



# Nutrient Management / Waste Management Specialist

Nutrient/Waste Management Specialists develop appropriate methods for removing and managing animal and food waste from/in the environment.



Inspiring Minds to Grow

Funded by the Department of Commerce and Economic Opportunity

# career profile

Name: Frank Harrison  
Job Title: Nutrient/Waste  
Management Specialist

Employer: JBS Swift

Education: BS, Virginia Tech: Blacksburg

 I first learned about my field of work while watching the evening news. There were reports about how waste from swine production facilities was polluting the environment. I took an interest in that and learned more about the issue in my high school animal science class. On a college visit, I was told by the dean that they had a course of study related to animal waste management.

 After graduating with a bachelor's degree in environmental science, I was hired by JBS Swift, the largest animal protein processor in the world. Of course, our business produces a lot of animal wastes that if untreated, pollute the air and water. I research environmentally friendly processes for treating wastes. I have to be

up-to-date on regulations pertaining to waste management so that the company isn't fined. I read meters and gauges to make sure that equipment is working properly. I monitor waste treatment processes and explore alternative uses for treated waste. For example, I analyze the fertilizer value of waste after microbial activity. An interesting part of my work is the increased use of transgenic bacteria to digest wastes.

 My job title may not sound very glamorous, but it is very interesting and challenging, particularly for those who like science. I especially like the problem-solving that goes with developing improved methods for handling waste.



# Nutrient/Waste Management Specialist

## overview



A **nutrient/waste management specialist** works to manage wastes in order to protect the environment.

## suggested high school courses



[animal science](#), earth science, biology, chemistry, environmental science, and mathematics

## experience needed



Participate on campus in labs and research trials when possible. Seek an internship while in school to gain practical experience.

## degree(s) required



A bachelor's degree in agricultural engineering or agronomy is required.

## potential employers



crop/chemical companies, food animal production companies, government agencies, universities

## salary range



\$49,177 to \$104,520

## employment outlook and trends



The employment outlook for nutrient/waste management specialists is **good**.

## professional organizations



American Society of Agricultural and Biological Engineers [www.asabe.org/](http://www.asabe.org/)  
American Society of Agronomy [www.agronomy.org/](http://www.agronomy.org/)



## Want to Learn More?

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