



PFI Standards Program: ***The Retailer's Perspective***

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Foxwood Resort & Casino
Mashantucket, CT

PFI Standards Program

- Program developed for the “End-User”
- Today’s market geared toward “bagged” retail customer
- *BUT*, with Obama Administration’s focus on renewables, we can anticipate more focus on commercial applications and bulk delivery



Why PFI Standards Need Industry-Wide Acceptance

- Overwhelming numbers of “nuisance” calls
- Increased service call frequency
- Unrealistic expectations for appliance cleaning frequency
- Expectation for appliance performance not satisfactorily realized

Every Pump Indicated PREMIUM





Why PFI Standards Need Industry-Wide Acceptance

- End-user unhappiness with renewable energy as fuel of the future due to poor performance
- Overuse of *Premium* labeling—truth in advertising needed
- Safety concerns overwhelming due to hopper fires and smoke damage to home caused by clogging

Standards clearly indicated and UNDERSTANDABLE



Retailers Goals

- Value-driven market
- Customer ability to select fuel that's appropriate for the performance level of their particular appliance
- Customer satisfaction with appliance purchase

Important to select the correct GRADE for your APPLIANCE



History of PFI's Standards Program

- Standards originally adopted in 1995
- Redevelopment started in 2005
- Updated standards were released in 2008
- Standards re-written as an EPA compliant program for use in NSPS in 2010



EPA NSPS Regulation

(anticipated 2012)

EPA New Source Performance Standards for Residential Wood Heaters

- Applies to cordwood burning fire places and inserts, pellet burning appliances, hydronic heaters and masonry heaters
- Requires that all appliances be certified by an independent third party to EPA emission limits



NSPS Implications for Pellet Appliances

- Pellet burning appliances are tested using graded fuel
- Once certified, pellet burning appliances may only burn the graded fuel they were approved to use



PFI's Standards Program - Purpose

- Provide the graded fuel referenced in EPA's NSPS for certifying pellet burning appliances
- Provide the graded fuel required to be used by consumers in all certified pellet burning appliances
- Increase the consistency and quality of pelletized fuel throughout the industry

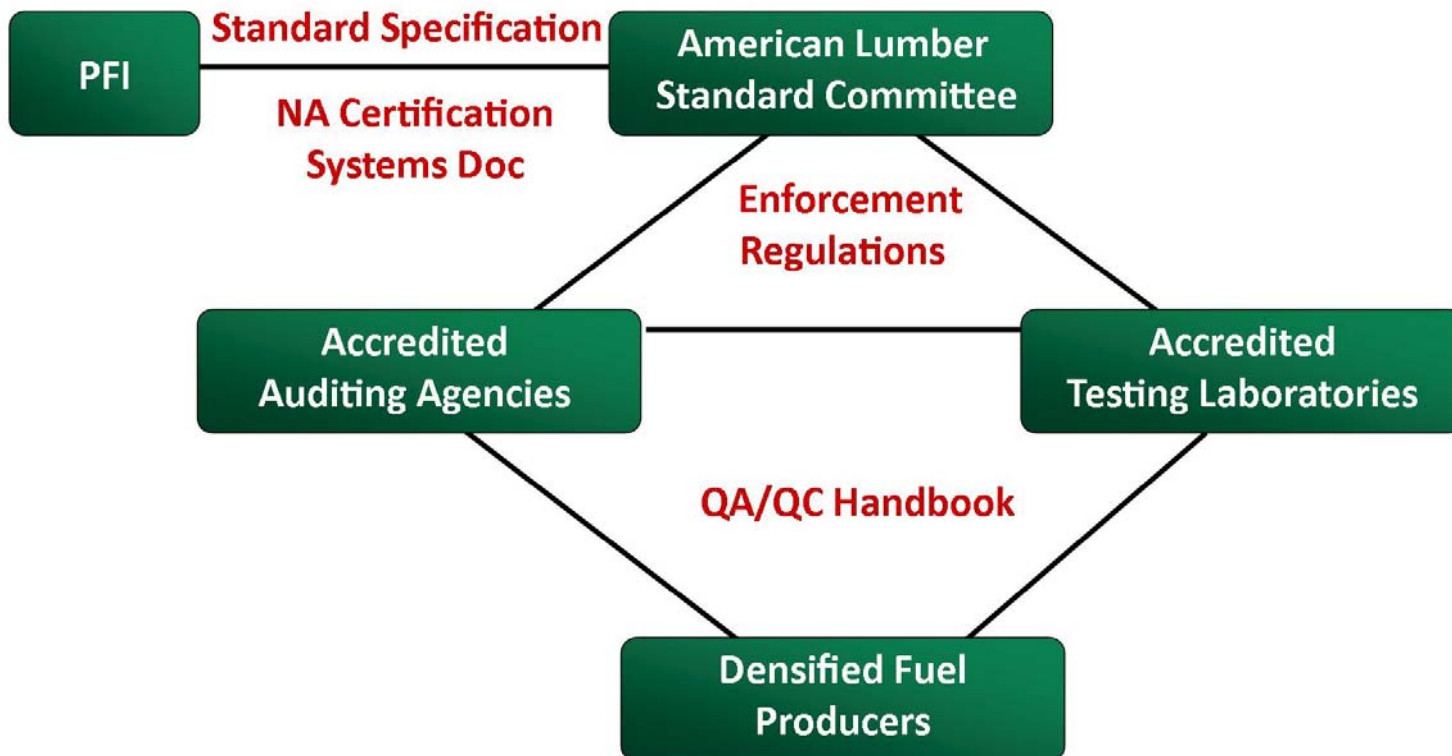
Historical Quality Issues with Pelletized Fuels

- Quality claims on the bag do not necessarily reflect what is in the bag
- Variable performance even within the same grade
- Inappropriate materials are showing up in pellets
- There is nowhere to report non-compliant product or unethical practices

New Structure PFI's Program

Issuer / Maintainer / Promoter

Implementer / Enforcer





PFI's Program Documents

<http://pelletheat.org/pfi-standards/what-are-the-pfi-standards/>

- PFI Standard Specifications for Residential/Commercial Densified Fuel
- PFI North American Grading System for Residential/Commercial Densified Fuel
- PFI Residential/Commercial Densified Fuel QA/QC Handbook
- ALSC Residential/Commercial Densified Fuel Enforcement Regulations

PFI's Responsibilities

- Issue / Maintain / Promote the standards
- Pursues technical research to improve upon the standards
- Contracts and monitors the accreditation body
- Maintains a website registration of all compliant parties
- Pursues any misuse of the Quality Mark

Accreditation Body

- Accredits auditing agencies and testing laboratories
- Implements and enforces the program
- Maintains the Enforcement Regulations
- Administers a laboratory proficiency program

Accredited Auditing Agencies

- Qualifies the production of densified fuel manufacturers
- Authorizes production facilities to use PFI's Quality Mark
- Conducts regular audits and extracts samples for third party verification
- Revokes authority to use the Quality Mark if necessary

Accredited Testing Laboratories

- Provides QA/QC testing for fuel producers – “As Needed”
- Provides testing for samples collected by auditing agencies
- Participates in the Accreditation Body’s proficiency testing program

Densified Fuel Producers

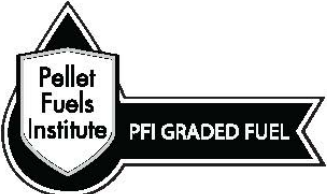
- Develop an in-house QA/QC program based on:
 - PFI QA/QC Handbook
 - PFI Standard Specification
- Select an auditing agency and test lab
- Demonstrate compliance with all program documents
- Maintain compliance through periodic audits, inspection and testing

PFI QA/QC Handbook - Includes

- Responsibilities
- Training
- Documentation
- Records
- Management of Change
- Raw Material Control
- Equipment & Operating processes
- QA/QC Testing
- Third Party Inspection & Monitoring
- Inspection Criteria
- Re-inspection Criteria
- Non Conformance
- Storage/Handling/Delivery
- Labeling

PFI's Quality Mark

- Displayed on front lower third of the bag
- Additives may not exceed 2% by weight (type must be stated)
- Material class must be stated
- Higher heating valued stated as-received and must reflect a minimum BTU guarantee – verified by audit
- Manufacturers may provide other guarantees as long as their claims are demonstrated through audit (e.g. Ash Content As-Received: <0.50%)



PFI Densified Fuel Grade: Premium
Mill Registration # 1234

Grade Requirements:

Bulk Density:	40–46 lbs/ft ³
Diameter:	.230–.285 in/5.84–7.25 mm
Durability:	≥96.5
Fines:	≤0.50%
Ash Content (as received):	≤1%
Length:	≤1% >1.5 in.
Moisture:	≤8.0%
Chlorides:	≤300 ppm

Manufacturers Guaranteed Analysis:

Type of Material:	Softwood Fiber
Additives:	2% Corn Oil by Weight
Minimum Higher Heating Value (as received):	8,000 BTU

Other Manufacturers Guarantees:

*Approved Auditing
Agency Logo
Displayed Here*

© For more information, please visit the PFI website at www.pelletheat.org.

Key Benefits of Standards Program

- Fuel manufacturers follow prescribed quality management practices assuring greater consistency between similarly labeled products
- Quality Mark clearly identifies graded fuel
- Provides three grades but allows manufacturers to provide additional guarantees if their quality reliably exceeds grade standards

Premium, Standard & Utility Grades

Fuel Property	Residential/Commercial Densified Fuel Standards		
	See Notes 1 - 3		
	PFI Premium	PFI Standard	PFI Utility
Normative Information - Mandatory			
Bulk Density, lb./cubic foot	40.0 - 46.0	38.0 - 46.0	38.0 - 46.0
Diameter, inches	0.230 - 0.285	0.230 - 0.285	0.230 - 0.285
Diameter, mm	5.84 - 7.25	5.84 - 7.25	5.84 - 7.25
Pellet Durability Index	≥ 96.5	≥ 95.0	≥ 95.0
Fines, % (at the mill gate)	≤ 0.50	≤ 1.0	≤ 1.0
Inorganic Ash, %	≤ 1.0	≤ 2.0	≤ 6.0
Length, % greater than 1.50 inches	≤ 1.0	≤ 1.0	≤ 1.0
Moisture, %	≤ 8.0	≤ 10.0	≤ 10.0
Chloride, ppm	≤ 300	≤ 300	≤ 300
Heating Value	NA	NA	NA
Informative Only - Not Mandatory			
Ash Fusion	NA	NA	NA

Key Benefits of Standards Program

- Provides standardized test methods
- Third party verification through an accredited auditing structure
- Provides a registration system for all compliant entities

Accredited Auditing Agencies

- Alberta Forest Products Association
- Canadian Mill Services Association
- Carolina Inspection Service
- Conway & Robison, LLC
- Northeastern Lumber Manufacturers Association
- PFS Corporation
- Pacific Lumber Inspection Bureau
- Package Research Laboratory
- Southern Pine Inspection Bureau
- Timber Products Inspection
- West Coast Lumber Inspection Bureau
- Western Wood Products Association



Accredited Testing Laboratories

- Canadian BioEnergy Centre
- Timber Products Inspection
- Twin Ports Testing
- University of Maine

**The “ PLAIN BAG ” does not inspire
customer confidence.**



Why is the Bag Label Important?

- Retailer/Customer acceptance
- Customer needs guarantee of what the label says is in the bag is actually in the bag

How Can Retailers Get Involved???

- Monitor the progress of PFI's Standards Program and provide feedback to PFI if you see ways that we can improve the program
- <http://pelletheat.org/pfi-standards/what-are-the-pfi-standards/>
- hedrick@pelletheat.org

How Can Retailers Get Involved???

Educate interested parties in your region

- Fuel Manufacturers
- Appliance Manufacturers
- Retailers
- Consumers

How Can Retailers Get Involved???

- Learn how to recognize fuel that is “Graded/Qualified”
 - Verify that PFI’s Quality Mark is on the bag
 - Verify that the producer is registered with PFI’s Standards Program
 - <http://pelletheat.org/pfi-standards/what-are-the-pfi-standards/>
- If you see non-qualified producers using the mark or other marks deceptively similar please report them to PFI immediately



PFI Standards Program Timeline

- The program is currently in the implementation phase
- It will still take several months to put the necessary pieces in place
- It is currently anticipated that you may begin to see PFI's Quality Mark appear on bags in the third or fourth quarter of 2012

Standards = Performance =
CUSTOMER SATISFACTION





Thank You!

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