Environmental Management Specialist

Job Description

Environmental specialists use their knowledge of natural sciences to protect and improve the environment. The scope of work for this is very large, from soil analysis to stormwater pollution to waste reduction plans. They also improve human health by preserving the environment.

Core Tasks

- Collect and analyze samples
- Conduct research where appropriate
- Monitor facilities that have a potential impact on the environment and human health
- Work with companies/clients to implement waste pollution reduction plans
- Evaluate environmental health issues and the major contributors
- Clean up polluted sites

Workplace / Environment

- **Work hours**
  Approx. 40 hours/week
  (At key milestones overtime work may be required to meet deadlines)

- **Environment**
  Frequent Communication with teams
  Meetings with Clients and local jurisdictions
  Office and Construction Sites are most common

- **Travel**
  Varies between companies, travel is common with design build construction

Education / Prerequisites

**Education Level**

Bachelor’s degree in a physical science, biological science, environmental science/engineering, occupational safety or related

**Licensing**

Varies by state and employer, Usually specified if required

**Pre-Job Preparation**

Advanced courses in STEM, and intern experience are extremely helpful

Experience

**Soft skills**

- Organization
- Communication
- Project Management
- Analytical skills
- Ability to work indoors and outdoors

**Technical skills**

- Understanding of local, state, and federal regulations
- Knowledge in water, environment, or agricultural planning/development/management

Salary

- **Entry** – $38,640
- **Middle** – $71,130
- **Top** – $80,890
High School Life

“In high school, I learned that around 2 million people a year die from waterborne diseases. I was so shocked, and this was really impactful to me. I learned about the global water crisis in an AP Environmental Science class, and I am thankful that I went to a school that had that; we didn’t have a lot of AP classes.”

College Choices

“My parents didn’t go to college, but my family values education, and they knew it was important to prioritize it. I loved school, wanted to go to college, and was thankful to financial aid that allowed me to attend Northwestern University.”

“I was grateful that I left California because it helped me build a greater appreciation for different ways of life and different challenges that people face, for example, farmers in the Midwest. I learned a lot about the unique water issues in the Great Lakes Region.”

“Coming from a low-income family, my parents wanted me to have security in finding a job after college, and I needed to be financially independent. I was happy to find out about the environmental engineering major that specifically addressed what I cared about, which is water and wastewater treatment.”

Into the Real World

“The first job I ended up taking was with the US Navy. I worked at a base in San Diego that maintained aircraft for the Navy where I was able to get a general introduction to environmental compliance. I wasn’t focused on anything in particular, at first, I was doing air pollution control.”

“I found at the Port of Seattle that they were doing some state of the art, even innovative things, with an environmental focus. Their work is also related to public service which is important to me. It was an amazing fit and has continued to be one.”
## About My Job

"I think it is unacceptable for people to be living with water that is going to kill them"

### Pros
- "The **personal fulfillment** I get from directly preventing water from getting polluted."
- "I get to talk to people about why it is important to **keep water clean**"  
- "**Human-centered** design thinking"

### Cons
- "You’re at the **mercy of the elements**, so working around constraints like weather is a big factor in my job.”
- "Someone wouldn’t want this job if they don’t know how to **build relationships**."

### Responsibilities
- "My primary responsibility is **implementing** our stormwater pollution prevention plan… to make sure the airport is not letting heavy metals and chemicals wash into Puget Sound when it rains"
- "I spend a lot of time **interacting** with different business partners at the airport."

### Fieldwork
- "I work with maintenance and with engineers on **designing** and **maintaining** systems that filter stormwater."
- "There are a lot of **facility inspections** that I do."
- "I learn about the **challenges** people face in their jobs when I train them"

### Skills
- "This kind of work requires being **comfortable with regulations**.”
- "Being able to **talk** to people with a **technical background** and without a technical background… You need to convey to them why something is important and why they need to prioritize certain best management practices”
- "**Important to be a team player**"
- "You want people to know you care before they’ll care about what you know."

### Education/Experience
- "The ideal would be if you were a high schooler and able to take as many **advanced courses** as you could.”
- "Choose a college in a place that has a **robust environmental industry** where you could be connected to **environmental internships**."
- "Something that anyone can do, whether they have money or not, is to look up **local events** that have to do with what they’re interested in, and it can be anything from an author coming to a bookstore or sustainability groups.”
- "There are **online forums** like environmental groups on Facebook. **Social media** has made it easier to network and stay up to date.”
The Future of Environmental Management

“It’s not a job that will be extremely changed by computers”

“Not ten years from now, but right now there is a lot more push for **green stormwater infrastructure**. Especially in the Puget Sound region, there is an **awareness** and **education** being done at every level.

“The better method to manage or monitor stormwater is to try to **mimic natural systems**.”

“I think people are still developing methods to convince the people paying for these systems that **green infrastructure** is more **efficient** and **effective** in the long term. I think it takes a long time to adjust”