

FEED ENERGY'S TOP PRIORITY IS QUALITY CONTROL EVERY STEP ALONG THE WAY.

To ensure that quality products are delivered to poultry and livestock producers, Feed Energy has stringent quality control and assurance procedures throughout the production and testing processes. Feed Energy's quality control laboratory is administered and staffed by trained chemists and engineers who develop and conduct a variety of product tests to make sure that all the raw materials received, as well as the products delivered, meet the highest quality standards. It is all part of Feed Energy's seven-step comprehensive QC7 program.

Assuring The Quality of Raw Material

- All incoming materials are subjected to multistage separation and purification processes, including filtration and thermo-gravimetric settling to assure removal of foreign matter.
- All materials are sampled and tested using the standard industry process determined by the American Oil Chemists' Society (AOCS).
- Incoming materials are tested internally using state-of-the-art equipment, then validated by independent third-part testing.
- All of the ingredients must pass stipulated federal regulations for pesticides and PCBs before being utilized in the production process.
- Nonconforming materials are isolated and returned immediately. Also, future shipments from supplies with nonconforming materials are suspended until the origin of the nonconformity is investigated.
- Samples of incoming materials and products are retained for a period of one year in accordance with the Safe Feed/Safe Food certification.
- Incoming storage reports and laboratory quality control data are retained in Feed Energy's permanent records archive.
- Feed Energy works exclusively with a select group of preapproved suppliers of raw material.

TAKING A SYSTEMATIC APPROACH TO QUALITY

Feed Energy believes in the **Hazard Analysis of Critical Control Points (HACCP)** management system to assure customers of the highest quality standards. HACCP addresses safety through the analysis and control of biological, chemical and physical hazards from raw material production, procurement and handling, to manufacturing, distribution and consumption of the finished product.



Blending For Optimum Quality

- Feed Energy ships from one tank while blending and testing in others, assuring customers of uninterrupted product supply.
- Blend formulations and finished product analyses are verified prior to releasing shipments, and all reports are archived and used for statistical process control.

Delivering Quality to Your Operation

- All produced materials are segregated by tank for identification purposes throughout production and testing purposes in accordance with Safe Feed/Safe Food Certification.
- Produced materials are tested internally utilizing wet chemistry methods, including utilization of infrared spectroscopy and gas chromatography equipment, then validated by independent third-party testing.
- Samples of outgoing materials are retained for a period of one year in accordance with the Safe Feed/Safe Food Certification.



“**Quality** is more than a word at Feed Energy, **it’s our reputation.** The last thing we want to see is a story in the media about contamination at your operation. That’s why **Feed Energy goes the distance** to assure you of the safest fats and oils for the health and welfare of your animals and the consuming public.”

Paul Knockel,
Director of Operations

Monitoring Quality Requires a Watchful Eye and State-of-the-Art Testing Methodologies

Quality control is everyone’s job at Feed Energy. Annual audits conducted internally as well as an annual audit by an independent firm assure that employees are delivering on the company promise.

Feed Energy accurately measures and monitors everything from moisture to total and free fatty acids, insolubles to Iodine value, and 55 separate pesticides to PCBs. Instrumentation currently being used at Feed Energy includes:

- Near Infrared Spectroscopy (NIR) — Invented by scientists at the USDA, NIR allows Feed Energy to quickly and accurately measure the composition of unknown samples.
- Gas Chromatography (GC) — Allows Feed Energy to separate and analyze compounds that can be vaporized without decomposition for testing the purity of a particular substance.

Moving Beyond Quality Control to Biosecurity

Feed Energy’s Biosecurity Program is designed to help keep poultry and livestock operations safe from potential contamination. This program takes practical and reasonable steps to ensure that Feed Energy vehicles and employees do not spread disease between customer locations.

Investing in Quality Pays Off for Poultry and Livestock Producers

Every year Feed Energy invests both financial and human resources to make certain products are safe and effective. As a result, poultry and livestock producers enjoy a significant return on their investment with Feed Energy. They are confident that the energy solutions they purchase from the company meet their needs for unparalleled levels of performance, safety, cost efficiencies and service.



ABOUT THE SAFE FEED/SAFE FOOD CERTIFICATION

The **Safe Feed/Safe Food** certification of the American Feed Industry Association (AFIA) signifies that Feed Energy has embraced the industry’s proactive role in creating feed-based safety programs. The Safe Feed/Safe Food program establishes comprehensive standards of excellence that go beyond existing regulations to maximize food and feed safety. Feed Energy’s Des Moines, Sioux City and Pacific Junction facilities were among the first facilities of their kind to be certified in this industry-respected certification program.

FEED ENERGY COMPANY

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