

↑ CAREER LAUNCHER

Hazardous Waste Manager



“All of us produce trash every day, but hazardous waste from hospitals, industries, or accidents such as oil spills is dangerous if it’s not disposed of properly. I’m committed to keeping the air, water, and earth clean.”



- **Education needed:** Bachelor’s or master’s degree in physics, ecology, geology, chemistry, or any combination of the sciences
- **Salary range:** \$24,180 – \$77,040 annually
- **Related jobs:** Chemist, recycling coordinator, scientist, toxicologist

Hazardous Waste Manager

➤ **What I do every day**

Whether I'm working for the government or private industry, properly disposing of hazardous waste is my main responsibility. Most hazardous waste managers specialize in one of two areas. Remedial management engineers identify waste problems and design waste management systems to solve them. Removal management engineers control and clean up major hazardous waste accidents. When there's a problem, I carefully examine the site to find the cause, determine the best way to dispose of the waste, and oversee the cleanup.

Hazardous Waste Manager

➤ **The best part of my job**

Hazardous waste disposal is a growing problem in the United States, and my skills are in demand. Since I was young, I wanted to protect the environment. Now I feel I'm making a difference.

➤ **The worst part of my job**

Convincing the government or big businesses to reduce the amount of waste that's produced is a challenge. Sometimes I get frustrated with all the bureaucracy.

Hazardous Waste Manager

➤ **What I need to know and be able to do**

Hazardous waste managers need a background in science, ecology, and environmental studies. They must be able to evaluate the way industries make their products in order to determine how much hazardous waste is produced. They also need to take air, soil, and water samples. Hazardous waste managers need good writing and speaking skills because they write environmental impact studies and propose waste management systems.

➤ **How I prepared to be a hazardous waste manager**

I earned my bachelor's degree in chemistry and went on to obtain my master's degree in environmental science. I was hired by a corporation to reduce the amount of hazardous waste produced in its operations.

➤ **How I could have prepared better**

This may sound crazy, but I wish I'd taken some graphic art or design courses. Adding graphics to my presentations and impact studies would make them more eye-catching and interesting.

NATURAL RESOURCES, ENVIRONMENT, AND AGRICULTURE

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Hazardous Waste Manager

English
Skill Check

► Skill Check 1



As a hazardous waste manager, you must read and analyze the results of different tests that measure pollution in the air, soil, and water. Read the results of the water purity test below and answer the questions that follow.

Water Purity Test	
Location: Sanatoga, Oregon	
Bacteriological	
Colony count per mL, 35°C, 24 h	3
Physical	
Appearance	Clear
Taste	Normal
pH value	8.3
Chemical (mg/liter)	
Aluminum	0.001
Calcium	108.00
Copper	0.03
Iron	0.01
Lead	0.05
Magnesium	4.2
Potassium	1.5
Sodium	9.1

1. How many milligrams (mg) of iron are in every liter of water? _____
2. Which metal is present in the water in the greatest concentration?

3. What color is the water? _____

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Hazardous Waste Manager

English
Skill Check

► Skill Check 2

Water purity guidelines allow a maximum amount of 0.2 mg of lead per liter of water. Greater amounts of lead in the water is unsafe. According to the results of the water purity test in English Skill Check 1, is the lead level in the water of Sanatoga, Oregon, safe?

Answer: _____

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Hazardous Waste Manager

Science
Skill Check

► Skill Check 1

As a hazardous waste manager, you know that the acidity and alkalinity of liquids are measured using the pH scale, which ranges from 0 to 14. A pH of 0 means that the liquid is highly acidic and a pH of 14 indicates that the liquid is highly alkaline. A pH of 7 is considered neutral.

Using the water purity test results from English Skill Check 1, describe the water using one of the terms acidic, alkaline, slightly acidic, slightly alkaline, or neutral.

Answer: _____

► Skill Check 2

You know that hazardous waste comes from oil, acids, sewage, fertilizers, pesticides, detergents, and poisonous metals. Identify two hazardous waste pollutants in the list below that can seriously damage the environment.

- a. oxygen
- b. lead
- c. aluminum
- d. sand

Answer: _____