered Species Specialist
				Soil Conservation Technician
Life, Physical, & Social Science Technicians, All Other 19-4099	40	46	18	Resource Conservation
				Aquatic Ecologist
				Aquatic/Terrestrial Habitat Restoration Technician
				Ecologist Technician
				Energy & Conservation Technician
				Waste Minimization Technician
				Biosolids Management Technician
Occupational Health & Safety Technicians 29-9012	10	12	5	Facility Environmental Technician
				Industrial Ecology Technician
				Health Physics Technician

*continued*

**Table 3c: Occupational Projections for Occupations Associated with Environmental Health & Safety Job Titles, Northwest Region***continued*

Standard Occupational Classification Title and Code	Estimated Employment 2007	Projected Employment 2014	Total Annual Openings Due to Growth and Replacement	Environmental Health & Safety Job Title	
				Health and Safety Technician Industrial Hygiene Technician Hazardous Waste Technician	
Fire Inspectors & Investigators	33-2021	2	2	1	Fire Management Technician
Recreation Workers	39-9032	58	70	29	Recreation Technician
Operating Engineers & Other Construction Equipment Operators	47-2073	592	697	291	Solid Waste Landfill Technician
Hazardous Materials Removal Workers	47-4041	0	0	0	Asbestos Abatement Worker/ Supervisor/Inspector Decontamination Technician Lead Abatement Worker/ Supervisor/Inspector Leaking Underground Storage Tank (LUST) Remover Remediation Technician
Earth Drillers, Except Oil & Gas	47-5021	46	58	26	Driller
Industrial Machinery Mechanics	49-9041	164	182	57	Industrial Process Equipment Maintenance and Operations Specialist Maintenance Technician
Stationary Engineers & Boiler Operators	51-8021	0	0	0	Building Control Operator Building Control Technician
Water & Liquid Waste Treatment Plant & System Operators	51-8031	39	44	20	Instrument/Control Technician and Process Operator Equipment and Controls Operator System Technician Treatment, Storage, & Disposal Facility (TSDF) Technician Industrial Waste Treatment Technician On-Site Wastewater Systems Technician Wastewater Treatment Operator Water Supply Technician
Refuse & Recyclable Material Collectors	53-7081	34	35	10	Recycling Technician Solid Waste Technician Waste Transportation Technician
<b>Total</b>		<b>1,491</b>	<b>1,733</b>	<b>677</b>	

Table by S. Jones, Wyoming Department of Employment, Research &amp; Planning, 5/29/08.

**Table 3d: Occupational Projections for Occupations Associated with Environmental Health & Safety Job Titles, Southwest Region**

<b>Standard Occupational Classification Title and Code</b>	<b>Estimated Employment 2007</b>	<b>Projected Employment 2014</b>	<b>Total Annual Openings Due to Growth and Replacement</b>	<b>Environmental Health &amp; Safety Job Title</b>	
Compliance Officers, Except Agriculture, Construction, Health & Safety, & Transportation	13-1041	27	31	12	Regulatory Compliance Information Technician Compliance Specialist Environmental Compliance Technician Legislative Research Technician Permit Review Assistant
Emergency Management Specialists	13-1061	8	9	4	Emergency Spill Response Technician Emergency Response Technician
Appraisers & Assessors of Real Estate	13-2021	75	92	39	Environmental Property Assessor (for Real Estate Transactions)
Financial Specialists, All Other	13-2099	43	51	19	Cost-Recovery/Investment Recovery Technician
Network & Computer Systems Administrators	15-1071	60	75	28	Environmental Web Crawler
Cartographers & Photogrammetrists	17-1021	20	24	12	Cartography/Mapping Technician GIS Technician
Civil Engineering Technicians	17-3022	20	23	9	Geotechnical Properties Technician
Environmental Engineering Technicians	17-3025	6	6	1	Energy Specialist Green Power Technician Energy Auditor Energy Analyst Air Pollution Auditor Air Quality Technician
Industrial Engineering Technicians	17-3026	0	0	0	Industrial Process Specialist
Surveying & Mapping Technicians	17-3031	99	118	60	Land Survey Technician
Soil & Plant Scientists	19-1013	13	14	4	Terrestrial Ecologist
Market Research Analysts	19-3021	40	50	23	Environmental Marketing Specialist
Biological Technicians	19-4021	41	47	15	Biological/Microbiological Laboratory Technician Botany Technician Fisheries Technician Wildlife Technician
Chemical Technicians	19-4031	36	35	9	Chemistry/Analytical Lab Technician
Geological & Petroleum Technicians	19-4041	50	81	54	Geology Technician Geological Technician

*continued*

**Table 3d: Occupational Projections for Occupations Associated with Environmental Health & Safety Job Titles, Southwest Region***continued*

<b>Standard Occupational Classification Title and Code</b>	<b>Estimated Employment 2007</b>	<b>Projected Employment 2014</b>	<b>Total Annual Openings Due to Growth and Replacement</b>	<b>Environmental Health &amp; Safety Job Title</b>
Environmental Science & Protection Technicians, Including Health 19-4091	47	60	28	Process Environmental Technician
				Measurement and Verification Technician
				Testing Technician
				Waste Management Technician
				Air Sampling and Monitoring Technician
				Mobile Lab Technician
				Field Sampling Technician
				Waste/Materials Exchange Specialist
				Hazardous Materials Analyst
				Sample Prep Technician
				Solid Waste Analyst
				Wastewater Analyst
				Water Analyst
				Hydrology Technician
				Radon Inspector
				Hazardous Materials Technician
Infectious Waste Technician				
Ground Water Technician				
Surface Water Technician				
Drinking Water Technician				
Forest & Conservation Technicians 19-4093	170	193	71	Soil Analyst
				Forestry Technician
				Range Technician
				Rare/Endangered Species Specialist
				Soil Conservation Technician
Life, Physical, & Social Science Technicians, All Other 19-4099	14	16	6	Resource Conservation
				Aquatic Ecologist
				Aquatic/Terrestrial Habitat Restoration Technician
				Ecologist Technician
				Energy & Conservation Technician
				Waste Minimization Technician
Biosolids Management Technician				
Occupational Health & Safety Technicians 29-9012	16	19	7	Facility Environmental Technician
				Industrial Ecology Technician
				Health Physics Technician

*continued*

**Table 3d: Occupational Projections for Occupations Associated with Environmental Health & Safety Job Titles, Southwest Region***continued*

<b>Standard Occupational Classification Title and Code</b>	<b>Estimated Employment 2007</b>	<b>Projected Employment 2014</b>	<b>Total Annual Openings Due to Growth and Replacement</b>	<b>Environmental Health &amp; Safety Job Title</b>	
				Health and Safety Technician Industrial Hygiene Technician Hazardous Waste Technician	
Fire Inspectors & Investigators	33-2021	16	17	6	Fire Management Technician
Recreation Workers	39-9032	145	167	62	Recreation Technician
Operating Engineers & Other Construction Equipment Operators	47-2073	838	1052	498	Solid Waste Landfill Technician
Hazardous Materials Removal Workers	47-4041	0	0	0	Asbestos Abatement Worker/ Supervisor/Inspector Decontamination Technician Lead Abatement Worker/ Supervisor/Inspector Leaking Underground Storage Tank (LUST) Remover Remediation Technician
Earth Drillers, Except Oil & Gas	47-5021	23	23	5	Driller
Industrial Machinery Mechanics	49-9041	401	522	243	Industrial Process Equipment Maintenance and Operations Specialist Maintenance Technician
Stationary Engineers & Boiler Operators	51-8021	29	30	6	Building Control Operator Building Control Technician
Water & Liquid Waste Treatment Plant & System Operators	51-8031	81	101	54	Instrument/Control Technician and Process Operator Equipment and Controls Operator System Technician Treatment, Storage, & Disposal Facility (TSDF) Technician Industrial Waste Treatment Technician On-Site Wastewater Systems Technician Wastewater Treatment Operator Water Supply Technician
Refuse & Recyclable Material Collectors	53-7081	58	66	26	Recycling Technician Solid Waste Technician Waste Transportation Technician
<b>Total</b>		<b>2,431</b>	<b>2,986</b>	<b>1,327</b>	

Table by S. Jones, Wyoming Department of Employment, Research &amp; Planning, 5/29/08.

**Table 3e: Occupational Projections for Occupations Associated with Environmental Health & Safety Job Titles, Casper Metropolitan Statistical Area**

Standard Occupational Classification Title and Code	Estimated Employment 2007	Projected Employment 2014	Total Annual Openings Due to Growth and Replacement	Environmental Health & Safety Job Title
Compliance Officers, Except Agriculture, Construction, Health & Safety, & Transportation 13-1041	33	34	10	Compliance Specialist Regulatory Compliance Information Technician Environmental Compliance Technician Legislative Research Technician Permit Review Assistant
Emergency Management Specialists 13-1061	2	2	0	Emergency Spill Response Technician Emergency Response Technician
Appraisers & Assessors of Real Estate 13-2021	0	0	0	Environmental Property Assessor (for Real Estate Transactions)
Financial Specialists, All Other 13-2099	37	40	12	Cost-Recovery/Investment Recovery Technician
Network & Computer Systems Administrators 15-1071	27	33	13	Environmental Web Crawler
Cartographers & Photogrammetrists 17-1021	6	6	2	Cartography/Mapping Technician GIS Technician
Civil Engineering Technicians 17-3022	14	15	5	Geotechnical Properties Technician
Environmental Engineering Technicians 17-3025	8	9	3	Energy Specialist Green Power Technician Energy Auditor Energy Analyst Air Pollution Auditor Air Quality Technician
Industrial Engineering Technicians 17-3026	0	0	0	Industrial Process Specialist
Surveying & Mapping Technicians 17-3031	13	14	6	Land Survey Technician
Soil & Plant Scientists 19-1013	2	2	0	Terrestrial Ecologist
Market Research Analysts 19-3021	28	34	15	Environmental Marketing Specialist
Biological Technicians 19-4021	0	0	0	Biological/Microbiological Laboratory Technician Botany Technician Fisheries Technician Wildlife Technician
Chemical Technicians 19-4031	70	80	32	Chemistry/Analytical Lab Technician
Geological & Petroleum Technicians 19-4041	131	144	52	Geology Technician Geological Technician
Environmental Science & Protection Technicians, Including Health 19-4091	0	0	0	Measurement and Verification Technician Testing Technician Waste Management Technician

*continued*

**Table 3e: Occupational Projections for Occupations Associated with Environmental Health & Safety Job Titles, Casper Metropolitan Statistical Area***continued*

<b>Standard Occupational Classification Title and Code</b>	<b>Estimated Employment 2007</b>	<b>Projected Employment 2014</b>	<b>Total Annual Openings Due to Growth and Replacement</b>	<b>Environmental Health &amp; Safety Job Title</b>	
				Air Sampling and Monitoring Technician Field Sampling Technician Mobile Lab Technician Waste/Materials Exchange Specialist Hazardous Materials Analyst Sample Prep Technician Solid Waste Analyst Wastewater Analyst Water Analyst Hydrology Technician Process Environmental Technician Radon Inspector Hazardous Materials Technician Infectious Waste Technician Ground Water Technician Surface Water Technician Drinking Water Technician	
Forest & Conservation Technicians	19-4093	30	31	9	Soil Analyst Forestry Technician Range Technician Rare/Endangered Species Specialist Soil Conservation Technician
Life, Physical, & Social Science Technicians, All Other	19-4099	17	18	6	Resource Conservation Aquatic Ecologist Aquatic/Terrestrial Habitat Restoration Technician Ecologist Technician Energy & Conservation Technician Waste Minimization Technician Biosolids Management Technician
Occupational Health & Safety Technicians	29-9012	3	4	2	Facility Environmental Technician Industrial Ecology Technician Health Physics Technician Health and Safety Technician Industrial Hygiene Technician

*continued*

**Table 3e: Occupational Projections for Occupations Associated with Environmental Health & Safety Job Titles, Casper Metropolitan Statistical Area***continued*

Standard Occupational Classification Title and Code		Estimated Employment 2007	Projected Employment 2014	Total Annual Openings Due to Growth and Replacement	Environmental Health & Safety Job Title
					Hazardous Waste Technician
Fire Inspectors & Investigators	33-2021	6	5	2	Fire Management Technician
Recreation Workers	39-9032	24	29	13	Recreation Technician
Operating Engineers & Other Construction Equipment Operators	47-2073	175	208	92	Solid Waste Landfill Technician
Hazardous Materials Removal Workers	47-4041	0	0	0	Asbestos Abatement Worker/Supervisor/ Inspector Decontamination Technician Lead Abatement Worker/ Supervisor/Inspector Leaking Underground Storage Tank (LUST) Remover Remediation Technician
Earth Drillers, Except Oil & Gas	47-5021	59	75	36	Driller
Industrial Machinery Mechanics	49-9041	175	217	97	Industrial Process Equipment Maintenance and Operations Specialist Maintenance Technician
Stationary Engineers & Boiler Operators	51-8021	6	6	1	Building Control Operator Building Control Technician
Water & Liquid Waste Treatment Plant & System Operators	51-8031	58	62	26	Instrument/Control Technician and Process Operator Equipment and Controls Operator System Technician Treatment, Storage, & Disposal Facility (TSDF) Technician Industrial Waste Treatment Technician On-Site Wastewater Systems Technician Wastewater Treatment Operator Water Supply Technician
Refuse & Recyclable Material Collectors	53-7081	28	29	8	Recycling Technician Solid Waste Technician Waste Transportation Technician
<b>Total</b>		<b>1,011</b>	<b>1,164</b>	<b>468</b>	

Table by S. Jones, Wyoming Department of Employment, Research &amp; Planning, 5/29/08.



**Table 3f: Occupational Projections for Occupations Associated with Environmental Health & Safety Job Titles, Cheyenne Metropolitan Statistical Area**

Standard Occupational Classification Title and Code		Estimated Employment 2007	Projected Employment 2014	Total Annual Openings Due to Growth and Replacement	Environmental Health & Safety Job Title
Purchasing Agents, Except Wholesale, Retail, & Farm Products	13-1023	84	94	34	Procurement Technician
Compliance Officers, Except Agriculture, Construction, Health & Safety, & Transportation	13-1041	70	80	30	Compliance Specialist Regulatory Compliance Information Technician Environmental Compliance Technician Legislative Research Technician Permit Review Assistant
Emergency Management Specialists	13-1061	2	3	1	Emergency Spill Response Technician Emergency Response Technician
Appraisers & Assessors of Real Estate	13-2021	48	51	15	Environmental Property Assessor (for Real Estate Transactions)
Financial Specialists, All Other	13-2099	30	35	12	Cost-Recovery/Investment Recovery Technician
Network & Computer Systems Administrators	15-1071	172	208	68	Environmental Web Crawler
Cartographers & Photogrammetrists	17-1021				Cartography/Mapping Technician GIS Technician
		13	14	6	
Civil Engineering Technicians	17-3022	68	88	41	Geotechnical Properties Technician
Environmental Engineering Technicians	17-3025	2	2	0	Energy Specialist Green Power Technician Energy Auditor Energy Analyst Air Pollution Auditor Air Quality Technician
Industrial Engineering Technicians	17-3026	3	4	2	Industrial Process Specialist
Surveying & Mapping Technicians	17-3031	14	16	8	Land Survey Technician
Soil & Plant Scientists	19-1013	7	7	1	Terrestrial Ecologist
Market Research Analysts	19-3021	104	131	62	Environmental Marketing Specialist
Biological Technicians	19-4021	11	12	3	Biological/Microbiological Laboratory Technician Botany Technician Fisheries Technician Wildlife Technician
Chemical Technicians	19-4031	2	2	0	Chemistry/Analytical Lab Technician
Geological & Petroleum Technicians	19-4041	12	13	5	Geology Technician Geological Technician

*continued*

**Table 3f: Occupational Projections for Occupations Associated with Environmental Health & Safety Job Titles, Cheyenne Metropolitan Statistical Area***continued*

<b>Standard Occupational Classification Title and Code</b>	<b>Estimated Employment 2007</b>	<b>Projected Employment 2014</b>	<b>Total Annual Openings Due to Growth and Replacement</b>	<b>Environmental Health &amp; Safety Job Title</b>
Environmental Science & Protection Technicians, Including Health 19-4091	2	2	0	Measurement and Verification Technician Testing Technician Waste Management Technician Air Sampling and Monitoring Technician Field Sampling Technician Mobile Lab Technician Waste/Materials Exchange Specialist Hazardous Materials Analyst Sample Prep Technician Solid Waste Analyst Wastewater Analyst Water Analyst Hydrology Technician Process Environmental Technician Radon Inspector Hazardous Materials Technician Infectious Waste Technician Ground Water Technician Surface Water Technician Drinking Water Technician
Forest & Conservation Technicians 19-4093	11	12	4	Soil Analyst Forestry Technician Range Technician Rare/Endangered Species Specialist Soil Conservation Technician
Life, Physical, & Social Science Technicians, All Other 19-4099	13	14	4	Resource Conservation Aquatic Ecologist Aquatic/Terrestrial Habitat Restoration Technician Ecologist Technician Energy & Conservation Technician Waste Minimization Technician Biosolids Management Technician
Occupational Health & Safety Technicians 29-9012	0	0	0	Facility Environmental Technician Industrial Ecology Technician Health Physics Technician

*continued*

**Table 3f: Occupational Projections for Occupations Associated with Environmental Health & Safety Job Titles, Cheyenne Metropolitan Statistical Area***continued*

<b>Standard Occupational Classification Title and Code</b>	<b>Estimated Employment 2007</b>	<b>Projected Employment 2014</b>	<b>Total Annual Openings Due to Growth and Replacement</b>	<b>Environmental Health &amp; Safety Job Title</b>	
				Health and Safety Technician Industrial Hygiene Technician Hazardous Waste Technician	
Fire Inspectors & Investigators	33-2021	2	2	1	Fire Management Technician
Recreation Workers	39-9032	67	73	24	Recreation Technician
Operating Engineers & Other Construction Equipment Operators	47-2073	275	331	145	Solid Waste Landfill Technician
Hazardous Materials Removal Workers	47-4041	7	8	3	Asbestos Abatement Worker/ Supervisor/Inspector Decontamination Technician Lead Abatement Worker/ Supervisor/Inspector Leaking Underground Storage Tank (LUST) Remover Remediation Technician
Earth Drillers, Except Oil & Gas	47-5021	28	37	18	Driller
Industrial Machinery Mechanics	49-9041	59	67	22	Industrial Process Equipment Maintenance and Operations Specialist Maintenance Technician
Stationary Engineers & Boiler Operators	51-8021	5	5	1	Building Control Operator Building Control Technician
Water & Liquid Waste Treatment Plant & System Operators	51-8031	24	25	10	Instrument/Control Technician and Process Operator Equipment and Controls Operator System Technician Treatment, Storage, & Disposal Facility (TSDF) Technician Industrial Waste Treatment Technician On-Site Wastewater Systems Technician Wastewater Treatment Operator Water Supply Technician
Refuse & Recyclable Material Collectors	53-7081	20	19	5	Recycling Technician Solid Waste Technician Waste Transportation Technician
<b>Total</b>		<b>1,155</b>	<b>1,355</b>	<b>525</b>	

Table by S. Jones, Wyoming Department of Employment, Research &amp; Planning, 5/29/08.

## Industry Employment

Table 4 shows the statewide employment and the estimated percentage of industry employment made up of Environmental Health & Safety (EHS) occupations for 2007 and 2014. For example, NAICS 213000, Support Activities for Mining, is one industry where EHS occupation employment is concentrated. The table shows that the industry is expected to grow from 11,271 in 2007 to 18,000 by 2014. At the same time, EHS occupational employment makes up 435 in 2007 and 689 in 2014, for an increase of 254. The average annual projected need in this industry is 254/7, or 36.2. Other industry needs can be estimated in the same manner.

**Table 4: Estimates of Environmental Health & Safety (EHS) Occupational Employment Within North American Industry Classification System (NAICS) Industries**

NAICS Code	Industry	Title	2007 Estimate	2014 Projection	Annual Change
111000	Crop Production	Industry Employment	472	570	14
112000	Animal Production	Industry Employment	1,654	1,867	30
113000	Forestry & Logging	Industry Employment	83	75	-1
115000	Support Activities for Agriculture	Industry Employment	362	397	5
211000	Oil & Gas Extraction	Industry Employment	3,769	4,708	134
		EHS Occupations	315	391	11
		Percentage of Industry	8.4%	8.3%	8.1%
212000	Mining (except Oil & Gas)	Industry Employment	7,771	8,600	118
		EHS Occupations	1,526	1,689	23
		Percentage of Industry	19.6%	19.6%	19.7%
213000	Support Activities for Mining	Industry Employment	11,271	18,000	961
		EHS Occupations	435	689	36
		Percentage of Industry	3.9%	3.8%	3.8%
221000	Utilities	Industry Employment	2,503	2,819	45
		EHS Occupations	413	463	7
		Percentage of Industry	16.5%	16.4%	15.8%
236000	Construction of Buildings	Industry Employment	4,634	6,000	195
		EHS Occupations	58	74	2
		Percentage of Industry	1.3%	1.2%	1.2%
237000	Heavy & Civil Engineering Construction	Industry Employment	5,831	7,870	291
		EHS Occupations	836	1,124	41
		Percentage of Industry	14.3%	14.3%	14.1%
238000	Specialty Trade Contractors	Industry Employment	10,993	14,034	434
		EHS Occupations	921	1,175	36
		Percentage of Industry	8.4%	8.4%	8.4%
311000	Food Manufacturing	Industry Employment	704	650	-8
		EHS Occupations	77	72	-1
		Percentage of Industry	10.9%	11.1%	9.3%
312000	Beverage & Tobacco Product Manufacturing	Industry Employment	321	363	6
		EHS Occupations	13	15	0
		Percentage of Industry	4.0%	4.1%	4.8%
314000	Textile Product Mills	Industry Employment	104	118	2
315000	Apparel Manufacturing	Industry Employment	54	49	-1

*continued*

**Table 4: Estimates of Environmental Health & Safety (EHS) Occupational Employment Within North American Industry Classification System (NAICS) Industries***continued*

NAICS Code	Industry	Title	2007 Estimate	2014 Projection	Annual Change
316000	Leather & Allied Product Manufacturing	Industry Employment	27	22	-1
321000	Wood Product Manufacturing	Industry Employment	835	840	1
		EHS Occupations	3	3	0
		Percentage of Industry	0.4%	0.4%	0.0%
323000	Printing & Related Support Activities	Industry Employment	398	409	2
324000	Petroleum & Coal Products Manufacturing	Industry Employment	948	1,046	14
		EHS Occupations	117	131	2
		Percentage of Industry	12.3%	12.5%	14.3%
325000	Chemical Manufacturing	Industry Employment	1,511	1,500	-2
		EHS Occupations	78	78	0
		Percentage of Industry	5.2%	5.2%	0.0%
326000	Plastics & Rubber Products Manufacturing	Industry Employment	543	705	23
		EHS Occupations	7	9	0
		Percentage of Industry	1.3%	1.3%	1.2%
327000	Nonmetallic Mineral Product Manufacturing	Industry Employment	924	1,039	16
		EHS Occupations	53	59	1
		Percentage of Industry	5.7%	5.7%	0.7%
332000	Fabricated Metal Product Manufacturing	Industry Employment	1,537	2,082	78
		EHS Occupations	47	63	2
		Percentage of Industry	3.1%	3.0%	2.9%
333000	Machinery Manufacturing	Industry Employment	420	532	16
		EHS Occupations	19	24	1
		Percentage of Industry	4.5%	4.5%	4.5%
334000	Computer & Electronic Product Manufacturing	Industry Employment	312	287	-4
		EHS Occupations	16	15	0
		Percentage of Industry	5.1%	5.2%	4.0%
335000	Electrical Equipment, Appliance, & Component Manufacturing	Industry Employment	160	220	9
		EHS Occupations	2	2	0
		Percentage of Industry	1.3%	0.9%	0.0%
336000	Transportation Equipment Manufacturing	Industry Employment	530	625	14
		EHS Occupations	6	10	0
		Percentage of Industry	1.1%	1.6%	2.1%
337000	Furniture & Related Product Manufacturing	Industry Employment	316	380	9
		EHS Occupations	2	3	0
		Percentage of Industry	0.6%	0.8%	1.6%
339000	Miscellaneous Manufacturing	Industry Employment	201	249	7
		EHS Occupations	2	2	0
		Percentage of Industry	1.0%	0.8%	0.0%
423000	Merchant Wholesalers, Durable Goods	Industry Employment	5,029	6,691	237
		EHS Occupations	158	208	7
		Percentage of Industry	3.1%	3.1%	3.0%
424000	Merchant Wholesalers, Nondurable Goods	Industry Employment	2,607	2,641	5
		EHS Occupations	28	28	0
		Percentage of Industry	1.1%	1.1%	0.0%
425000	Wholesale Electronic Markets & Agents & Brokers	Industry Employment	491	783	42
		EHS Occupations	48	76	4

*continued*

**Table 4: Estimates of Environmental Health & Safety (EHS) Occupational Employment Within North American Industry Classification System (NAICS) Industries***continued*

NAICS Code	Industry	Title	2007 Estimate	2014 Projection	Annual Change
		Percentage of Industry	9.8%	9.7%	9.6%
441000	Motor Vehicle & Parts Dealers	Industry Employment	4,472	5,080	87
		EHS Occupations	19	21	0
		Percentage of Industry	0.4%	0.4%	0.3%
442000	Furniture & Home Furnishings Stores	Industry Employment	816	908	13
		EHS Occupations	4	4	0
		Percentage of Industry	0.5%	0.4%	0.0%
443000	Electronics & Appliance Stores	Industry Employment	759	900	20
		EHS Occupations	12	14	0
		Percentage of Industry	1.6%	1.6%	1.4%
444000	Building Material & Garden Equipment & Supplies Dealers	Industry Employment	2,697	3,332	91
444000	Building Material & Garden Equipment & Supplies Dealers	EHS Occupations	4	5	0
		Percentage of Industry	0.1%	0.2%	0.2%
445000	Food & Beverage Stores	Industry Employment	4,501	4,133	-53
445000	Food & Beverage Stores	EHS Occupations	2	2	0
		Percentage of Industry	0.0%	0.0%	0.0%
446000	Health & Personal Care Stores	Industry Employment	998	1,248	36
		EHS Occupations	3	3	0
		Percentage of Industry	0.3%	0.2%	0.0%
447000	Gasoline Stations	Industry Employment	4,207	4,204	0
448000	Clothing & Clothing Accessories Stores	Industry Employment	1,521	1,605	12
451000	Sporting Goods, Hobby, Book, & Music Stores	Industry Employment	1,359	1,537	25
		EHS Occupations	4	5	0
		Percentage of Industry	0.3%	0.3%	0.6%
452000	General Merchandise Stores	Industry Employment	6,288	7,495	172
		EHS Occupations	17	20	0
		Percentage of Industry	0.3%	0.3%	0.2%
453000	Miscellaneous Store Retailers	Industry Employment	1,948	2,126	25
454000	Nonstore Retailers	Industry Employment	1,611	1,900	41
		EHS Occupations	15	18	0
		Percentage of Industry	0.9%	0.9%	1.0%
484000	Truck Transportation	Industry Employment	3,761	4,459	100
		EHS Occupations	67	79	2
		Percentage of Industry	1.8%	1.8%	1.7%
485000	Transit & Ground Passenger Transportation	Industry Employment	639	815	25
486000	Pipeline Transportation	Industry Employment	646	746	14
		EHS Occupations	110	127	2
		Percentage of Industry	17.0%	17.0%	17.0%
487000	Scenic & Sight Seeing Transportation	Industry Employment	29	30	0
488000	Support Activities for Transportation	Industry Employment	1,010	1,212	29
		EHS Occupations	2	2	0
		Percentage of Industry	0.2%	0.2%	0.0%
492000	Couriers & Messengers	Industry Employment	746	855	16
511000	Publishing Industries	Industry Employment	1,348	1,456	15
		EHS Occupations	8	8	0

*continued*

**Table 4: Estimates of Environmental Health & Safety (EHS) Occupational Employment Within North American Industry Classification System (NAICS) Industries***continued*

NAICS Code	Industry	Title	2007 Estimate	2014 Projection	Annual Change
		Percentage of Industry	0.6%	0.5%	0.0%
512000	Motion Picture & Sound Recording Industries	Industry Employment	476	580	15
		EHS Occupations	5	6	0
		Percentage of Industry	1.1%	1.0%	1.0%
515000	Broadcasting (except Internet)	Industry Employment	572	545	-4
		EHS Occupations	4	4	0
		Percentage of Industry	0.7%	0.7%	0.0%
517000	Telecommunications	Industry Employment	1,445	1,500	8
		EHS Occupations	39	41	0
		Percentage of Industry	2.7%	2.7%	3.6%
518000	Internet Service Providers, Web Search Portals, & Data Processing Services	Industry Employment	595	751	22
		EHS Occupations	31	38	1
		Percentage of Industry	5.2%	5.1%	4.5%
519000	Other Information Services	Industry Employment	672	751	11
522000	Credit Intermediation & Related Activities	Industry Employment	4,698	5,200	72
		EHS Occupations	110	122	2
		Percentage of Industry	2.3%	2.3%	2.4%
523000	Securities, Commodity Contracts, & Other Financial Investments & Related Activities	Industry Employment	445	523	11
		EHS Occupations	30	35	1
		Percentage of Industry	6.7%	6.7%	6.4%
524000	Insurance Carriers & Related Activities	Industry Employment	2,019	2,214	28
		EHS Occupations	42	45	0
		Percentage of Industry	2.1%	2.0%	1.5%
531000	Real Estate	Industry Employment	2,010	2,423	59
		EHS Occupations	80	96	2
		Percentage of Industry	4.0%	4.0%	3.9%
532000	Rental & Leasing Services	Industry Employment	2,073	3,000	132
		EHS Occupations	189	271	12
		Percentage of Industry	9.1%	9.0%	8.8%
541000	Professional, Scientific, & Technical Services	Industry Employment	8,797	11,000	315
		EHS Occupations	786	977	27
		Percentage of Industry	8.9%	8.9%	8.7%
551000	Management of Companies & Enterprises	Industry Employment	808	932	18
		EHS Occupations	38	41	0
		Percentage of Industry	4.7%	4.4%	2.4%
561000	Administrative & Support Services	Industry Employment	6,935	8,400	209
		EHS Occupations	81	96	2
		Percentage of Industry	1.2%	1.1%	1.0%
562000	Waste Management & Remediation Service	Industry Employment	621	799	25
		EHS Occupations	138	177	6
		Percentage of Industry	22.2%	22.2%	21.9%
611000	Educational Services	Industry Employment	26,871	28,947	297
		EHS Occupations	319	342	3
		Percentage of Industry	1.2%	1.2%	1.1%
621000	Ambulatory Health Care Services	Industry Employment	8,322	10,139	260
		EHS Occupations	14	15	0

*continued*

**Table 4: Estimates of Environmental Health & Safety (EHS) Occupational Employment Within North American Industry Classification System (NAICS) Industries***continued*

NAICS Code	Industry	Title	2007 Estimate	2014 Projection	Annual Change
		Percentage of Industry	0.2%	0.1%	0.1%
622000	Hospitals	Industry Employment	10,203	11,468	181
		EHS Occupations	76	89	2
		Percentage of Industry	0.7%	0.8%	1.0%
623000	Nursing & Residential Care Facilities	Industry Employment	5,868	7,776	273
		EHS Occupations	121	160	6
		Percentage of Industry	2.1%	2.1%	2.0%
624000	Social Assistance	Industry Employment	5,738	6,966	175
		EHS Occupations	60	72	2
		Percentage of Industry	1.0%	1.0%	1.0%
711000	Performing Arts, Spectator Sports, & Related Industries	Industry Employment	413	516	15
		EHS Occupations	17	20	0
		Percentage of Industry	4.1%	3.9%	2.9%
712000	Museums, Historical Sites, & Similar Institutions	Industry Employment	1,287	1,400	16
		EHS Occupations	18	18	0
		Percentage of Industry	1.4%	1.3%	0.0%
713000	Amusement, Gambling, & Recreation Industries	Industry Employment	2,193	2,700	72
		EHS Occupations	51	63	2
		Percentage of Industry	2.3%	2.3%	2.4%
721000	Accommodation	Industry Employment	11,380	13,000	231
		EHS Occupations	131	149	3
		Percentage of Industry	1.2%	1.1%	1.1%
722000	Food Services & Drinking Places	Industry Employment	19,029	21,039	287
811000	Repair & Maintenance	Industry Employment	3,461	4,057	85
		EHS Occupations	200	234	5
		Percentage of Industry	5.8%	5.8%	5.7%
812000	Personal & Laundry Services	Industry Employment	1,921	2,100	26
		EHS Occupations	32	36	1
		Percentage of Industry	1.7%	1.7%	2.2%
813000	Religious, Grantmaking, Civic, Professional, & Similar Organizations	Industry Employment	2,492	2,731	34
		EHS Occupations	62	67	1
		Percentage of Industry	2.5%	2.5%	2.1%
814000	Private Households	Industry Employment	511	559	7
999100	Federal Government	Industry Employment	3,922	3,900	-3
		EHS Occupations	702	696	-1
		Percentage of Industry	17.9%	17.8%	27.3%
999200	State Government, Excluding Education & Hospitals	Industry Employment	8,424	9,246	117
		EHS Occupations	238	260	3
		Percentage of Industry	2.8%	2.8%	2.7%
999300	Local Government, Excluding Education & Hospitals	Industry Employment	10,825	12,000	168
		EHS Occupations	1,248	1,380	19
		Percentage of Industry	11.5%	11.5%	11.2%
999400	All Other Industries	Industry Employment	3,315	4,545	176

Table by D. Leonard, Wyoming Department of Employment, Research &amp; Planning, 5/28/08.



Table 5 illustrates the substate employment projections by industry roll-ups for the 2004-2014 period. For example, Support Activities for Mining (North American Industry Classification System [NAICS] 213000; see Table 4, page 28) is part of the Mining industry roll-up. The table for the northeast region of the state indicates that its employment is expected to grow from 6,924 in 2004 to 11,750 in 2014, or 4,826 jobs. The average annual need in this region is estimated to be 4,826/10, or approximately 483. These data can provide guidance as to where Environmental Health & Safety occupational demand may be concentrated within the state.

**Table 5: Wyoming Employment Projections by Substate Area**

**Central Southeast Region Long-Term Employment Projections, Industry Roll-Ups, 2004-2014**

**Albany, Carbon, Platte, Goshen, Converse, and Niobrara Counties**

North American Industry Classification System		2004	2014	Employment	Average Annual
Code	Title	Employment	Employment	Change	Compound
				2004-2014	Rate of Change
					2004-2014
11	Agriculture, Forestry, Fishing & Hunting	669	865	196	2.6%
21	Mining	867	1,248	381	3.7%
23	Construction	1,909	2,580	671	3.1%
31-33	Manufacturing	1,414	1,429	15	0.1%
42, 48-49, 22	Wholesale Trade, Transportation, & Utilities	2,031	2,472	441	2.0%
44-45	Retail Trade	4,003	4,239	236	0.6%
51	Information	625	611	-14	-0.2%
52-53	Financial Activities	1,327	1,642	315	2.2%
54-56	Professional & Business Services	1,679	2,249	570	3.0%
61-62	Education & Health Care	12,105	13,506	1,401	1.1%
71-72	Leisure & Hospitality	4,165	4,518	353	0.8%
81	Other Services	1,164	1,331	167	1.3%
90	Government (Includes Postal Service)	3,730	4,299	569	1.4%
<b>Total</b>		<b>35,688</b>	<b>40,989</b>	<b>5,301</b>	<b>1.4%</b>

*continued*

**Table 5: Wyoming Employment Projections by Substate Area**  
*continued***Northeast Region Long-Term Employment Projections, Industry Roll-Ups, 2004-2014**  
**Sheridan, Johnson, Campbell, Crook, and Weston Counties**

North American Industry Classification System		2004	2014	Employment	Average Annual
Code	Title	Employment	Employment	Change	Compound
				2004-2014	Rate of Change
					2004-2014
11	Agriculture, Forestry, Fishing & Hunting	426	515	89	1.9%
21	Mining	6,924	11,750	4,826	5.4%
23	Construction	3,649	6,330	2,681	5.7%
31-33	Manufacturing	1,257	1,630	373	2.6%
42, 48-49, 22	Wholesale Trade, Transportation, & Utilities	3,090	4,706	1,616	4.3%
44-45	Retail Trade	4,316	5,239	923	2.0%
51	Information	605	685	80	1.2%
52-53	Financial Activities	1,381	1,818	437	2.8%
54-56	Professional & Business Services	2,304	3,796	1,492	5.1%
61-62	Education & Health Care	7,879	9,652	1,773	2.1%
71-72	Leisure & Hospitality	4,212	5,090	878	1.9%
81	Other Services	1,517	1,755	238	1.5%
90	Government (Includes Postal Service)	2,946	3,292	346	1.1%
<b>Total</b>		<b>40,506</b>	<b>56,258</b>	<b>15,752</b>	<b>3.3%</b>

**Northwest Region Long-Term Employment Projections, Industry Roll-Ups, 2004-2014**  
**Park, Big Horn, Washakie, Hot Springs, and Fremont Counties**

North American Industry Classification System		2004	2014	Employment	Average Annual
Code	Title	Employment	Employment	Change	Compound
				2004-2014	Rate of Change
					2004-2014
11	Agriculture, Forestry, Fishing & Hunting	759	883	124	1.5%
21	Mining	1,966	2,634	668	3.0%
23	Construction	2,669	3,624	955	3.1%
31-33	Manufacturing	1,701	1,794	93	0.5%
42, 48-49, 22	Wholesale Trade, Transportation, & Utilities	1,911	2,151	240	1.2%
44-45	Retail Trade	4,492	5,211	719	1.5%
51	Information	815	989	174	2.0%
52-53	Financial Activities	1,438	1,784	346	2.2%
54-56	Professional & Business Services	1,383	1,874	491	3.1%
61-62	Education & Health Care	9,628	11,270	1,642	1.6%
71-72	Leisure & Hospitality	5,515	6,660	1,145	1.9%
81	Other Services	1,011	1,135	124	1.2%
90	Government (Includes Postal Service)	4,046	4,483	437	1.0%
<b>Total</b>		<b>37,334</b>	<b>44,492</b>	<b>7,158</b>	<b>1.8%</b>

*continued*

**Table 5: Wyoming Employment Projections by Substate Area***continued***Southwest Region Long-Term Employment Projections, Industry Roll-Ups, 2004-2014****Sweetwater, Uinta, Lincoln, Sublette, and Teton Counties**

North American Industry Classification System		2004	2014	Employment	Average Annual
Code	Title	Employment	Employment	Change	Compound
				2004-2014	Rate of Change
					2004-2014
11	Agriculture, Forestry, Fishing & Hunting	226	257	31	1.3%
21	Mining	5,997	10,518	4,521	5.8%
23	Construction	5,683	7,929	2,246	3.4%
31-33	Manufacturing	1,975	2,168	193	0.9%
42, 48-49, 22	Wholesale Trade, Transportation, & Utilities	3,373	4,899	1,526	3.8%
44-45	Retail Trade	6,429	7,358	929	1.4%
51	Information	1,179	1,381	202	1.6%
52-53	Financial Activities	2,078	2,918	840	3.5%
54-56	Professional & Business Services	3,502	4,972	1,470	3.6%
61-62	Education & Health Care	8,958	10,720	1,762	1.8%
71-72	Leisure & Hospitality	10,203	12,242	2,039	1.8%
81	Other Services	1,370	1,693	323	2.1%
90	Government (Includes Postal Service)	3,808	4,523	715	1.7%
<b>Total</b>		<b>54,781</b>	<b>71,578</b>	<b>16,797</b>	<b>2.7%</b>

**Casper Metropolitan Statistical Area Long-Term Employment Projections, Industry Roll-Ups, 2004-2014****Natrona County**

North American Industry Classification System		2004	2014	Employment	Average Annual
Code	Title	Employment	Employment	Change	Compound
				2004-2014	Rate of Change
					2004-2014
11	Agriculture, Forestry, Fishing & Hunting	111	145	34	2.7%
21	Mining	2,967	4,297	1,330	3.8%
23	Construction	2,402	3,297	895	3.2%
31-33	Manufacturing	1,609	1,973	364	2.1%
42, 48-49, 22	Wholesale Trade, Transportation, & Utilities	3,464	4,547	1,083	2.8%
44-45	Retail Trade	4,819	5,700	881	1.7%
51	Information	616	629	13	0.2%
52-53	Financial Activities	1,884	2,414	530	2.5%
54-56	Professional & Business Services	2,936	3,779	843	2.6%
61-62	Education & Health Care	7,166	9,240	2,074	2.6%
71-72	Leisure & Hospitality	3,489	4,462	973	2.5%
81	Other Services	1,340	1,553	213	1.5%
90	Government (Includes Postal Service)	2,467	2,622	155	0.6%
<b>Total</b>		<b>35,270</b>	<b>44,658</b>	<b>9,388</b>	<b>2.4%</b>

*continued*

**Table 5: Wyoming Employment Projections by Substate Area**  
*continued***Cheyenne Metropolitan Statistical Area Long-Term Employment Projections, Industry Roll-Ups, 2004-2014**  
**Laramie County**

<b>North American Industry Classification System</b>		<b>2004</b>	<b>2014</b>	<b>Employment</b>	<b>Average Annual</b>
<b>Code</b>	<b>Title</b>	<b>Employment</b>	<b>Employment</b>	<b>Change</b>	<b>Compound</b>
				<b>2004-2014</b>	<b>Rate of Change</b>
					<b>2004-2014</b>
11	Agriculture, Forestry, Fishing & Hunting	162	208	46	2.5%
21	Mining	75	95	20	2.4%
23	Construction	2,603	3,847	1,244	4.0%
31-33	Manufacturing	1,571	1,984	413	2.4%
42, 48-49, 22	Wholesale Trade, Transportation, & Utilities	2,458	3,378	920	3.2%
44-45	Retail Trade	5,540	6,506	966	1.6%
51	Information	1,079	1,212	133	1.2%
52-53	Financial Activities	2,032	2,300	268	1.2%
54-56	Professional & Business Services	3,346	4,339	993	2.6%
61-62	Education & Health Care	8,054	10,473	2,419	2.7%
71-72	Leisure & Hospitality	4,482	5,338	856	1.8%
81	Other Services	1,464	1,680	216	1.4%
90	Government (Includes Postal Service)	6,749	7,266	517	0.7%
<b>Total</b>		<b>39,615</b>	<b>48,626</b>	<b>9,011</b>	<b>2.1%</b>

Table by D. Leonard, Wyoming Department of Employment, Research &amp; Planning, 5/28/08.

## Knowledge, Skills, and Abilities

Using data provided by O\*Net (<http://www.onetcenter.org>), the Environmental Health & Safety job titles (see Table 1, page 4) were matched to associated Knowledge, Skills, and Abilities. Table 6 lists the 15 most important for all of the occupations. Detailed data are available at:

- <http://doe.state.wy.us/LMI/career/knowledge.pdf>
- <http://doe.state.wy.us/LMI/career/skills.pdf>
- <http://doe.state.wy.us/LMI/career/abilities.pdf>

**Table 6: Top 15 Most Important Standard Knowledge, Skills, and Abilities Required for Occupations Associated with Environmental Health & Safety Job Titles**

Ranking	Knowledge	Skills	Abilities
1	Mathematics	Information Gathering	Near Vision
2	English Language	Reading Comprehension	Written Comprehension
3	Mechanical	Mathematics	Information Ordering
4	Engineering and Technology	Problem Identification	Problem Sensitivity
5	Chemistry	Writing	Oral Comprehension
6	Computers and Electronics	Information Organization	Written Expression
7	Physics	Critical Thinking	Oral Expression
8	Public Safety and Security	Science	Deductive Reasoning
9	Administration and Management	Product Inspection	Inductive Reasoning
10	Clerical	Active Listening	Number Facility
11	Production and Processing	Judgment and Decision Making	Mathematical Reasoning
12	Law, Government and Jurisprudence	Speaking	Control Precision
13	Communications and Media	Equipment Selection	Speech Clarity
14	Geography	Solution Appraisal	Manual Dexterity
15	Design	Active Learning	Category Flexibility

Source: <http://www.onetcenter.org>.

Table by S. Jones, Wyoming Department of Employment, Research & Planning, 5/29/08.

## Education

Table 7 matches Bureau of Labor Statistics (BLS) provided education levels associated with the Environmental Health & Safety job titles. Required education is provided based on Standard Occupational Classification (SOC) codes, so it is likely that associated job titles have the same requirements. For example, because SOC 19-4021 – Biological Technicians requires an associate degree, it is likely that Biological/Microbiological Laboratory Technicians, Botany Technicians, Fisheries Technicians, and Wildlife Technicians also require an associate degree.

**Table 7: Bureau of Labor Statistics-Provided Required Education Level for Occupations Associated with Environmental Health & Safety Job Titles**

Standard Occupational Classification Code and Title		Required Education Level	Associated Central Wyoming College Job Titles
13-1023	Purchasing Agents, Except Wholesale, Retail, & Farm Products	Work experience in a related occupation	Procurement Technician
13-1041	Compliance Officers, Except Agriculture, Construction, Health & Safety, & Transportation	Long-term on-the-job training	Compliance Specialist Regulatory Compliance Information Technician Environmental Compliance Technician Legislative Research Technician Permit Review Assistant
13-1061	Emergency Management Specialists	Work experience in a related occupation	Emergency Spill Response Technician Emergency Response Technician
13-2021	Appraisers & Assessors of Real Estate	Postsecondary vocational training	Environmental Property Assessor (for Real Estate Transactions)
13-2099	Financial Specialists, All Other	Bachelor's degree	Cost-Recovery/Investment Recovery Technician
15-1071	Network & Computer Systems Administrators	Bachelor's degree	Environmental Web Crawler
17-1021	Cartographers & Photogrammetrists	Bachelor's degree	Cartography/Mapping Technician GIS Technician
17-3022	Civil Engineering Technicians	Associate degree	Geotechnical Properties Technician
17-3025	Environmental Engineering Technicians	Associate degree	Energy Specialist Green Power Technician Energy Auditor Energy Analyst Air Pollution Auditor Air Quality Technician
17-3026	Industrial Engineering Technicians	Associate degree	Industrial Process Specialist
17-3031	Surveying & Mapping Technicians	Moderate-term on-the-job training	Land Survey Technician
19-1013	Soil & Plant Scientists	Bachelor's degree	Terrestrial Ecologist
19-3021	Market Research Analysts	Bachelor's degree	Environmental Marketing Specialist

*continued*

**Table 7: Bureau of Labor Statistics-Provided Required Education Level for Occupations Associated with Environmental Health & Safety Job Titles***continued*

<b>Standard Occupational Classification Code and Title</b>		<b>Required Education Level</b>	<b>Associated Central Wyoming College Job Titles</b>
19-4021	Biological Technicians	Associate degree	Biological/Microbiological Laboratory Technician Botany Technician Fisheries Technician Wildlife Technician
19-4031	Chemical Technicians	Associate degree	Chemistry/Analytical Lab Technician
19-4041	Geological & Petroleum Technicians	Associate degree	Geology Technician Geological Technician
19-4091	Environmental Science & Protection Technicians, Including Health	Associate degree	Measurement and Verification Technician Testing Technician Waste Management Technician Air Sampling and Monitoring Technician Field Sampling Technician Mobile Lab Technician Waste/Materials Exchange Specialist Hazardous Materials Analyst Sample Prep Technician Solid Waste Analyst Wastewater Analyst Water Analyst Hydrology Technician Process Environmental Technician Radon Inspector Hazardous Materials Technician Infectious Waste Technician Ground Water Technician Surface Water Technician Drinking Water Technician
19-4093	Forest & Conservation Technicians	Associate degree	Soil Analyst Forestry Technician Range Technician Rare/Endangered Species Specialist Soil Conservation Technician
19-4099	Life, Physical, & Social Science Technicians, All Other	Associate degree	Resource Conservation Aquatic Ecologist Aquatic/Terrestrial Habitat Restoration Technician Ecologist Technician Energy & Conservation Technician Waste Minimization Technician Biosolids Management Technician
29-9012	Occupational Health & Safety Technicians	Postsecondary vocational training	Facility Environmental Technician Industrial Ecology Technician

*continued*

**Table 7: Bureau of Labor Statistics-Provided Required Education Level for Occupations Associated with Environmental Health & Safety Job Titles***continued*

<b>Standard Occupational Classification Code and Title</b>		<b>Required Education Level</b>	<b>Associated Central Wyoming College Job Titles</b>
			Health Physics Technician Health and Safety Technician Industrial Hygiene Technician Hazardous Waste Technician
33-2021	Fire Inspectors & Investigators	Work experience in a related occupation	Fire Management Technician
39-9032	Recreation Workers	Short-term on-the-job training	Recreation Technician
47-2073	Operating Engineers & Other Construction Equipment Operators	Moderate-term on-the-job training	Solid Waste Landfill Technician
47-4041	Hazardous Materials Removal Workers	Moderate-term on-the-job training	Asbestos Abatement Worker/Supervisor/Inspector  Decontamination Technician Lead Abatement Worker/Supervisor/Inspector Leaking Underground Storage Tank (LUST) Remover Remediation Technician
47-5021	Earth Drillers, Except Oil & Gas	Moderate-term on-the-job training	Driller
49-9041	Industrial Machinery Mechanics	Long-term on-the-job training	Industrial Process Equipment Maintenance and Operations Specialist Maintenance Technician
51-8021	Stationary Engineers & Boiler Operators	Long-term on-the-job training	Building Control Operator  Building Control Technician
51-8031	Water & Liquid Waste Treatment Plant & System Operators	Long-term on-the-job training	Instrument/Control Technician and Process Operator  Equipment and Controls Operator System Technician Treatment, Storage, & Disposal Facility (TSDF) Technician Industrial Waste Treatment Technician On-Site Wastewater Systems Technician Wastewater Treatment Operator Water Supply Technician
53-7081	Refuse & Recyclable Material Collectors	Short-term on-the-job training	Recycling Technician  Solid Waste Technician Waste Transportation Technician

Table by S. Jones, Wyoming Department of Employment, Research &amp; Planning, May 29, 2008



## Licensed Occupations

Like the projections for Environmental Health & Safety (EHS) job titles (see Table 1, page 4), it is important to note that the EHS job titles do not conform perfectly to the associated SOC occupation. As such, although there are three SOC matched occupations which require a state-issued license, only two are likely to be relevant for EHS jobs. Specifically, Environmental Property Assessor (for real estate transactions) is matched to SOC 13-2021 – Appraisers & Assessors of Real Estate, so a person working in that capacity will require a state license. SOC 51-8031 – Water and Liquid Waste Treatment Plant & System Operators require a state license so it is likely that several of the associated job titles also require a license. Alternatively, Facility Environmental Technicians, Industrial Ecology Technicians, Health Physics Technicians, Health and Safety Technicians, Industrial Hygiene Technicians, and Hazardous Waste Technicians are all classified as SOC 29-9012 – Occupational Health & Safety Technicians. In addition, Mine Examiners, which require a state license, are classified as Occupational Health & Safety Technicians. The job titles share the SOC code but it is unlikely that any will require licensure. Detailed information on license occupation requirements are available at [http://doe.state.wy.us/LMI/DIR\\_LIC/toc.htm](http://doe.state.wy.us/LMI/DIR_LIC/toc.htm).