

US EPA ARCHIVE DOCUMENT

Environmental Management Systems:  
Systematically Improving  
your Performance

EMS

Meat Processing Sector



# Standing Ground in a Stampede of Regulations and Safety Concerns

Meat processing plant operations in the U.S. face a wide range of new and changing regulatory requirements. And it won't get any easier. Heightened concerns about the deliberate biological, chemical, or radiological contamination of the nation's food supply are challenging the industry to preserve consumer confidence in food safety—from the safety of the supplied animals to the final product.

High employee turnover and encroaching residential areas are equally important challenges as processing plants struggle with properly training employees and concerns within their communities.

Many meat processing facilities have found a way to remain competitive in this tight-fisted and uncertain era through the use of Environmental Management Systems (EMSs). Companies such as Advance Brands, Excel Corporation, Farmland Foods, Humbolt Sausage, Smithfield Foods and West Liberty Foods are already taking advantage of EMSs to improve their businesses' effectiveness.

Meat processing facilities have already realized the following benefits by implementing an EMS:

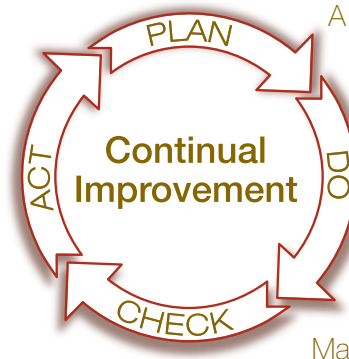
- Reduced operating costs;
- Improved environmental compliance;
- Improved internal communication;
- A bolstered corporate image; and
- Enhanced environmental decision-making.

**If your facility is looking for a proven, efficient way to improve your environmental performance while improving your bottom line, an EMS may be right for you.**



# Environmental Management System (EMS) Fundamentals

An EMS weaves environmental decision-making into the fabric of a meat processor's business, facilitating compliance while improving overall performance. Like the Quality Management Systems used at many meat processing facilities, an EMS' systematic approach allows facilities to be more efficient, more competitive, and better able to meet crucial challenges, such as increased security. While each EMS is unique, most follow the Plan-Do-Check-Act model.



A **Plan-Do-Check-Act approach** establishes a framework to examine the environmental aspects of your facility, then develop, implement, monitor, review, and revise the facility's environmental procedures over time to promote continual improvement.

Many facilities already have components of an EMS in place that they can build upon, such as written and unwritten procedures, practices, and environmental training. Your facility may also want to consider integrating safety, quality, maintenance, public relations, and other facets of your business into one integrated system.



# Evaluate Your Operations for Opportunities to Reduce Costs

Many meat processing facilities that have implemented an EMS have experienced significant cost savings attributed to:

- Lowered energy usage, resource conservation, and reduced material inputs;
- Reduced wastes and associated disposal costs; and
- Minimized redundant paperwork and reporting costs.

These cost reductions can be used to help facilities compete with domestic and international facilities—either by reducing overhead costs or by freeing up funds for investments in the facilities or employees. Upfront costs for an EMS can be quickly recovered through EMS' identification of money-saving pollution prevention initiatives and opportunities for continuous improvement in your operations.

An EMS can identify opportunities for environmental improvements and help you weigh associated costs and benefits to make an informed decision. According to Mike DeMarr of West Liberty Foods, the facility's EMS-

prompted decision to begin a new recycling and composting program “has reduced landfill costs by 35%, saving us between \$2,000 and \$3,000 per month.” An EMS can also reduce future liabilities and manage risks as potential environmental problems are identified early and resolved.

“Our EMS process influenced us to introduce aeration at our wastewater treatment plant and we’re projecting annual savings of \$300,000. We also installed a new sludge press that we expect to save us \$150,000 per year and a plastic waste compactor that should save us \$100,000 per year.”

—*Dave Frotz*, **Excel Corporation**

“Through our EMS we were able to make a significant improvement by using less chemicals to treat wastewater. We’re proposing to cut our caustic use in half, reducing our chemical use by 27,000 gallons for annual savings of \$56,000. We’re also working with our sanitation department to recycle or reuse our cardboard. We expect significant future savings.”

—*Sue Leaverton*, **Advance Brands**



# Systematically Facilitate Environmental Compliance

A man with grey hair, wearing a white lab coat over a plaid shirt, is focused on his work in a laboratory. He is standing at a stainless steel sink, handling a piece of white material, possibly a filter or a sample. The background is filled with various pieces of laboratory equipment, including several large glass funnels mounted on a metal stand, and other glassware. The lighting is soft and even, highlighting the man's concentration and the clean, professional environment of the lab.

American meat processors face an array of environmental regulations. An EMS' systematic approach can bring a sense of order to the environmental compliance process.

Many facilities with EMSs agree that they now have greater assurance about maintaining environmental compliance. As noted by Terry Mott of Humboldt Sausage, "One of the major benefits of our EMS so far is the improved ability to track—to see where we are weak and improve upon those areas."

By implementing an EMS, your facility can stay in compliance with environmental regulations, avoid violations and fines that can damage your public image, and keep an eye on the future.

**"The EMS has definitely improved our environmental performance in terms of wastewater. It also has helped us keep our paperwork in line and has made us more confident during audits of our facility."**

*—Sue Leaverton, **Advance Brands***

**"An EMS is a framework that people can grab hold of to capture information about various and complex environmental regulations, to determine their environmental aspects, and then determine the significance of them."**

*—Jeff Fiagle, **Iowa Department of Natural Resources***

# Enhance Internal Communication to Encourage Environmental Responsibility

Effective communication among your facility's employees plays a critical role in improving your environmental performance and can also lead to increased employee morale and elevated employee retention rates.

Meat processing facilities that communicate well internally often boast more informed, involved, and proactive employees who not only implement their assigned parts of the EMS, but who suggest other potential areas for improvement or cost-saving opportunities. To encourage environmental responsibility, Smithfield Foods assigned every employee at their farms an environmental-related job, from not letting something go down a drain to not throwing something into the waste chain. According to Dennis Treacy at Smithfield Foods, "It makes the program work and helps prevent problems instead of having to clean up after them."

Facilities such as Excel Corporation, Advance Brands and others reported improved internal morale as a direct result of their EMS.

**"Our employees were excited about the value they were able to bring to the company by helping to implement EMS."**

*—Dave Frotz, **Excel Corporation***

**"Our EMS has really helped employees become more aware of environmental issues. Morale has improved since employees now realize that our company cares and is being proactive in terms of the environment."**

*—Sue Leaverton, **Advance Brands***



# Take a Proactive Stance on the Environment to Bolster Your Facility's Image

By sharing information about your environmental performance with your community, customers, and state, you can build credibility and trust. An EMS will help you establish a dialogue with those directly impacted by your facility's operations.

According to Sue Leaverton of Advance Brands, EMS opened lines of communication with local officials, the environmental community, and environmental regulators. Says Ms. Leaverton, "Our communication with city officials has improved since initiation of the EMS."

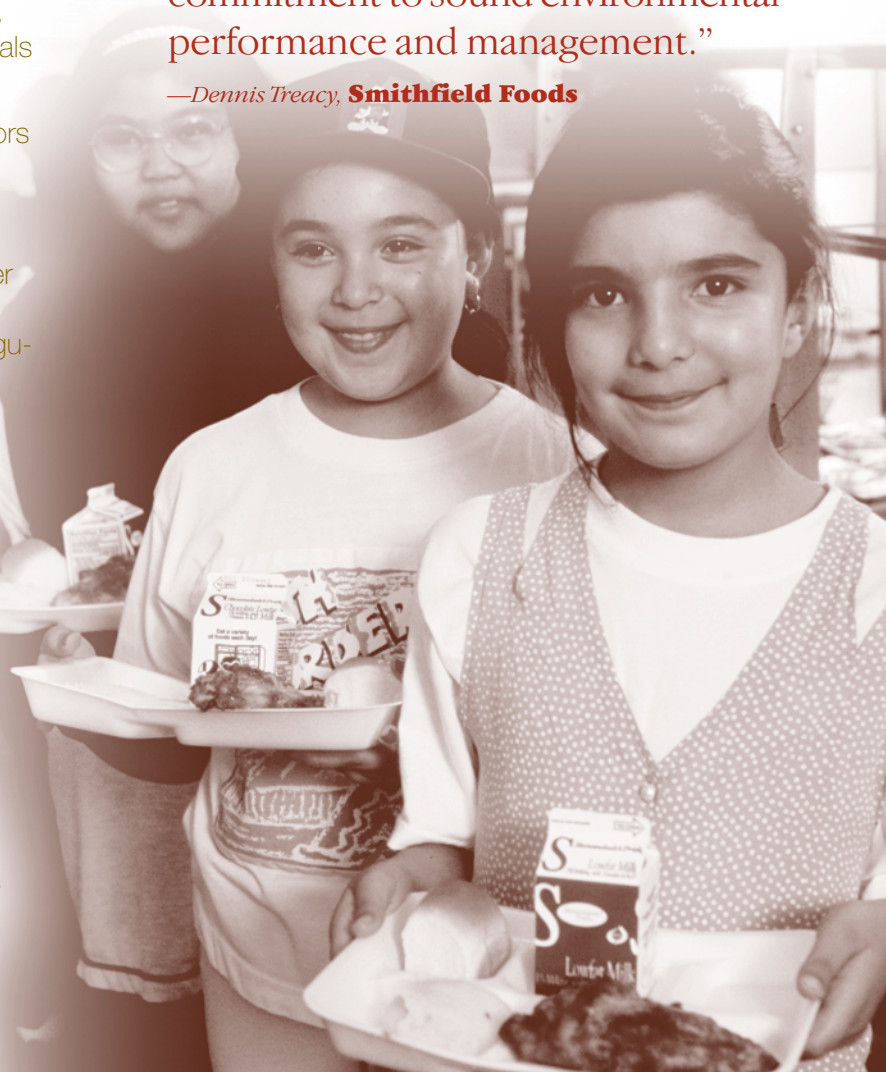
Your facility can build a positive relationship with regulators by taking advantage of available state and national programs. States such as Texas and Virginia and national programs such as the U.S. Environmental Protection Agency's National Environmental Performance Track offer incentives ranging from public recognition to regulatory flexibility to facilities that consistently perform beyond regulatory compliance.

"Facilities that implement an EMS embrace pollution prevention as a way to achieve their long-term goal of reducing environmental impact—it's a win-win process. Through an EMS, facilities can potentially downsize their environmental footprint, become more efficient, and save money."

—Jeff Fiagle, **Iowa Department of Natural Resources**

"EMS, and the process of receiving ISO certification (including third-party audits of the performance of our EMS), give credibility to our environmental programs, and reinforce our image and commitment to sound environmental performance and management."

—Dennis Treacy, **Smithfield Foods**





# Lead Environmental Decision-Making at Your Facility

Your participation in the environmental decision-making process can ensure that your facility's environmental policy is relevant, that your facility is meeting its regulatory obligations, and that it is applying resources appropriately. The senior management review process established by an EMS ensures your continued involvement in environmental decisions and can lead to improved operations and reduced liabilities.

Facilities that have implemented an EMS have noted increased senior management involvement in establishing metrics, plans, and results.

“The elevation of the importance of environmental programs is definitely a benefit of EMS. EMS gives the company a formal process to seize upon and rally around. Because our top management is 100% behind this effort, our employees don't have to worry about hitting a wall when trying to implement environmental processes—they just keep moving up the chain and finish the project.”

—Dennis Treacy, **Smithfield Foods**

“Since starting the EMS process, we have established monthly environmental team meetings attended by our top management.”

—Sue Leaverton, **Advance Brands**



# Get Started with Environmental Management Systems

Now that you've learned how an EMS can reduce costs, improve your business processes, and enhance your internal and external communication, here are steps you can take to get started.

## Take Advantage of Assistance and Tools Tailored to Meat Processors

To begin developing your facility's own customized EMS, visit EPA's Sector Strategies Web site at [www.epa.gov/sectors/agribusiness](http://www.epa.gov/sectors/agribusiness) for an EMS implementation guide created specifically for the meat processing industry. You can also find many resources related to EMS development and implementation as well as a list of Technical Assistance Providers near you on EPA's EMS Web site at [www.epa.gov/ems/](http://www.epa.gov/ems/). Other organizations, such as state environmental agencies and universities, may also offer EMS expertise.

## Start Small and Build Momentum

An EMS is based on common sense and intuitive business decisions. Learn from the tools listed above, then start by taking small, doable steps and build momentum from there. To be effective, you'll need proactive involvement from senior management, front-line workers, and supervisors throughout your facility. Keep the big picture in mind, but define reasonable expectations, set goals and time frames in line with your expectations, then monitor progress, making corrections where necessary. Capitalize on any elements of an EMS your facility may already have in place to advance to the next level in environmental management.



# Meat Processing Facilities Already Implementing EMS



## **Advance Brands**

Oklahoma City, Oklahoma  
[www.advancebrands.com](http://www.advancebrands.com)



## **Humboldt Sausage Company**

Humboldt, Iowa  
[www.smgmeats.com](http://www.smgmeats.com)



## **Excel Corporation**

Wichita, Kansas  
[www.excelmeats.com](http://www.excelmeats.com)



## **Farmland Foods, Inc.**

Kansas City, Missouri  
[www.farmlandfood.com](http://www.farmlandfood.com)

# Smithfield

## **Smithfield Foods**

Smithfield, Virginia  
[www.smithfieldfoods.com](http://www.smithfieldfoods.com)



## **West Liberty Foods**

West Liberty, Iowa  
[www.wlfoods.com](http://www.wlfoods.com)

Discover what other leading meat processors across the country are finding—

# EMS is a Good Business Decision

“As a former regulator, and now business executive, I am convinced that EMS strategies at any level improve the environment, save money, and streamline operations.”

—*Dennis Treacy*, **Smithfield Foods**



# Sector Strategies

*Insight • Innovation • Results*

EPA's Sector Strategies Program is a cooperative working relationship among government, trade groups, and other stakeholders to reduce pollution and ease the burden of regulation. For more information, visit [www.epa.gov/sectors](http://www.epa.gov/sectors) or contact your trade association.



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