

**MARKET ANALYSIS
BROADBAND PAY PLAN
ENVIRONMENTAL SCIENCE SPECIALIST**

Reviewed: March 2004

Note: This market analysis is not meant to be a "stand alone" document. Users can find explanatory documents in the *!ReadMe* Directory on the MINE intranet site under *Market Analyses by Class*. These explain the intended use of market analyses and how the information and analyses were produced.

SOC: Environmental Scientists and Specialists Including Health 19-2041
O*Net Environmental Scientists and Specialists Including Health 19-2041.00

Current Broadband Plan Classes:

192415	EnvironmentalScienceSpc	5
192416	EnvironmentalScienceSpc	6
192417	EnvironmentalScienceSpc	7

I. SUMMARY ANALYSIS

Classification level 6 is used for applying survey data and for extending survey rates to other levels in the class series (see section III). The following table shows survey data considered in determining a market rate. Details on survey data are provided in sections IV-VI of this document.

CSCA Four State Govts.	\$37,607	
OES MT	\$42,525	
Watson-Wyatt	No Match	
OES US	\$47,600	\$40,460
Average (except CSCA)		\$41,493

The four surrounding state governments consistently show lower salary averages than other survey sources. State governments might offer paid benefits and job conditions that compensate for lower salaries. The CSCA salary in this case is so much lower than other sources it is not considered a valid reflection of the market and is not included in determination of this market rate.

Absent a more in-depth study of job matching, total compensation and rewards, and other variables in relation to each survey source, a reasonable market rate appears to be **\$41,500**. This amount is the rounded average of the OES MT, and the OES US adjusted national rate.

The following table shows pay ranges based on a \$41,500 market rate at level 6, a 20% midpoint progression, and a 50% range width.

Pay Band	Minimum	Market	Maximum
5	\$27,667	\$34,583	\$41,500
6	\$33,200	\$41,500	\$49,800
7	\$39,840	\$49,800	\$59,760

II. OCCUPATIONAL CLASS STANDARDS

Positions with this title are classified using O*Net standards (Occupational Information System). These standards are copied below for immediate reference. All tasks and conditions listed in the O*Net summary description and task list need not apply to the position being classified for the class to be considered an appropriate match. Additional information such as Skills, Knowledge, Abilities, Interests, Work Values, Work Context, and Work Activities for this occupational title can be found on the O*Net web site at: <http://online.onetcenter.org/report?r=0&id=155>.

Summary Report for:

19-2041.00 - Environmental Scientists and Specialists, Including Health

Conduct research or perform investigation for the purpose of identifying, abating, or eliminating sources of pollutants or hazards that affect either the environment or the health of the population. Utilizing knowledge of various scientific disciplines may collect, synthesize, study, report, and take action based on data derived from measurements or observations of air, food, soil, water, and other sources.

Tasks

- Analyze data to determine validity, quality, and scientific significance, and to interpret correlations between human activities and environmental effects.
- Collect, synthesize, and analyze data derived from pollution emission measurements, atmospheric monitoring, meteorological and mineralogical information, and soil or water samples.
- Conduct environmental audits and inspections, and investigations of violations.
- Design and direct studies to obtain technical environmental information about planned projects.
- Determine data collection methods to be employed in research projects and surveys.
- Develop methods to minimize the impact of production processes on the environment, based on the study and assessment of industrial production, environmental legislation, and physical, biological, and social environments.
- Evaluate violations or problems discovered during inspections in order to determine appropriate regulatory actions or to provide advice on the development and prosecution of regulatory cases.
- Investigate and report on accidents affecting the environment.

- Monitor effects of pollution and land degradation, and recommend means of prevention or control.
- Monitor environmental impacts of development activities.

III. CHOOSING THE CLASSIFICATION LEVEL FOR APPLYING SURVEY DATA

Classification Level 6 has been chosen as the appropriate level for applying survey data for this class based on comparison to BLS and O*Net ratings. These ratings as shown in the following tables are comparable to the typical education and experience parameters for classification level 6.

Classification Level Six

Work involves the application of the principles and practices of a professional field to diverse assignments in which conflict situations, ambiguous concepts or divergent views are typical. Work requires developing policies, new methods or techniques to resolve sensitive problems through individualized solutions to recurring problems or situations, based on data that is complicated and intricate. Plans or designs must be oriented to complex or uncommon sites, circumstances or natural resource features. Plans and approaches are based upon extensive information, or numerous variables and include determining the relative importance, and value of the data or variables. Modification and testing applications of known and accepted processes to new applications involves diverse parameters and work includes testing for soundness of approach. Work requires demonstrated skill and professional knowledge of a breadth of issues associated with an occupation applicable to complex and/or diverse assignments.

Typical Education and Experience:

The required knowledge and skills are typically acquired through the completion of a Bachelor degree and 2-5 years related experience, or Master degree and 0-3 years experience, or a Juris Doctorate degree and 0-2 years of experience.

19-2041.00	Environmental Scientists and Specialists, Including Health	SOC	5	Job Zone Five: Extensive Preparation Needed	5	Bachelor's degree

Bachelor's degree: at least 4 years but not more than 5 years FTE academic work	5

Job Zone

Title Job Zone Five: Extensive Preparation Needed

Overall Experience Extensive skill, knowledge, and experience are needed for these occupations. Many require more than five years of experience. For example, surgeons must complete four years of college and an additional five to seven years of specialized medical training to be able to do their job.

Job Training Employees may need some on-the-job training, but most of these occupations assume that the person will already have the required skills, knowledge, work-related experience, and/or training.

Job Zone Examples These occupations often involve coordinating, training, supervising, or managing the activities of others to accomplish goals. Very advanced communication and organizational skills are required. Examples include athletic trainers, lawyers, managing editors, physicists, social psychologists, and surgeons.

SVP Range (8.0 and above)

Education A bachelor's degree is the minimum formal education required for these occupations. However, many also require graduate school. For example, they may require a master's degree, and some require a Ph.D., M.D., or J.D. (law degree).

IV. 2002 OCCUPATIONAL EMPLOYMENT STATISTICS SURVEY (OES)

Description: Conduct research or perform investigation for the purpose of identifying, abating, or eliminating sources of pollutants or hazards that affect either the environment or the health of the population. Utilizing knowledge of various scientific disciplines may collect, synthesize, study, report, and take action based on data derived from measurements or observations of air, food, soil, water, and other sources. Exclude "Zoologists and Wildlife Biologists", "Conservation Scientists", "Forest and Conservation Technicians", "Fish and Game Wardens", and "Forest and Conservation Workers".

Wages: Environmental Scientists and Specialists, Including Health

Location	2002									
	10%		25%		Median		75%		90%	
	hourly	annual								
United States	\$14.39	\$29,900	\$17.70	\$36,800	\$22.88	\$47,600	\$30.00	\$62,400	\$37.60	\$78,200
Montana	\$14.91	\$31,000	\$16.75	\$34,800	\$19.82	\$41,200	\$27.14	\$56,500	\$42.13	\$87,600

The Montana median is .87 of the national median and is ranked forty-third of the fifty-two states (including the District of Columbia and Puerto Rico). Montana wages for most occupations are significantly lower than national wages.

Montana state government salary data has in many cases a significant impact on MT OES reported wages. MT OES data for this title without state government is reported in the following table. Since

state government's analysis of the MT market should be of the remainder of the MT market absent state government, the rate from the following table is used in determining a market rate.

OFS MT - No State Government Data Included		
19-2041	Environmental Scientists and Specialists, Including Health	\$42,525

V. CSCA SURVEY 2003 – FOUR STATE DATA (ID, ND, SD, WY)

7100 ENVIRONMENTAL SPECIALIST I

This is journey-level technical work in the administration of a state environmental control or environmental health program. An employee in this class participates in the investigation and evaluation of the more routine problems that may affect the environment and/or impact on the public health. Work includes the monitoring of water and air pollution sources, inspecting of water supply, wastewater and solid and hazardous waste treatment facilities, the preparing of inspection reports, and the investigating of complaints concerning pollution problems or possible health hazards. The employee generally works in one or more of the following disciplines: air quality, water quality, land reclamation, soil and water conservation, solid waste, hazardous waste, water supply or environmental health.

Since this survey benchmark is described as a journey level environmental specialist it is matched to classification level 6.

7100	Scientist 3	19	43,503	ID
7100	ENVIRON SCIENTIST II (5272)	41	32,703	ND
7100	Environmental Scientist	15	31,782	SD
7100	Environmental Analyst (SC28)	17	42,438	WY
Average			37,607	

VI. WATSON-WYATT SURVEY 2003

There is no matching information available in Watson-Wyatt.