

Carroll, Catherine M.

From: Joe Rose <jrose@pgane.org>
Sent: Monday, April 28, 2014 12:10 PM
To: Gray, Vickey L; DBurnell@NeMech.com; Mark.anderson@deadriver.com; propane@maine.rr.com; mmoya@cq.com; moody@uninets.net; dawn.slater@thomsonreuters.com; dardene@securespeed.us; jamie@maineenergymarketers.com; GMcCarthy@pierceatwood.com; chrisgreen@mechanicalservices.com; Head, Anne L; timothy.stewart@lexisnexis.com; Perkins, Bob
Cc: Carroll, Catherine M.; Holmes, Peter T; Leclair, Robert V
Subject: RE: Maine Fuel Board Notice of Agency Rule-making

13.7.1 new section 3 makes no sense. I think it needs to be reworded!

Joe



Joseph Rose
President / CEO
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www.pgane.org

From: Gray, Vickey L [<mailto:Vickey.L.Gray@maine.gov>]
Sent: Monday, April 28, 2014 11:48 AM
To: DBurnell@NeMech.com; Mark.anderson@deadriver.com; propane@maine.rr.com; mmoya@cq.com; moody@uninets.net; dawn.slater@thomsonreuters.com; dardene@securespeed.us; Jamie@maineenergymarketers.com; Joe Rose; GMcCarthy@pierceatwood.com; chrisgreen@mechanicalservices.com; Head, Anne L; timothy.stewart@lexisnexis.com; Perkins, Bob
Cc: Carroll, Catherine M.; Holmes, Peter T; Leclair, Robert V
Subject: Maine Fuel Board Notice of Agency Rule-making

Dear Interested Parties,

Attached is the Notice of Agency Rule-making Proposal. A public hearing on the proposed rule is scheduled for Wednesday, May 14, 2014 at 1:00 p.m. at the Department of Professional & Financial Regulation, Central Conference Room, 76 Northern Avenue, Gardiner.

Please feel free to contact either Catherine Carroll, Administrator, at Catherine.m.carroll@maine.gov or me should you have any questions.

Sincerely,

Vickey Gray
Board Clerk

Barry Austin, Chm

May 19th, 2014

State of Maine Professional and Financial Regulation

Maine Fuel Board

76 Northern Ave.

MAY 21 2014

Gardiner Maine . 04345

Dear Mr. Chairman and Board,

My name is Frank Fitzpatrick and I am employed by RW Beckett a national manufacturer of oil and gas commercial burners and residential oil burners. We are in the process of introducing a conversion gas burner this Spring and Summer to the market.

I attended the recent meeting of Wednesday, May 14th regarding changing the code for the application of conversion gas burners to existing appliances of less than 400 mBTU.

It was interesting to note that all but one witness spoke in favor of retaining the language as exists or of modifying it to reflect manufacturer's recommendations.

The witness who seemed to be in favor of the changes expressed that the "primary concern was for safety". In this he was correct. He cited examples of "30-40 year old boilers" that he was concerned about applying conversion burners on. Our literature prohibits our conversion burner on units that are older than 15 years old.

The witness was also concerned with the fact that appliances may not be properly maintained by the homeowner (failing to get the appliance regularly serviced). This also is a legitimate concern but if taken to its logical conclusion, all gas fired equipment would be at risk, not just converted units.

This witness also mentioned the recent issue with the hotel in Ogunquit where 21 people were sickened by carbon monoxide. This was caused by a failure of the ventilation system, not of the burner.

Also, as mentioned by one of the speakers, the major reason that gas conversion burners are installed is because with a newer boiler, it is a very effective way to enjoy the savings of burning gas fuels to heat homes in Maine. Rather than incur the additional cost of changing out the entire heating system that may be perfectly good and capable of safely burning gas, for a much lower cost, Mainers can enjoy the savings provided by a conversion burner.

As was mentioned by several of the speakers, the appliance manufacturers would not invest considerable time money and effort into testing every possible unit they manufacture, as they would have no way to recoup these costs as they do not sell conversion burners. Thus, the proposed changes

in the language would serve to prevent homeowners in Maine from the lower costs of using gas fuels to heat their homes.

Not all home owners of course. The wealthy could replace the entire system regardless of cost. But the average Mainer who is concerned with the cost of heating his home during a Maine winter may not have the \$6000-12,000 for a new heating system.

So in my mind the question is: Do the wealthy have more right to burn gas than does the average Maine resident? Do only the wealthy get to enjoy the cost saving potential of gas fuel units?

Thank You

A handwritten signature in cursive script that reads "Frank Fitzpatrick". The signature is written in black ink and is positioned below the "Thank You" text.

Frank Fitzpatrick

RW Beckett Corp.

781-910-4148

ffitzpatrick@beckettcorp.com

Carroll, Catherine M.

From: Gavin McCarthy <GMcCarthy@PierceAtwood.com>
Sent: Tuesday, April 29, 2014 2:13 PM
To: Carroll, Catherine M.
Subject: Fuel Board Rule
Attachments: W4236786.docx

Catherine,

We appreciate the opportunity to be heard further on the new Fuel Board rule. Attached to this email are Mechanical Services' proposed changes to Section 13.7.2 in the form of a redline of the rule as ultimately approved by the Fuel Board at its last meeting. We propose these changes for the reasons previously described by Mechanical Services in its written and oral testimony provided to the Fuel Board on December 13, 2013, and in our correspondence to the Fuel Board dated February 27, 2014. If that latter letter with exhibits is not currently part of the record in front of the Fuel Board, we ask that it be added to the record; if you would prefer that we send a new copy, we would be happy to do so, just let us know. In short, however, Mechanical Services believes that these proposed changes to the rule will avoid imposing prohibitively expensive and unknown testing requirements on a burner manufacturer while still ensuring safety by requiring the burner manufacturer to select the burner to be used in accordance with accepted engineering practices. Representatives from Mechanical Services will be present at the May 14 meeting of the Fuel Board and would welcome the opportunity to discuss the reasons for their position and/or answer any questions the Board may have at that time.

Best,
Gavin

Gavin G. McCarthy
PIERCE ATWOOD LLP

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GMcCarthy@pierceatwood.com

BIO ▶

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13.7.2 Greater than 400,000 btu

When converting to propane and natural gas from another fuel source where the input of the burner is over 400,000 btu, the burner must be listed by Underwriters' Laboratory or by an independent nationally recognized testing laboratory and the following requirements must be met:

1. The installer must verify from the manufacturer of the appliance to be converted that the appliance is capable of being used with gas as a fuel.
2. The burner must be tested ~~selected~~ for use in the make and model of appliance in which it is intended to be installed and must meet one of the following conditions:

A. ~~The burner has been tested by the burner manufacturer in the make and model of appliance in which it is intended to be installed and has been approved for use in such appliance by a licensed professional engineer with the proper disciplines~~ The burner manufacturer must provide written documentation that the burner has been approved, using accepted engineering practices, for use in the appliance intended to be converted;

B. The burner has been tested by an independent testing laboratory in the make and model of appliance in which it is intended to be installed and has been certified for use in such appliance by the nationally recognized independent testing laboratory;

C. The burner has been tested by the appliance manufacturer in the make and model appliance in which it is intended to be installed and has been approved for use in such appliance by the appliance manufacturer.

[NOTE: ~~The appliance and or burner manufacturer or licensed professional engineer must provide installation and combustion set-up instructions for the appliance.~~]

3. The installation must conform to the requirements of NFPA #54 and NFPA #211 for the installation of a gas appliance.

Carroll, Catherine M.

From: Gavin McCarthy <GMcCarthy@PierceAtwood.com>
Sent: Thursday, February 27, 2014 2:23 PM
To: Carroll, Catherine M.
Subject: Revisions of Proposed Fuel Board Rule
Attachments: W4128742.pdf; W4128736.pdf; Engineers-FormPDF.pdf; OTH Limpsfield data sheet (W3895898x7AC2E).pdf; OTH Limpsfield letter (W4128910x7AC2E).pdf

Catherine,

Thank you for sending the Basis Statement and the proposed substantive revisions that the Board is considering. In light of the changes, Mechanical Services has further comments, which are attached hereto for the Board's consideration.

Best,
Gavin

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Admitted in: MA, ME

BY EMAIL ONLY

February 27, 2014

Members of the Maine Fuel Board
c/o Catherine M. Carroll, Board Administrator
35 State House Station
Augusta, ME 04333

Dear Members of the Fuel Board:

This submission is in response to the Basis Statement issued by the Maine Fuel Board ("Board") on February 10, 2013. As discussed below: (I) the Board is proposing substantial changes to the previously noticed draft rule, triggering new notice and opportunity to respond duties under 5 M.R.S. § 8052(5)(B); and (II) the rule as now proposed would, if adopted, be arbitrary, capricious, an abuse of discretion, and not based on sound science and evidence, and would raise constitutional concerns.

In brief, Section 13.7 of the rule as originally drafted referenced testing, without further substance or clarity. The changes to the rule identified in the Board's Basis Statement provide some clarity and substance, but they do so by proposing a cost-prohibitive test unwarranted by any legitimate technical or safety concern. This appears to be a product not of any policy disagreement, but rather due to a misunderstanding or overlooking of certain facts. Hence, Mechanical Services seeks the opportunity to provide the Board with the facts it needs, and to answer the questions it may have, in order to arrive at a sound, effective, fact-based rule.

BACKGROUND

1. The testing rule as originally proposed in 2013

In 2013, the Board, which derives its authority from 32 M.R.S. § 18123, proposed rules that would repeal and replace the existing combined rules of the Oil and Solid Fuel and Propane and Natural Gas Boards. Mechanical Services, along with its counsel, attended the Board's meeting on December 12, 2013, and submitted comments on the proposed rules in that meeting.

One rule Mechanical Services commented on is contained in Section 13.7, relating to the testing of propane and natural gas burning equipment. The 2013 proposed replacement rule provided in relevant part that when converting to propane or natural gas from another fuel source, "[t]he burner must be tested for use in the individual appliance in which it is intended to be installed" (Proposed 13.7.1(2), 13.7.2(2).)

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Mechanical Service's comments to these proposed rules as originally noticed included observations as to the lack of clarity in the terms "test" and "individual appliance."

The record closed on comments on the propose rules on January 6, 2014.

2. The testing rule as proposed as of February 13, 2014.

The Board then issued its Basis Statement and Response to Comments on February 13, 2014 ("Basis Statement"). In that Basis Statement, among other things, the Board indicated that it agreed with Mechanical Services' comments that these terms were vague. (E.g., "The Board agrees with the comment that the term 'test' is vague."; "The Board does accept the comment that the terms 'appliance' and 'individual appliance' should be defined.")

The Board then announced its decision to follow up on its acceptance of these comments by changing the text of the 2013 proposed rules. These substantive changes and additions to the proposed rules now require safety and combusting testing for each combination of a make and model of burner and make and model of appliance.

DISCUSSION

I. The February 13 text changes to the proposed rules trigger additional notice and comment requirements under 5 M.R.S. § 8052(5)(B).

Section 8052(5)(B) provides that when the rule an agency intends to adopt is "substantially different" from the rule as previously proposed, the agency (a) must request comments from the public concerning the changes from the proposed rule; (b) may not adopt the rule for a period of 30 days from the date additional comments are requested; and (c) must publish notice of the new request in the same manner as the initial notice. 5 M.R.S. § 8052(5)(B).

The "substantially different" test is met here. The terms used in the originally proposed version were undefined and empty of meaning, as properly recognized by the Board. Only now, with its textual additions and amendments, has substance been provided. Hence, only now is Mechanical Services in a position to provide meaningful commentary as to the problems with this substance. The reason for the "substantially different" rule is to ensure proper notice and a meaningful opportunity to be heard, in conformance with the due process requirements of the Maine and U.S. Constitutions. Until someone knows the substance of a proposed rule, he or she cannot meaningfully comment on that rule.

In sum, Section 8052(5)(B)'s requirements have been triggered such that, *inter alia*, the record must reopen, and Mechanical Service's comments on the amended proposed rules (submitted with this letter, to be supplemented at the meeting February 28) must be accepted and reviewed.

II. The proposed new definitions of testing and appliance, if adopted as is, would be arbitrary, capricious, an abuse of discretion, and not based on an accurate factual predicate, and would raise constitutional concerns.

The fundamental problem with the Board's proposed definitions is that they impose costs amounting into perhaps millions of dollars for no technically supportable reason. The testing that the amended proposed rule envisions would simply be infeasible, and would effectively operate to exclude most burner manufacturers from the Maine market.

Under the most recent iteration of the rule, a burner manufacturer must do still unspecified "safety and combustion testing" on every combination of a model of burner and model of boiler it might use in a conversion. This definition of testing leaves unanswered a number of important questions. What sort of testing beyond the UL testing of the burner itself is envisioned? Does the Rule require physical testing of some sort, as opposed to computer modeling? What is meant by combustion testing – does this mean efficiency testing? The lack of a specific definition of the testing that is required makes it difficult, if not impossible, for manufacturers to know whether they are complying with the rule.

Moreover, regardless of the specific test required, the testing will be cost prohibitive. A typical burner manufacturer has dozens of burners (with various options that make the unique number of burners in the hundreds or perhaps thousands), and there are thousands of models of boilers. There are thus tens (or perhaps hundreds) of thousands of combinations to test. To run a test, the manufacturer would seemingly have to purchase each model of boiler (since few boiler manufacturers, if any, will be cooperative with their competition in permitting testing), which cost approximately \$50,000 a piece. Thus, it would cost literally millions of dollars to test the boilers, before even considering the cost of the "test" itself, a cost that cannot currently be approximated because it is not apparent what "safety and combustion" testing could be done beyond that required to obtain the UL listing on the burner itself. This cost is plainly prohibitive to entry into the market – no burner manufacturer will pay millions of dollars for testing, with the effect that the market in Maine will likely be reduced to those companies that make both boilers and burners, creating an unfair competitive situation and reducing consumer choice.

Nor is there is a technically sound basis to impose such cost-prohibitive expenses. To obtain a UL listing on the burner itself, a company must subject the burner to substantial safety testing. In addition, whenever a burner is to be replaced by a burner that is not identical to the one previously installed, a professional engineer must be involved. Thus, without any additional testing requirement, each burner will be tested and verified as safe. Since a boiler or other pressure vessel is essentially just a metal box, there is no safety or combustion testing that would vary from boiler to boiler – a safe burner will safely fire into any pressure vessel (presuming, of course, that the burner output is properly matched to the size of the pressure vessel, but that calculation is already controlled by other rules that require a professional engineer to certify that the proper matching has occurred). In short, there would be no additional benefit to the expensive testing that the current rule envisions. Underscoring that point, we are aware of no other state that requires testing similar to that which the Board is now proposing.

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Finally, the vague language of the regulation, the lack of specificity in the scope of the Board's powers expressed in the statute, the cost-prohibitive nature of the current iteration of the rule, the profound and extraterritorial effect it would have on limiting the use of safe equipment, and the fact that no other state imposes such restrictions, would raise constitutional concerns should this version of the rule stand, see *Kassel v. Consolidated Freightways Corp. of Delaware*, 450 U.S. 662 (1981); *Healy v. Beer Institute*, 491 U.S. 324 (1989); *Pike v. Bruce Church*, 397 U.S. 137, 142 (1970); see also *C & A Carbone, Inc. v. Town of Clarkstown*, 511 U.S. 383, 406 (1994) (O'Connor, J., concurring) (noting unconstitutional "balkanization" from local impeding local regulation), as well as excessive delegation and vagueness issues under the Maine and U.S. Constitutions. See *Kosalka v. Town of Georgetown*, 2000 ME 106 ¶¶ 13-17; 752 A.2d 183, 187; *Lewis v. State of Maine Dept. of Human Services*, 433 A.2d 743, 747 (Me. 1981). See also *Crosby v. Town of Ogunquit*, 468 A.2d 996, 1000 (Me. 1983) (striking down ordinance as arbitrary and capricious); *Buck v. Kilgore*, 298 A.2d 107, 110 (Me. 1972) (striking down an ordinance for lack of rational ends-means relationship).

Mechanical Services shares with the Board the goal of enacting logical, cost-effective rules that ensure safety while promoting competition and thus encourage lower pricing. It looks forward to the meeting to be held on February 28, at which it hopes, given the need for additional notice and opportunity to be heard under the Administrative Procedure Act, to provide further live testimony, and to answer any specific questions that the Board may have. It is apparent from the articulation of the Board's comments to date, that it simply has not yet been exposed to the certain key facts. Mechanical Services would like to make sure that the Board receives all the information it needs to make a considered decision on the facts.

Thank you for your attention to this matter.

Sincerely,



Gavin McCarthy

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Company registered in Great Britain
Company registration no. 3016979
VAT Registration no. 644 547 0 92



Ref 11D01kkcl1

1st April 2011

Limpsfield Combustion Retro - fitting of burners to Cleaver Brooks Boilers

For the attention of Mr. Jotham Pierce.

Dear Mr. Pierce,

Further to our recent conversation regarding the retro fitting of our Limpsfield burner range to Cleaver Brooks boilers in particular, I would like to detail the following for our joint records.

I have attached a project list of known Limpsfield burners / Cleaver Brooks boiler retro fits in the USA with this letter. This project list is accurate to my knowledge, although there may be many more burners sold than detailed that have been installed to Cleaver Brooks boilers. Limpsfield Combustion had sold many burners before I joined Limpsfield (6 years ago) but the serial number log was not as accurate in that site details were not always known or requested in the early days of Limpsfield Combustion selling burners to the USA. This has since been rectified as we are now accredited to the International Quality Standards ISO9001.

Our burner was originally designed to fire Cleaver Brooks boilers over 15 years ago in the UK as it was quite impossible to get spares to the UK from the USA. Since then we have been offering our burners to known and reputable combustion specialists in the USA. I am a combustion engineer by trade, having over 28 years of experience in this business; since I joined Limpsfield Combustion 6 years we have made a very conscious decision to only offer our burners to professional, experienced and proven combustion companies who have a good track record in our industry such as Mechanical Services in Maine. We have refused to sell our burners to unprofessional (in our opinion) companies on many occasions as we are very protective of our "Limpsfield Brand". We have worked with some large company names, such as Intel Corp (worldwide), Hershey Foods, Cadburys/Kraft, Freescale Semiconductors, Mobil, Exxon, Schreiber Foods, Novartis, Sanofi Pasteur to a name a few. A more recent and very successful project carried out for Millipore in Bedford NH, saved our customer 29% of their fuels costs as well as reducing harmful emissions to atmosphere by over 45%. I have attached the third party engineering report of this project.

Over this time of offering our burners to our Representatives, and alongside our Representatives to their customers we have never had a project rejected / denied / or not approved for code reasons in the context of retrofitting a Cleaver Brooks boiler with Limpsfield burners. I fact in all cases our customers are happy that they have been able to use an alternative burner which offers fuel savings and increased safety.

Limpsfield Combustion take our business very seriously, that is why we decided to send our burners and associated burner data to the world's major safety test houses for worldwide approval. In the case of the UK and Europe we have the CE approval, this allows us to sell our burners anywhere in the UK and Europe, as well as most of the old English Colonies as they look to the UK approval test houses as the higher authority of burner and product safety testing. In the case of the United States of America we chose to put our burners through UL, Underwriters Laboratories in Northbrook, Illinois and North Carolina. We chose UL as their exacting standards and safety approvals are unrivalled in the USA and Canada. Having the UL approval also allows us to sell into areas that the USA has sold to both past and present, such as the Far East, Middle East etc. where combustion products often have to meet UL and NFPA standards. Our UL file (MP4 134) and O & M manual refers to NFPA standards with regards to gas firing, oil firing and electrical installation. Our UL approval is for the installation to new boilers as well as the retro fitting to older boilers including Cleaver Brooks and is detailed as such.

I hope the above information is of use to you. Please feel free to contact me if I can be of further assistance to you with regards to this matter.

Yours Sincerely

Keith Knowles
Managing Director - Limpsfield Combustion Engineering

Customer/Site	Burner Type No.	Fabrication No.	Date
CSI - Pennsylvania	LCN036	30-04-23	30/04/01
Trojan - (Nathan Lithiuer Hospital) New York State	LCN053	30-05-27 30-05-28	30/05/01
Sterling (Canada)	LCN036	25-06-29 25-06-30 25-06-31	26/06/01
Trojan (Lawrence Hospital) NYS	LCN073	00203 00204	24/07/02
Sterling (Telus) Canada	LCN073	00354	25/09/03
Trojan - (North Adams Hospital) NYS	LCN021	00374 00375	11/05/04
Sterling - (Telus) Canada	LCN073	00376	11/05/04
PVR - (Mobil) New Jersey	LCN062	00377	11/05/04
Calder Valley (UK)	LCN053	00410	01/12/04
Sterling - (Tonko) Canada	LCN036	00434	31/05/05
Freescale Semiconductors Texas	LCN0100	00454	22/05/06
PVR - (Washington Home) Maryland	LCN036	00457 00458	29/06/06
NW Industrial Mech (Treetops) Oregon	LCN062	00459	21/07/06
Rasmussen Mech (Novartis) NE	LCN053	00465	23/08/06
Freescale Semiconductors Texas	LCN0100	00466 00467	14/09/06
Freescale Semiconductors (E.D Bluestein) Texas	LCN0100	00468	01/10/06
CSI - (Cadbury's) New Jersey	LCN073	00476 00477	08/12/06
Arizona - Kingman Medical Centre	LCN036	00479 00480	05/02/07
Trojan - (Chevron) NYS	LCNH036 C.B	00481 00482	27/02/07

Customer/Site	Bumer Type No.	Fabrication No.	Date
CSI – (Hershey Foods) PA	LCN62 C.B FGR	00483 00484	06/02/07
NW Industrial Mech (Treetops) Oregon	LCN073	00486 00487 00488	18/04/07
CSI – (Hershey Foods) PA	LCN100	00492 00493	16/05/07
GTW – (Boston University) MASS	LCN073	00503 00504 00505 00506 00507	06/08/07
GTW – (Wentworth Institute) MASS	LCN062	00512 00513	28/08/07
Ware Inc. – (Buffalo Trace) Kentucky	LCNOAL175	00514	04/09/07
Sterling – (Kuehne Chemicals) Canada	LCN036	00538	20/06/08
GTW – (Millipore) Mass	LCN036	00539 00540	03/07/08
GTW (Intel Corp) Hudson MASS	LCN088	00557 00558 00559 00560 00561	02/12/08
GTW – (Deans Foods) MASS	LCN062 LCN053 LCN036	00569 00570 00571	21/05/09
GTW – (Mordern Hospital) MASS	LCN036	00572 00573 00574	21/05/09
Hughes Machinery Kansas State Facilities Kansas	LCN021	00579 00580 00581	14/07/09
CSI – (Organics Unlimited) PA	LCNP15	00592	27/10/09

Customer/Site	Burner Type No.	Fabrication No.	Date
Hughes Machinery (JC Penney's) Kansas	LCN088	00604	08/01/10
PVR (PPPL) New Jersey	LCN044	00634	08/05/10
GTW – (Milton Academy) MASS	LCNP044	00635 00636	20/05/10
Brady – (Anjinomoto)	LCN100	00639	01/06/10
Hughes Machinery Penn Valley Kansas	LCN073	00668 00669	01/10/10
Trojan (Chevron) NYS	LCNH062	00671 00672	11/10/10
PBBS (100HP CB) Wisconsin	LCNP15	00673	20/10/10
Ware Inc. (Chem Group) Kentucky	LCNP36 LCNP44	00680 00681	21/10/10
GTW – (Wakefield Hospital) MASS	LCN062	00693 00694	23/11/10
Trojan (NYS)	LCN021	00695	26/11/10
Ware Inc. (Finish Line) Kentucky	LCN21P	00700	03/12/10
Ware Inc. (Freudenburg) Kentucky	LCNP36	00712	25/01/11



**MECHANICAL
SERVICES, INC.**

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FAX (207) 849-5592

76 CENTER ROAD
EASTON, ME 04740-0377

TEL (207) 488-5112
FAX (207) 488-6023

40 GABRIEL DRIVE
AUGUSTA, ME 04330-9430

TEL (207) 626-0822
FAX (207) 621-1008

Members of the Maine Fuel Board
c/o Catherine M. Carroll, Board Administrator
35 State House Station
Augusta, ME 04333

February 27, 2014

Members of the Fuel Board,

Mechanical Services, Inc., provides installation and service of commercial and industrial burners. We have concerns regarding the proposed language requiring testing by the burner or appliance manufacturer. The problem is that the most recent proposed rule requires such expensive testing that it will make it impossible for Mechanical Services to compete in the marketplace with companies that manufacture both burners and boilers, and the proposed rule will do so without improving safety. In effect, the Board will have largely abolished competition – only those companies that make both boilers and burners will be able to compete.

Mechanical Services uses burners made by a variety of different manufacturers. As shown on the enclosure, when it purchases a burner, it provides the burner manufacturer with specific details regarding the boiler or furnace that the burner will be firing into. Typical information provided is the appliance manufacturer's required input both in BTU's and fuel amount and type. Mechanical Services provides appliance design, furnace pressure, combustion chamber dimensions, chimney draft, design of the boiler stack and breeching, number of boilers connected to stack and breeching, combustion air supply, combustion air temperature variations, fuel system design and pressures, boiler mounted operational and safety devices, equipment operation schedules, and so on. The burner manufacturer takes all of this information into account when selecting the correct burner.

When a burner is submitted for U.L. certification, the burner manufacturer provides U.L. with the range and application the burner has been designed for including product variation, firing rates, fuel types, boiler/furnace types, etc as part of an overall product matrix. The U.L. certification is issued to the burner manufacturer taking all of the information into account. U.L. performs field verifications to ensure the safety and reliability of the burner. This testing is done in a controlled environment and involves a representative from U.L. and the burner manufacturer.

Thus, Mechanical Services is able to offer customers the choice of a number of safe, reliable, and efficient burners, which allows each customer to find the right balance of

current price, future efficiency savings, and so forth. Under the new rules, however, Mechanical Services will be at a serious competitive disadvantage. Boiler or furnace manufacturers who manufacture their own burners are unlikely to provide testing for every conceivable variation of a competitor's burner on their equipment. Why would a boiler/burner manufacturer allow competitors to use its equipment at all? The burner manufacturer could hardly be expected to buy a string of boilers from a series of manufacturers (at a cost of about \$50,000 per boiler) just to be able to compete on some possible future bid, nor could boiler manufacturers be expected to buy hundreds of combinations of burners. Thus, Mechanical Services believes that the proposed changes would cause many – perhaps all – burner manufacturers to abandon doing business in Maine (or at least to substantially reduce the number of boilers for which their burners can be used), which would reduce competition and drive up prices, negatively affect the state's goal of reducing energy consumption, and potentially result in a loss of business for some burner installation and service companies, while giving essentially all the business to companies that manufacture both boilers and burners.

This result is not fair or justified. When a commercial or industrial U.L. certified burner is selected by the burner manufacturer for a specific application, the U.L. label is confirming that the burner will operate safely, the ASME stamp on the pressure vessel ensures the pressure vessel is safe, and a professional engineer is responsible for ensuring that the combination will work safely. Attaching the burner onto the appliance without simulating the exact conditions that will be encountered in the field does little to ensure the boiler/burner package will operate to any greater degree of safety than the U.L. certification on the burner alone. If qualified and licensed personnel select the burner for a commercial or industrial application there should be no need to require the proposed cost prohibitive pre-testing. Mechanical Services believes that is why no other state has required such testing, and why ASME does not require that the burner and boiler be tested together prior to installation.¹

It is important to note that the combination of UL certified burners with ASME compliant boilers made by a different manufacturer is commonplace in this country and the world. As explained in the attached letter and accompanying installation materials, the Limpsfield burner that Mechanical Services often supplies has been combined, for example, with Cleaver-Brooks boilers in hundreds of installations in the US and other countries. Limpsfield reports that it has never been subjected to the type of boiler-by-boiler testing the Board is contemplating anywhere in the world. There is no reason why Maine should adopt a procedure that so requires, especially when it adds nothing and damages to ability of local suppliers to compete.

¹ CSD-1-2002, Part CF-Combustion Side Control, CF-110 Burner Assemblies and boiler units, provides: "Burner assemblies for boiler units having inputs in excess of 400,000 Btu/hr shall comply with the provisions of this part. Burner assemblies, as part of a boiler unit or separately, shall bear a label and or be listed by a national recognized testing agency or other organization that is acceptable to the authority having jurisdiction as complying with the standards listed below. For a burner provided as an integral part of a boiler unit, the label on the boiler unit may serve as evidence that the burner is in compliance."



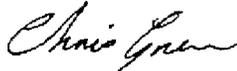
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SERVICES, INC.**
MAINE CONTROLS
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Heating • Air Conditioning • Refrigeration • Ventilation • Boiler & Duct Cleaning
Temperature Controls & Energy Management Systems • Systems Design & Installation
Access Control & Video Monitoring • Preventive Maintenance • 24/7 Emergency Service

On a separate note, Mechanical Services also believes that Section 13.7.2 of the new proposed rule should apply to burners with BTUs greater than 400,000 but less than 12,500,000. The NFPA has standards that supersede the UL listing at 12,500,000, such that many burners of that size comply with the strict NFPA standards but are not UL listed. The rule as drafted would, we think unintentionally, create an additional requirement that would serve no purpose and would limit competition.

We appreciate the Board's consideration, and we look forward to discussing the matter further with the Board and answering any questions the Board might have at the February 28 meeting.

Sincerely,



Chris Green
President
Mechanical Services, Inc.



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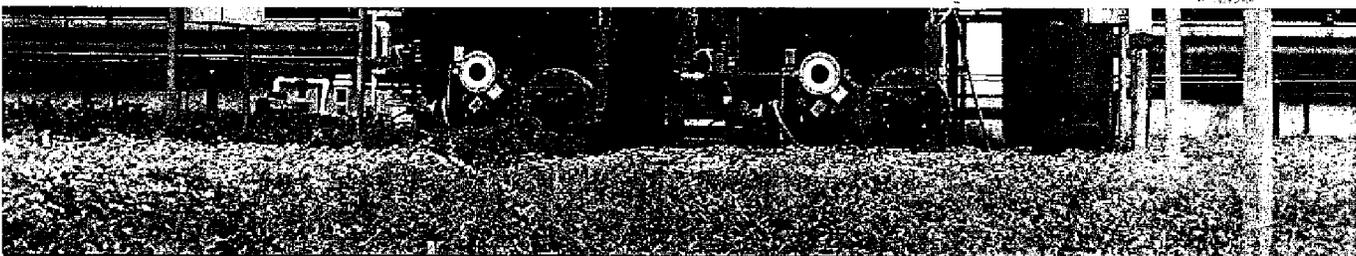
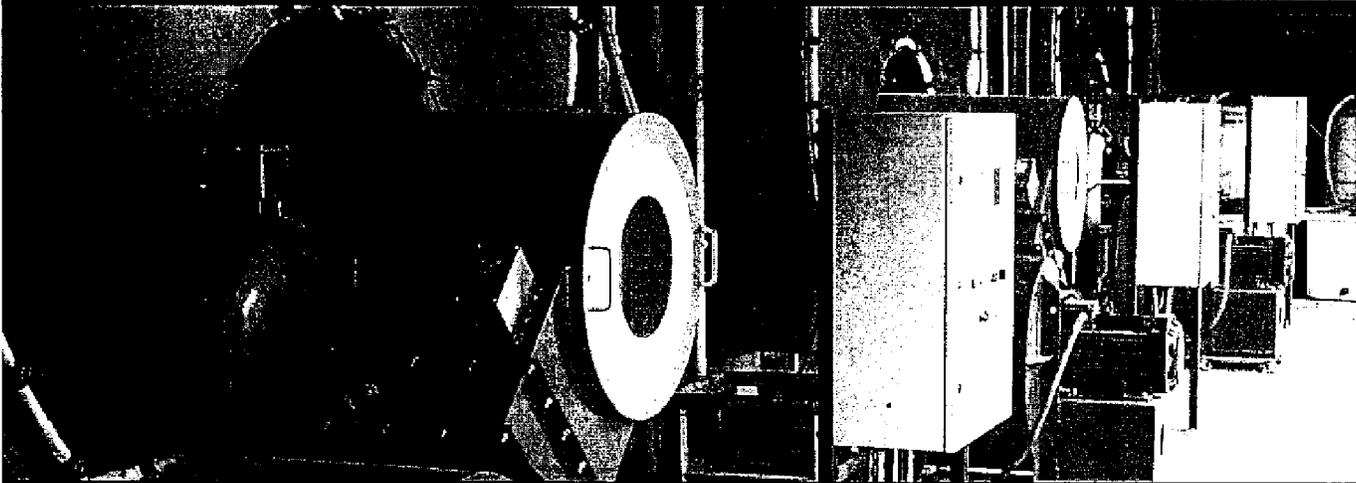
JOB REF: _____

Company name:		Contact name:	
Engineer responsible:		Customer Tel:	
Despatch date:		Customer Fax:	
Quantity:		Delivery date:	
Burner Details:		Boiler Details:	
Primary fuel:		Boiler type:	
Secondary fuel:		Boiler output:	
Burner input:		Furnace Ø:	
Burner type:		Furnace length:	
Gas pressure available:		Furnace pressure:	
Oil pressure requirement:		Furnace volume:	
Air handing inlet:		Stack pressure:	
Gas handing inlet:		No. of passes:	
FGR handing inlet:		Stack temp:	
Terminal box handing:		Head Extension length:	
U.V. type:		Stack Ø:	
Pilot injector or Direct spark:		New or Existing:	
Air sensor or Air switch:		Boiler GA drawing:	
Specified performance:		Site details:	
Gas turn down ratio:		Country:	
Oil turn down ratio:		State/Province:	
N0x requirement, gas:		Application:	
N0x requirement, oil:		Altitude:	
Noise requirement:		Ambient temp: max.	
Local code requirements:		Ambient temp: min.	
		Voltage:	
Scope of supply (included with burner)			
Combustion air fan:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
FGR fan:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Gas train:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Oil pump set:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Oil pre-heater:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Sound attenuator:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Air transition duct:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Burner mounting plate:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Anti-vibration mounts:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Control panel:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Variable speed drive:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
EGA:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Commissioning/Start-up:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Freight type:	Sea <input type="checkbox"/>	Air <input type="checkbox"/>	
SPECIAL INSTRUCTION: All details must be complete before manufacturing can commence.			
Customer signature:		Date:	
Engineers signature:		Date:	



Limpsfield

LC BURNER SERIES



www.limpsfield.co.uk



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Disclaimer: The information supplied in this brochure is only correct at the time of publish.



Introduction

Limpsfield Combustion is an industrial burner manufacturer, offering complete solutions to combustion requirements from standard burners to individually engineered solutions. Experienced in all common aspects and many more specialised areas of its field, Limpsfield offers experience, quality and competitive prices.

Limpsfield Burners are of an Industrial Forced Draft design, suitable for alternative or simultaneous firing of all types of gaseous fuels and mineral fuel oils. Limpsfield Combustion offers burners for a range of application inputs from 3 - 110 MmBtu/hr (0.9 - 31MW)

Designed and manufactured to exacting specifications, the Limpsfield LC burner line is an exceptional combination of form and function. Every feature, from the powder coated finish to the sealed damper bearings and large viewing port, exemplifies the commitment to quality and performance. With the ability to orient both the fuel and air inlets independently of one another the application possibilities are virtually unlimited

In addition to being easy to set up and adjust, the unique forced draft combustion design distributes the combustion air in the burner head so that the necessary static pressure is maintained for stable combustion and flame geometry, throughout the complete burner firing range. Therefore the burner achieves less than 3% O₂ throughout the complete firing range making the boiler more efficient with low emissions and assist with being "Green".



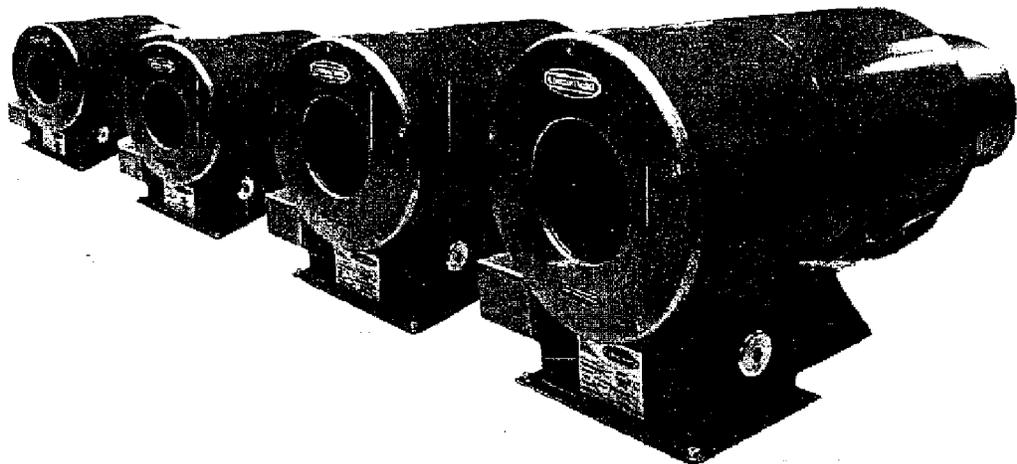
Burner Range

Limpsfield offer standard burners from 3,000,000 Btu/hr (0.9 MW) to 110,000,000 Btu/hr (31 MW), firing a wide range of fuels from natural gas, diesel, #2 oil to heavy fuel oil, waste oils, animal fats, fish oils, bio gases etc. Excellent results have been achieved when firing such fuels offering the end user substantial fuel savings through high performance.

Burner Features

Standard burners have the following features:

- Autoflame burner control system fitted as standard to maximise efficiency and reliability of equipment.
- Large rear flame viewing port, enabling a unique view of the combustion process
- Fuel inlets on both sides of burner housing offering build flexibility to suit site application.
- Simple construction allows easy access to internal components for maintenance. All components can be accessed and replaced without the need to remove the burner from the boiler front.
- Stainless steel diffusers and blast tube cones.
- Split head combustion head design. Adjustable to alter gas injection velocity.
- Adjustable gas head/diffuser position for optimum performance.
- Multiple fixings on the burner rear section allows fan to be mounted in a variety of different positions to overcome site space restraints.
- Remote combustion air fan. Allows forced draught fan to be sized for actual project and sized to meet turndown requirements.





Retrofit package

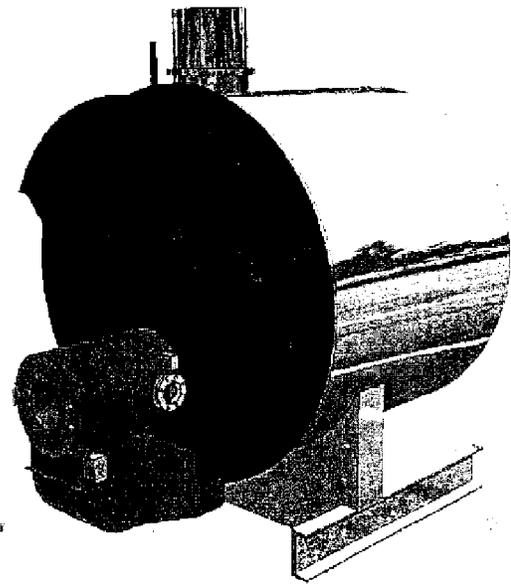
Limpsfield's engineered solutions enables all burners to be fitted to both new boilers as well as being retro fitted to existing boilers allowing fuel savings to be made by replacing an existing burner with this high efficiency burner.

The construction of the Limpsfield burner allows it to be easily retro fitted to the Cleaver Brooks boiler. A transitional duct is sized and designed to transfer combustion air using the original boiler front door fan impeller and motor assembly. Typical turndown ratios of 5:1 and 6:1 on gas firing with O₂ levels less than 3% throughout the firing range make this retro fit have a very quick and realistic return on investment. Many customers have realised savings of over 10% when retro fitting their existing burner with a Limpsfield burner.

At a major Semiconductor manufacturer in Texas, USA further saving were made by data linking all burner controllers and sequencing the boilers. With the reliability of the Limpsfield burners and the gained confidence from the site operators, only one burner/boiler fires at any one time with the other two boilers in a warming status ready to produce steam when the demand dictates. Previously all three boilers would be in operation all the time as the boiler house operators did not have the confidence to leave only one boiler dealing with the demand as they had experienced many start up failures in the past.



Cleaver Brooks retrofit installation



3D Cleaver Brooks conversion



Applications

Limpsfield will engineer a project to suit the requirements whether it is single fuel, dual fuel, multi fuel, change over on the fly between fuels or burning waste stream fuels. The burner can be supplied as a low NOx burner for both gas and oils.

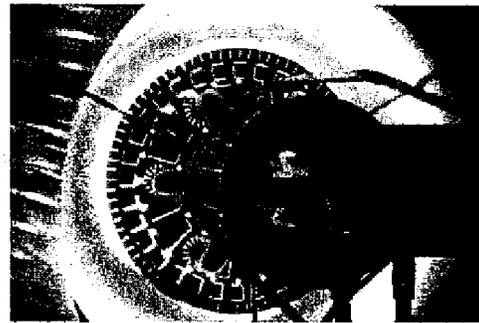
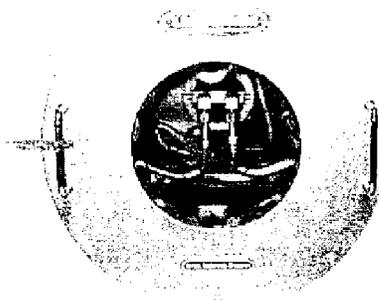
We have carried out many applications to suit our customers requirements and have extensive experience in firing many fuels in a wide range of applications including fire tube boilers, water tube boilers, kilns and dryers.

A selection of successful applications have been listed below;

- Change over on the fly between fuels (no boiler down time between fuel change over)
- Multi fuel firing
- Burning waste stream fuels
- Combined firing of waste stream fuels with a primary fuel
- Six fuels through one burner with out hardware changes
- We also offer a steam or air atomizing oil lance assembly
- Hydrogen
- Propane
- No6 oil with or without Low NOx
- No4 oil with or without Low NOx
- Methanol
- Isopropanol
- Toluene
- Bio Gas
- Bio Gas / Natural gas blends
- Tallow

We have engineered projects for many more fuels

Limpsfield offers a total engineered solution to meet the site application and specification with high performance and reduced O₂ levels. Contact us for more information.



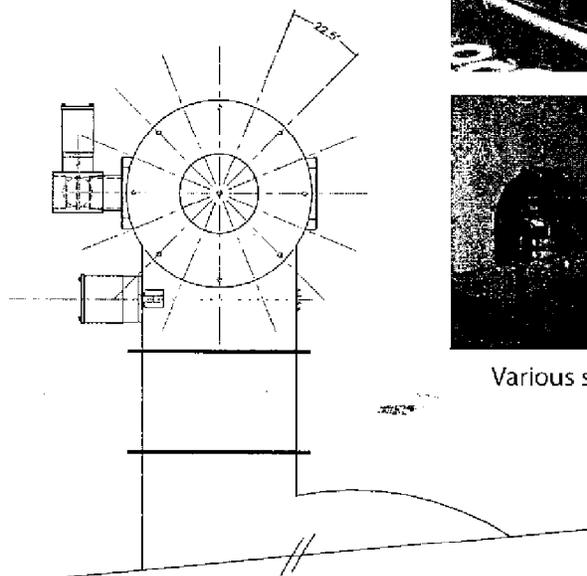


Combustion Air Control

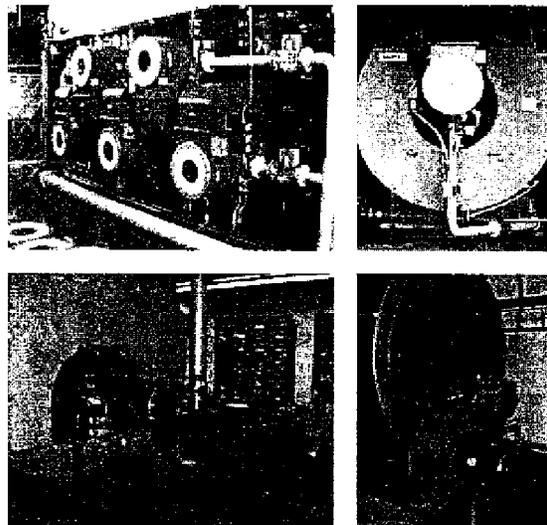
Combustion air is delivered via a remote or directly mounted medium volume high pressure fan. The fan has a direct coupled, backward curved impeller, and can be supplied with a flange mounted silencer. The air damper blades are operated using fully enclosed bearing assemblies, this allows hysteresis free operation with infinite repeatability.

The Limpsfield burner is supplied as standard with a split housing which allows the air inlet duct to be rotated 360 degrees in increments of 22.5 degrees, independent of the gas inlets illustrated in the drawings. This feature allows flexibility as to the position of the blower relative to the burner, which may be governed by specific site constraints. Installation arrangements are limitless. However, for arrangements not shown please contact the factory for consultation in proper air duct design. It is recommended that the pressure drop in the air duct between the outlet of the blower and inlet to the burner be no more than 1/2" WC.

To properly engineer and ensure job performance, Limpsfield combustion utilizes a vast array of fan types/sizes from several manufacturers. This allows for proper air delivery in both volume and pressure for installations of high altitude, elevated furnace pressures and varying ambient conditions which affect fan performance. Thus, blower arrangement is dependant upon jobsite conditions, which must be known at the time of placing the order.



Showing possible angles of rotation of air inlet



Various sites with different combustion air inlet requirements.



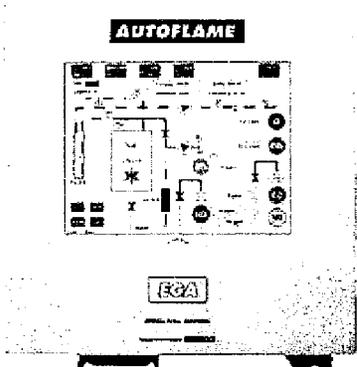
Combustion Control

Limpsfield offers its users control panels to accompany the burners. These are designed and built around advanced combustion control equipment which will further enhance the reliability and performance of the LC burner.

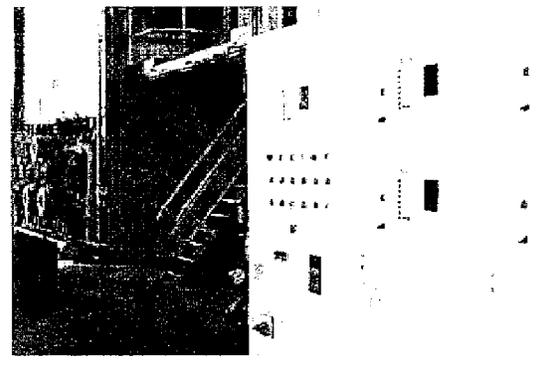
A range of products are available, from a stand alone micro modulation unit, to exhaust gas analysers with combustion trim functions, water level monitoring, variable speed drives and boiler sequencing packages.

In addition, panel design and specification can be tailored to the end user's specific requirements.

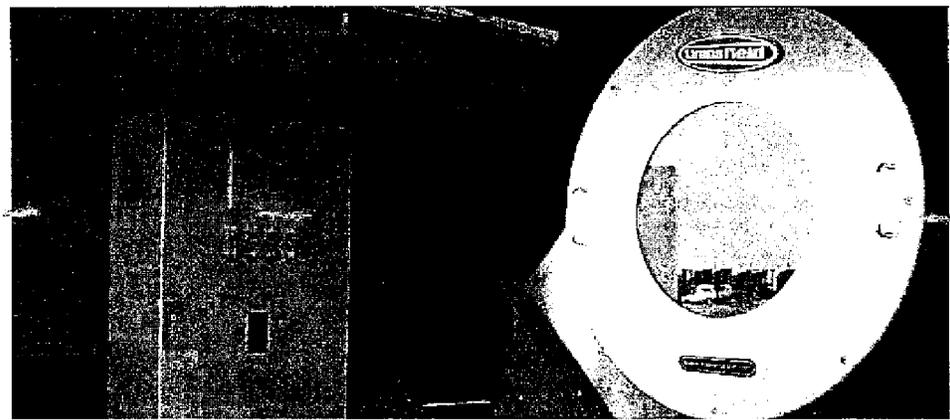
All panels are UL approved and built in an ISO9001 environment.



Touch screen Mk7 E.G.A



Control panel for a 5 burner application

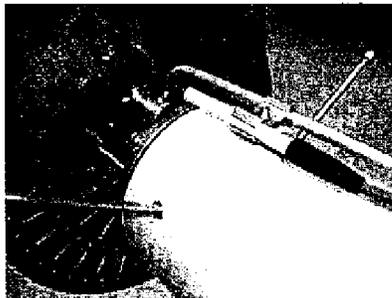


LCN123 Burner on Johnston boiler



Burner Turndown

Limpsfield burners provide high turndowns typically between 4:1 and 10:1. This turndown is established by using a split gas head or a spider head. The split gas head can be used on most applications and provides excellent mixing to maintain good combustion throughout the firing range.



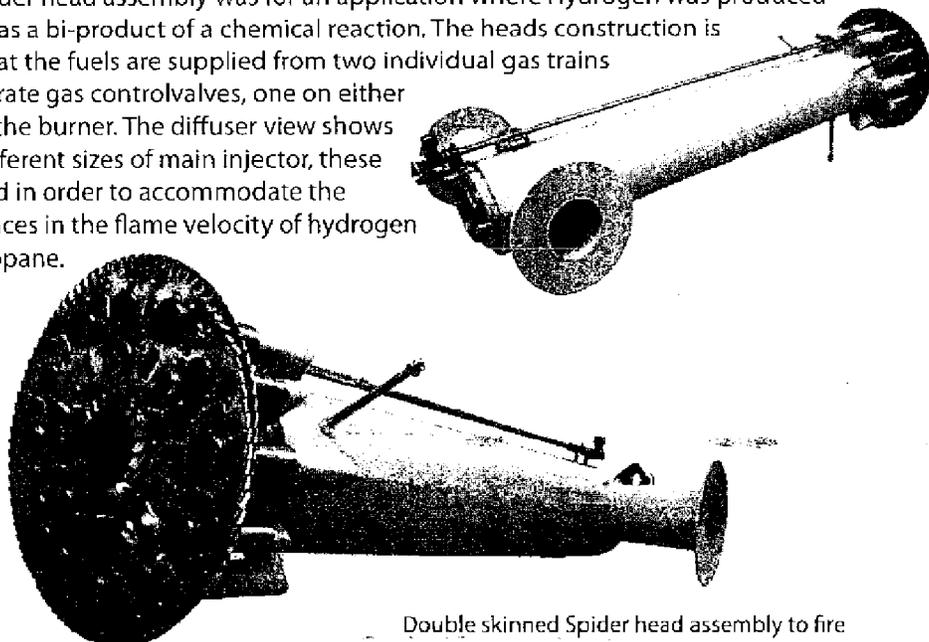
Split head assembly

The unique spider head assembly offers the user high turn down ratios. It was initially designed to be fired when using fuels with high burning velocities such as Propane or Hydrogen. Unlike the split head, the fuel is introduced after the diffuser plate enabling the flame to establish good retention whilst maintaining excellent mixing.

Limpsfield will design and engineer the correct solution to suit your application.

An example of Limpsfield's in-depth engineering capabilities;

This spider head assembly was for an application where Hydrogen was produced on-site as a bi-product of a chemical reaction. The heads construction is such that the fuels are supplied from two individual gas trains to separate gas control valves, one on either side of the burner. The diffuser view shows two different sizes of main injector, these are used in order to accommodate the differences in the flame velocity of hydrogen and propane.



Double skinned Spider head assembly to fire hydrogen and propane



Emissions

Limpsfield burners have been designed to ensure minimal emissions are released into the atmosphere. This means less harmful emissions are created, but also means greater efficiency of the burner due to good combustion which in turn creates great fuel savings. Typically Limpsfield burners operate at <3% O₂ and <10ppm of CO. These figures continue throughout the firing range, from low fire to high fire.

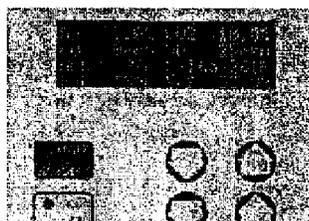
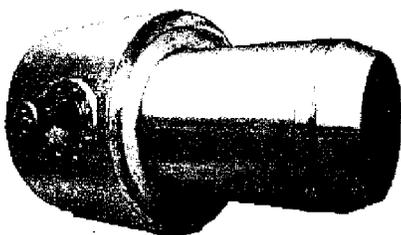
Low NOx Capabilities

All burners are capable of meeting tough US federal codes regarding low NOx emissions. Numerous installations of this nature have been carried out with excellent results.

We believe that in order to meet local codes for low NOx requirements, efficiency should not be compromised; therefore our burners have been designed to operate at sub 30 ppm while operating at 3% O₂ or lower throughout the firing range. This is due to the utilisation of flue gas re-circulation and the superior flame retention and mixing achievable from the Limpsfield design.

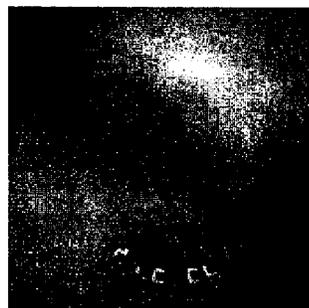
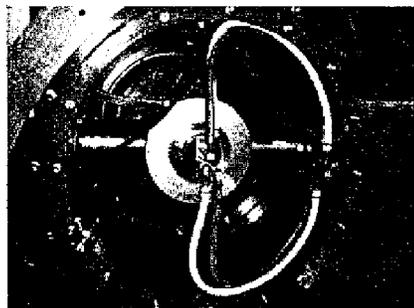
Low NOx can be achieved by using 'Flue Gas Recirculation'. This is done by using one of two methods either forced FGR or induced FGR depending on application. FGR is accomplished by forcing the flue gases with a separate fan back into the combustion zone (forced FGR), or by drawing the flue gases through the combustion air fan (induced FGR). Both methods reduce the bulk flame temperature in the furnace to inhibit the chemical reaction between the nitrogen and oxygen. FGR systems reduce NOx emissions without reducing efficiency.

Tailor-made FGR stainless steel burner



Typical Low Nox emissions

Stainless steel FGR connections inside burner



Low Nox Flame

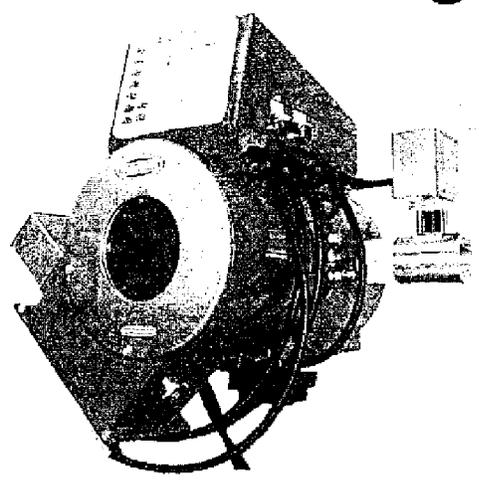


Specification

Burner Model Number	9	15	21	36	44	53	62	73	88	100	123	150	175	200	263	310
Units																
Mimbtu	3	5	7	12.3	15	18	21	25	30	35	42	50	60	70	90	110
MW	0.9	1.5	2.1	3.6	4.4	5.3	6.2	7.3	8.8	10	12.3	15	17.5	20	26.3	31
Air at 15% Excess	33,465	55,775	78,085	137,206	167,325	200,790	234,255	278,875	334,650	390,425	468,510	557,750	669,300	780,850	1,003,950	1,227,050
Air + FGR @62.9°C / 145.22°F	41,831	69,718	97,606	171,507	209,156	250,987	292,818	348,593	418,312	488,031	585,637	697,187	836,625	976,062	1,254,937	1,533,812
No.2 Oil input rate (137,080 btu/gal)	21.88	36.47	51.06	89.72	109.43	131.31	153.19	183.38	218.85	255.33	306.39	364.75	437.7	510.65	656.55	802.45
Gas input rate (1000 btu/cuft)	3,000	5,000	7,000	12,300	15,000	18,000	21,000	25,000	30,000	35,000	42,000	50,000	60,000	70,000	90,000	110,000
Minimum Pilot pressure	"WG 12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Delta P Air	"WG 7	10	11	12	12	12	12	12	12	12	12	12	12	12	12	12
Delta P Air + FGR	mbar 17.4	24.9	27.4	29.88	29.88	29.88	29.88	29.88	29.88	29.88	29.88	29.88	29.88	29.88	29.88	29.88
Blast tube O.D	"WC N/A	N/A	16.5	18	18	18	18	18	18	18	18	18	18	18	18	18
Gas inlet	mbar N/A	N/A	41	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8
Mounting P.C.D	mm 176	189	254	299	314	361	386	417	456	490	540	582	638	687	775.5	852
Mounting hole Ø	Inches 6.92	7.44	10	11.77	12.36	14.21	15.19	16.41	17.95	19.29	21.25	22.91	25.11	27.04	30.53	33.53
Quantity of mounting holes	NPT 2"	2"	2.5"	2.5"	2.5"	3"	3"	4"	4"	4"	4"	6"	6"	6"	8"	8"
	lb -	-	150lb	150lb	150lb	150lb	150lb	150lb	150lb	150lb	150lb	150lb	150lb	150lb	150lb	150lb
	mm 240	240	355	355	355	440	440	440	440	440	440	440	440	440	440	440
	Inches 9.45	9.45	13.97	13.97	13.97	17.32	17.32	17.32	17.32	17.32	17.32	17.32	17.32	17.32	17.32	17.32
	mm 8.5	8.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
	Inches 0.33	0.33	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
	4	4	8	8	8	8	8	8	8	8	8	8	8	8	8	8

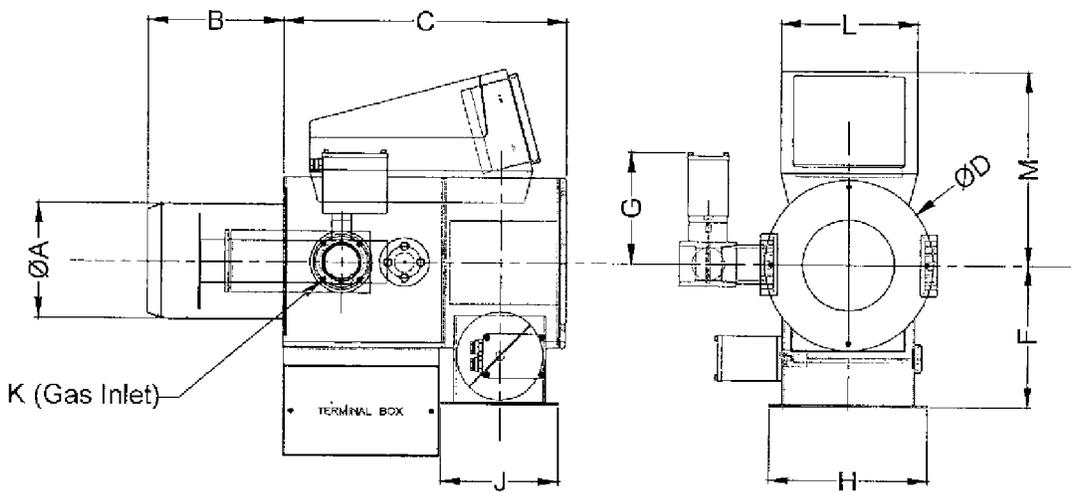


Package burner



Limpsfield have launched a new package burner range. This consists of the smaller Lc9 (P) and goes through to the Lc62 (P) with outputs ranging from 3MBtu (0.9MW) to 21MBtu (6.2MW). In this range the burner is supplied with a pre-mounted digital control panel. The control panel supplied by Autoflame allows the user to commission and alter the combustion firing process quickly and easily. The control system is pre wired into the housing, reducing onsite installation time. The burners can be supplied as gas only, oil only or as dual fuel.

LC9/15 package burner shown

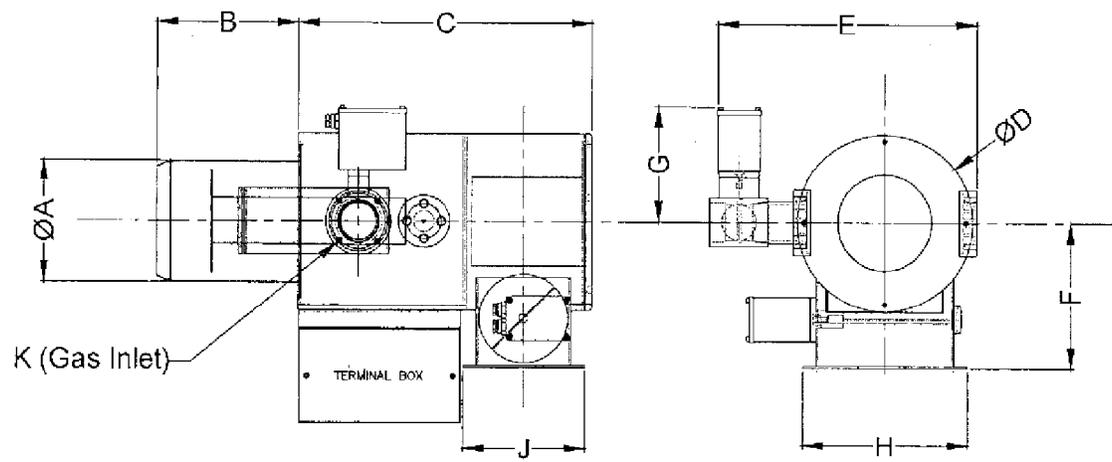


Burner Model Number	Burner Rating		A	B	C	D	F	G	H	J	K	L	M
	(Mmbtu)	(MW)											
All dimension in mm and (inches) unless stated otherwise													
9 (P)	3	0.9	177 (6.97)	210 (8.27)	435 (17.13)	260 (10.24)	394 (15.51)	170 (6.69)	244 (9.60)	180 (7.09)	2" NPT	210 (8.27)	296 (11.65)
15 (P)	5	1.5	189 (7.44)	210 (8.27)	435 (17.13)	260 (10.24)	394 (15.51)	170 (6.69)	244 (9.60)	180 (7.09)	2" NPT	210 (8.27)	296 (11.65)
21 (P)	7	2.1	259 (10.19)	406 (15.98)	642 (25.28)	385 (15.16)	455 (17.91)	170 (6.69)	362 (14.25)	242 (9.53)	2.5" 150lb	210 (8.27)	359 (14.13)
36 (P)	12.3	3.6	299 (11.77)	408 (16.06)	642 (25.28)	385 (15.16)	455 (17.91)	170 (6.69)	362 (14.25)	242 (9.53)	2.5" 150lb	210 (8.27)	359 (14.13)
44 (P)	15	4.4	316 (12.44)	408 (16.06)	642 (25.28)	385 (15.16)	455 (17.91)	170 (6.69)	362 (14.25)	262 (10.31)	150lb	210 (8.27)	359 (14.13)
53 (P)	18	5.3	285 (11.22)	428 (16.85)	703 (27.68)	480 (18.90)	572 (22.52)	240 (9.45)	430 (16.93)	298 (11.73)	150lb	210 (8.27)	406 (15.98)
62 (P)	21	6.2	386 (15.19)	464 (18.27)	703 (27.68)	480 (18.90)	572 (22.52)	240 (9.45)	430 (16.93)	298 (11.73)	150lb	210 (8.27)	406 (15.98)



Technical Data

- Burner Dimensions



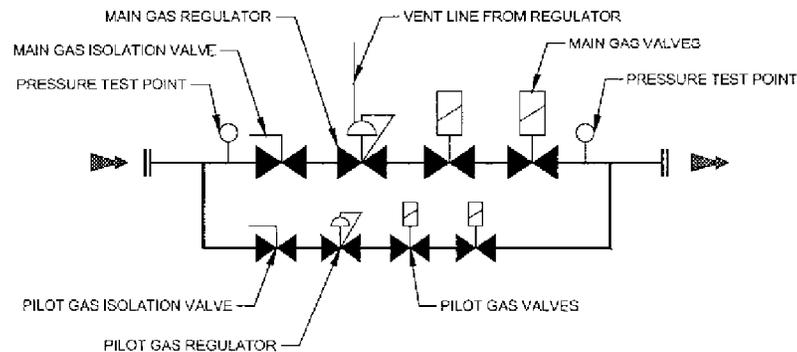
Burner Model Number	A	B	C	D	E	F	G	H	J	K
All dimension in mm and (inches) unless stated otherwise										
9	177 (6.97)	210 (8.27)	435 (17.13)	260 (10.24)	394 (15.51)	212 (8.35)	170 (6.69)	244 (9.60)	180 (7.09)	2" NPT
15	189 (7.44)	210 (8.27)	435 (17.13)	260 (10.24)	394 (15.51)	212 (8.35)	170 (6.69)	244 (9.60)	180 (7.09)	2" NPT
21	259 (10.19)	406 (15.98)	642 (25.28)	385 (15.16)	455 (17.91)	311 (12.24)	170 (6.69)	362 (14.25)	242 (9.53)	2.5" 150lb
36	299 (11.77)	408 (16.06)	642 (25.28)	385 (15.16)	455 (17.91)	311 (12.24)	170 (6.69)	362 (14.25)	242 (9.53)	2.5" 150lb
44	316 (12.44)	408 (16.06)	642 (25.28)	385 (15.16)	455 (17.91)	311 (12.24)	170 (6.69)	362 (14.25)	262 (10.31)	2.5" 150lb
53	285 (11.22)	428 (16.85)	703 (27.68)	480 (18.90)	572 (22.52)	347 (13.66)	240 (9.45)	430 (16.93)	298 (11.73)	3" 150lb
62	386 (15.19)	464 (18.27)	703 (27.68)	480 (18.90)	572 (22.52)	347 (13.66)	240 (9.45)	430 (16.93)	298 (11.73)	3" 150lb
73	412 (16.22)	556 (21.89)	814 (32.05)	630 (24.80)	721 (28.39)	460 (18.11)	253 (9.96)	550 (21.65)	396 (15.59)	4" 150lb
88	456 (17.95)	575 (22.64)	814 (32.05)	630 (24.80)	721 (28.39)	460 (18.11)	253 (9.96)	550 (21.65)	396 (15.59)	4" 150lb
100	490 (19.29)	595 (23.43)	814 (32.05)	630 (24.80)	721 (28.39)	460 (18.11)	253 (9.96)	550 (21.65)	396 (15.59)	4" 150lb
123	540 (21.26)	726 (28.58)	1205 (47.44)	838 (33.00)	942 (37.09)	561 (22.09)	264 (10.39)	721 (28.39)	594 (23.39)	6" 150lb
150	582 (22.91)	766 (30.16)	1205 (47.44)	838 (33.00)	942 (37.09)	561 (22.09)	264 (10.39)	721 (28.39)	594 (23.39)	6" 150lb
175	638 (25.12)	783 (30.83)	1205 (47.44)	838 (33.00)	942 (37.09)	561 (22.09)	264 (10.39)	721 (28.39)	594 (23.39)	6" 150lb
200	699 (27.52)	809 (31.85)	1205 (47.44)	838 (33.00)	942 (37.09)	561 (22.09)	264 (10.39)	721 (28.39)	594 (23.39)	6" 150lb
263	776 (30.55)	986 (38.81)	1608 (63.31)	1055 (41.54)	1187 (46.73)	731 (28.78)	314.8 (12.39)	893 (35.17)	710 (27.95)	8" 150lb
310	864 (34.02)	1035 (40.75)	1608 (63.31)	1055 (41.54)	1187 (46.73)	731 (28.78)	314.8 (12.39)	893 (35.17)	710 (27.95)	8" 150lb

Technical Data

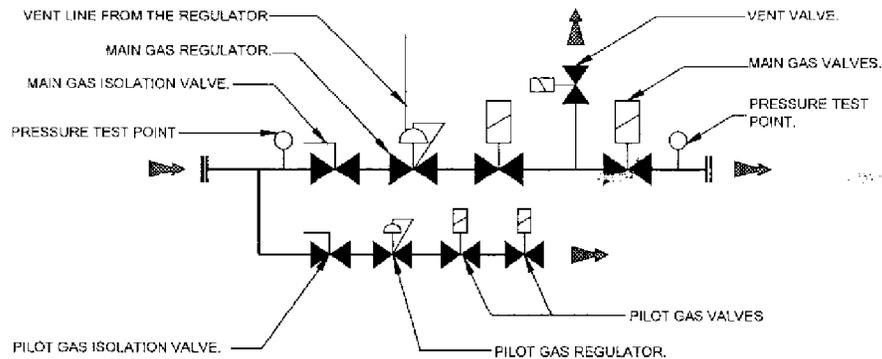
- Gas Trains

Burner Model Number	Gas input rate		Minimum Pilot pressure		Typical gas train size		Typical valve manufacturer	
	Units	(1000 btu/cuft)	MW	"WG	mbar	Inches		mm
9	3,000	0.9		8	20	2"	50.8	Dungs
15	5,000	1.5		8	20	2"	50.8	Dungs
21	7,000	2.1		12	30	2"	50.8	Dungs
36	12,300	3.6		12	30	2.5"	63.5	Dungs
44	15,000	4.4		12	30	2.5"	63.5	Dungs
53	18,000	5.3		12	30	3"	76.2	Dungs
62	21,000	6.2		12	30	3"	76.2	Dungs
73	25,000	7.3		12	30	4"	101.6	Dungs
88	30,000	8.8		12	30	4"	101.6	Dungs
100	35,000	10		12	30	4"	101.6	Dungs
123	42,000	12.3		12	30	5"	127	Dungs
150	50,000	15		12	30	TBA	TBA	TBA
175	60,000	17.5		12	30	TBA	TBA	TBA
200	70,000	20		12	30	TBA	TBA	TBA
263	90,000	26.3		12	30	TBA	TBA	TBA
310	110,000	31		12	30	TBA	TBA	TBA

Note: All gas train sizes shown are typical sizes as site pressures and applications may vary. This may result in a change in selection to meet the volume flow requirements of the application to obtain full input into the boiler. These gas control trains are typically sized at the time of quoting assuming the correct pressures and volumes are supplied on the engineering form. For more information please contact us.



Schematic of a typical gas train (Lc9-15)

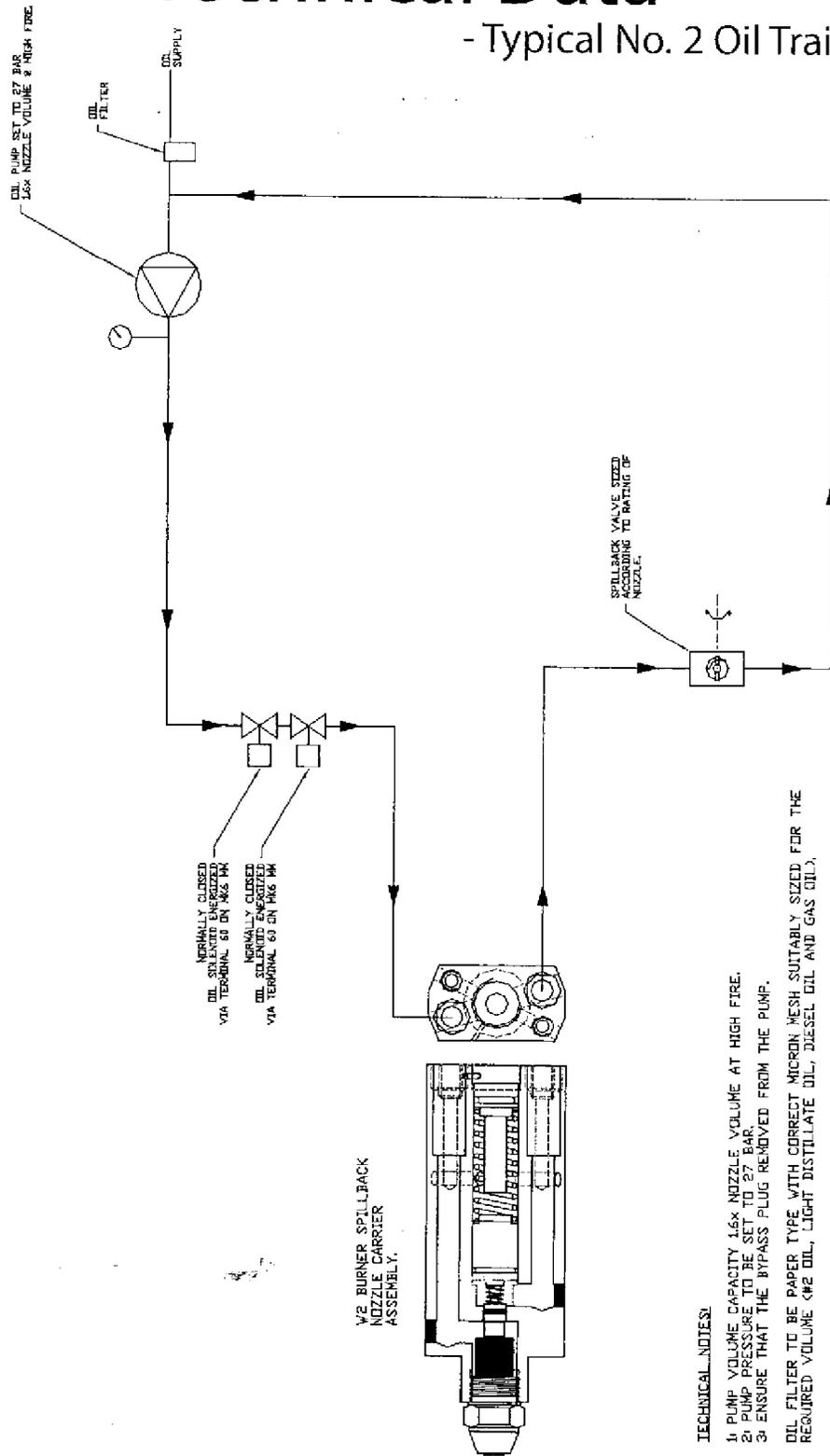


Schematic of a typical gas train (Lc21-310)



Technical Data

- Typical No. 2 Oil Train



TECHNICAL NOTES:

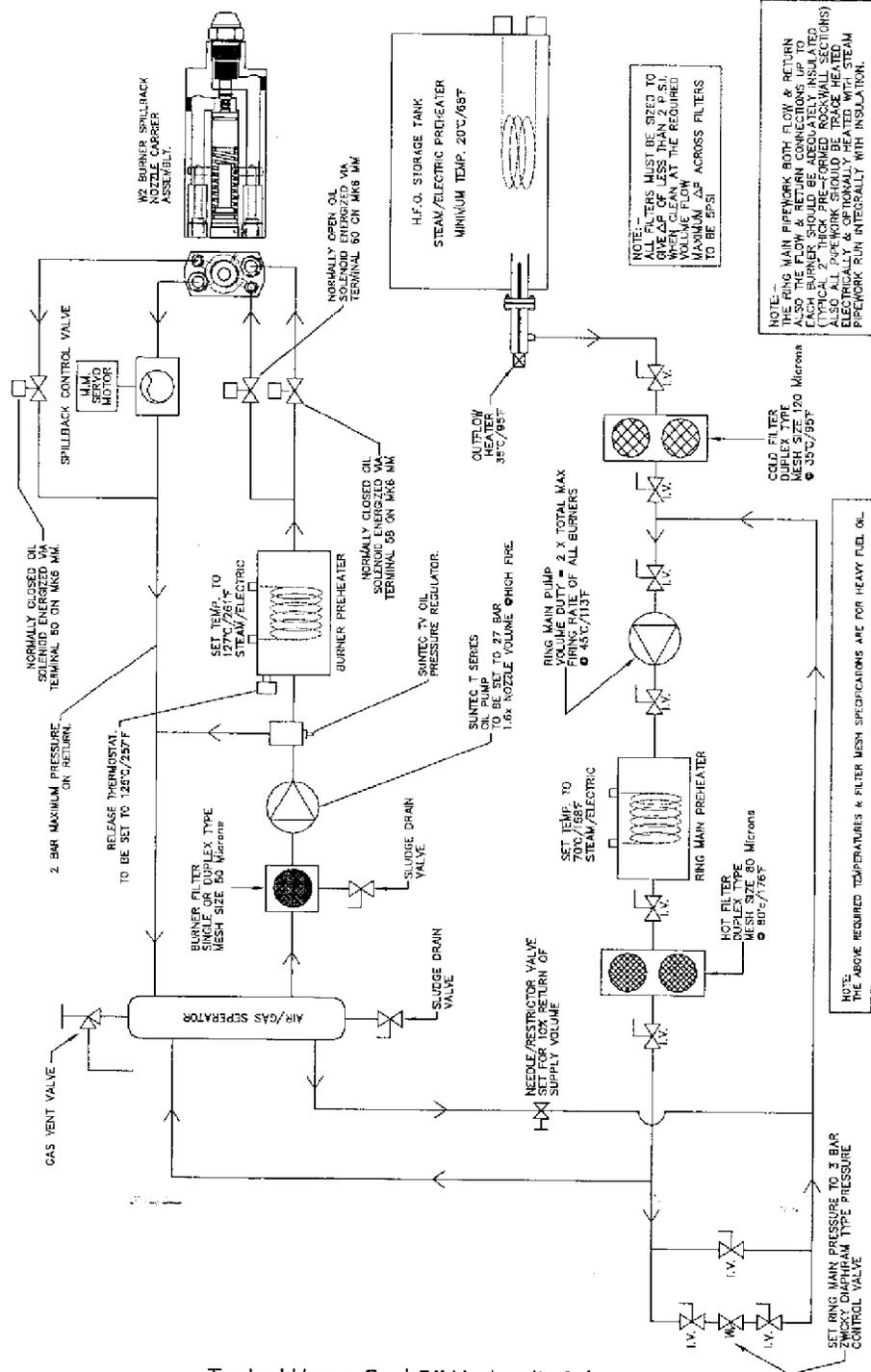
1. PUMP VOLUME CAPACITY 1.6x NOZZLE VOLUME AT HIGH FIRE.
 2. PUMP PRESSURE TO BE SET TO 27 BAR.
 3. ENSURE THAT THE BYPASS PLUG REMOVED FROM THE PUMP.
- OIL FILTER TO BE PAPER TYPE WITH CORRECT MICRON MESH SUITABLY SIZED FOR THE REQUIRED VOLUME (#2 OIL, LIGHT DISTILLATE OIL, DIESEL OIL AND GAS OIL).

Typical Light Fuel Oil Hydraulic Schematic



Technical Data

- Typical No. 6 Oil Train



Typical Heavy Fuel Oil Hydraulic Schematic



Approvals



In 2008 Limpsfield gained their CE BS EN 676 Certificate for the design, build and testing of the burner range. Limpsfield Combustion Engineering Limited is continuing to design and test new products, offering the combustion industry world beating products. This is achieved by enthusiastic and talented individuals working collectively as a team, this along with good sound investment by the owners of Limpsfield allow us to progress our products and people with confidence into the future.



EC Type Examination Certificate

Issued by Advantica Certification Services

Certificate No. EC-87/08-073 Rev 1 (Page 1 of 1)
 Notified Body No. 0087
 Project No. 2/05134
 Date 17 December 2008
 Original/Supplementary Supplementary
 Applicant/Manufacturer Limpsfield Combustion Engineering Limited
 Unit 10 Airport Industrial Estate
 Wireless Way
 Biggin Hill
 Kent
 TN16 3BW
 Normative Reference BS EN 676: 2003
 EC Product Identification No. 878T73

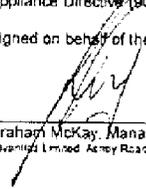
Product Type	Model Designation	Gas Category & Pressure	Destination Countries
Industrial Forced Draught Burner	LC9, LC15, LC21, LC36, LC44, LC53, LC62, LC73, LC86 & LC*00	Is (20-350)	CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, NL, NO, PT, SE, SI & SK

Note: This revised certificate has been issued to include DE, LU, NL & FR and to clarify supply pressure.

Declaration

Type samples representative of the products detailed have been tested and examined and found to comply with the Essential Requirements detailed in Annex I of the European Gas Appliance Directive (90/396/EEC)

Signed on behalf of the Advantica Notified Body (No. 0087)


 Graham McKay, Manager, Certification Services
 Advantica Limited, Abbey Road, Loughborough, Leicestershire LE11 3QR

Product Evaluation You Can Rely On



Approvals



In 2007 Limpsfield gained their ISO 9001:2001 International Quality Management Certificate.



Quality Management System Certificate

Issued by Advantica Certification Services

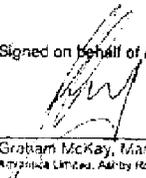
Certificate No.	QMS07/602
Certification Body No.	079
Date	6 th November 2007
Applicant	Limpsfield Combustion Engineering Ltd. Unit 10 Airport Industrial Estate Wireless Way Biggin Hill Kent TN16 3BW
Standard	BS EN ISO 9001:2000
Expiry Date	1 st September 2010

Declaration

This is to certify that the Quality Management System has been assessed and registered by Advantica Certification Services for the scope of:

The design, manufacture & testing of gas & oil burners with associated valves, enclosures and housings

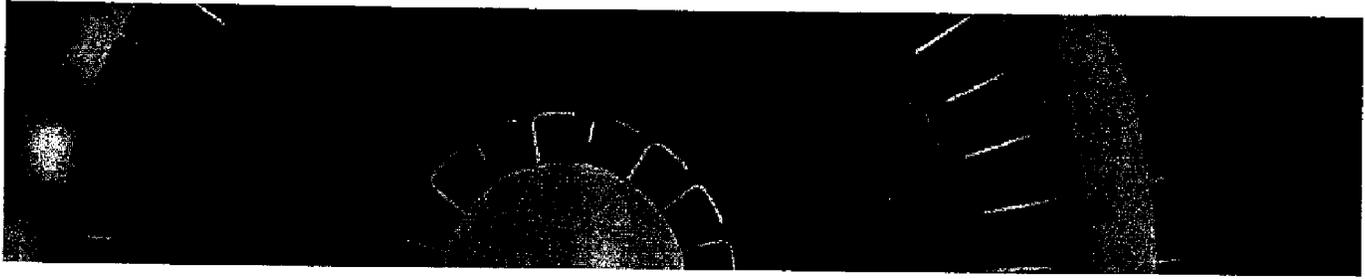
Signed on behalf of Advantica



Graham McKay, Manager, Certification Services
Advantica Limited, Ashby Road, Loughborough, Leicestershire LE11 3GJ



Product Evaluation You Can Rely On



Rep:

Limpsfield Combustion Engineering Co. Limited
Unit 10 Airport industrial Estate,
Wireless road,
Biggin Hill,
Kent,
TN16 3BW



Tel: +44 (0)1959 576 633
Fax: +44 (0)1959 576 644

e-mail: sales@limpsfield.co.uk
Website: www.limpsfield.co.uk



Carroll, Catherine M.

From: Gavin McCarthy <GMcCarthy@PierceAtwood.com>
Sent: Friday, May 30, 2014 4:04 PM
To: Carroll, Catherine M.
Subject: RE: Clarifying Language to Section 13.7.2 from Maine Fuel Board Staff - Comments
Welcome from Interested Parties

Members of the Fuel Board,

Mechanical Services provides this brief additional commentary to respond to certain comments made at or after the most recent Fuel Board meeting.

First, we do not agree with the clarifying comments made by Board staff to the extent that they conflict with the adoption of the language proposed by Mechanical Services for section 13.7.2. The result would either be the remaining imposition of burdensome and expensive testing, which should not be done for the reasons that Mechanical Services previously explained; or it would be internally inconsistent and confusing, referring in some places to testing and in others to selection. We presume that such was not the intent, and the Administrator has confirmed that staff comments were not intended as any commentary on comments submitted by others to date, including by Mechanical Services, but rather were simply clarifying comments from review of the prior draft.

Second, representatives from Northeast Mechanical made statements at the last meeting to the effect that replacing a burner on an existing burner-boiler combination will void the combination's UL listing if the new burner is not made by the same manufacturer as the old burner. Northeast Mechanical made no particular suggestions as to changes to be made to the existing language, and it is not precisely clear what they are proposing. Whatever it might be, we urge the Board not to make any changes as a result of the views of Northeast Mechanical. As an initial matter, the comments are irrelevant – the rule already requires that the burner be UL listed either separately or as a package, consistent with past practice of permitting the installation of a UL burner on a previously approved burner/boiler package. The Board has in any event made clear on several previous occasions its view that it does not control what is or is not UL listed, and it would be inappropriate to alter that position now to adopt a view pressed for the apparent purpose of gaining a competitive advantage for a particular manufacturer, which would be bad for the business climate in Maine and for Maine consumers. This is especially so given that Northeast Mechanical submitted no evidence in support of its assertion, and the assertion appears to be incorrect or at least overbroad – while it would depend on the precise UL approval at issue, the retrofit of parts onto an existing burner is likely to void the UL package listing given to the original package just as would the replacement of the entire burner. The difference is that, in the case of a replacement of the entire burner, the new burner is UL approved (and thus found to be safe) while in the retrofit parts situation there is often no UL approval at all.

Best,
Gavin McCarthy

Gavin G. McCarthy

PIERCE ATWOOD LLP PH 207.791.1170

In accordance with I.R.S. Circular 230 we advise you that any tax advice in this email is not intended or written to be used, and cannot be used, by any recipient for the avoidance of penalties under federal tax laws.

From: Carroll, Catherine M. [mailto:Catherine.M.Carroll@maine.gov]
Sent: Friday, May 23, 2014 4:59 PM

To: Stacey Fitts (SFitts@summitnaturalgas.com); Chris Green, Jr. (chrisgreen@mechanicalservices.com); Chris Green (cgreen@mechanicalservices.com); rcote@carlincombustion.com; Laurie Baizanelli (LBaizanelli@mainenaturalgas.com); Smith, Lisa J; Lambert, Mark (lambert@unitil.com); adlermpj@aol.com; BDamon@damonmechanical.com; JOHN SUNDERLAND (jtsunderland@myfairpoint.net); jwjamesiv@gmail.com; Gavin McCarthy; dburnell@nemech.com; Mark Anderson (Mark.Anderson@deadriver.com) (Mark.Anderson@deadriver.com); propane@maine.rr.com; mmoya@cq.com; moody@uninets.net; dawn.slater@thomsonreuters.com; jamie@maineenergymarketers.com; jrose@pgane.org; Stewart, Timothy (LNG-SA2) (timothy.stewart@lexisnexis.com); ffitzpatrick@beckettcorp.com

Cc: Head, Anne L; Holmes, Peter T; Leclair, Robert V; Perkins, Bob; Gray, Vickey L

Subject: Clarifying Language to Section 13.7.2 from Maine Fuel Board Staff - Comments Welcome from Interested Parties

Importance: High

Dear Interested Parties ~ Thank you to those of you who have submitted written comments, thus far, regarding changes to Section 13.7 of the Maine Fuel Board rules. As you know, the comment period ends at the close of business **Friday, May 30, 2014**. Please refer to the email I sent to you on May 23rd stating that there was a typographical error and that the day the comment period actually ends is on May 30th.

Board staff raise the following changes to 13.7.2 that would clarify and not modify the language in the rule. Specifically, the staff proposes deleting the word in paragraph 2 "tested" and replacing it with "selected". The words "for use" are added in paragraph 2. A.. And, in the NOTE paragraph the words "and/or" are added and the words "or licensed professional engineer are deleted. I have inserted a comment next to each of the proposed changes for purposes of making these changes stand out.

We hope that those who are interested will comment on this clarifying language. Any additional comments are welcome until the close of business Friday, May 30, 2014. Thank you.

Yours truly,

Catherine

Catherine M. Carroll

Board Administrator

Office of Professional and Occupational Regulation

www.maine.gov/pfpr/professionallicensing

 Tel: (207) 624-8605 (direct)

 Tel: Maine relay 711 (TTY)

 Fax: (207) 624-8636

 Address: Department of Professional and Financial Regulation
35 State House Station, Augusta, Maine 04333-0035
Office Located At: 76 Northern Avenue, Gardiner, Maine

Carroll, Catherine M.

From: JOHN SUNDERLAND <jtsunderland@myfairpoint.net>
Sent: Wednesday, May 07, 2014 1:44 PM
To: Carroll, Catherine M.
Cc: John James; rcote@carlincombustion.com
Subject: Recommended Wording to Section 13.7
Attachments: Proposed Gas Burner Rules.doc

Ms. Carroll,

Attached is a Word document with the comments by the Bath North-End Natural Gas Working Group (the "Bath Group") to the language proposed for Maine Fuel Board Chapter 13, section 13.7.1. These comments supercede the previous submission by John James IV.

As a starting point, I pulled the latest proposed rule change language from the state's web site and saved the proposed language AFTER the changes from the earlier draft. The language on the web has track changes showing, and I didn't want to confuse things by tracking my suggested changes on top of the existing track changes. Thus, the initial language on the attached represents the clean version of the proposed rule language, and the Bath Group's suggested changes show as deletions and additions from that clean version.

The Bath Group's draft deletes the "testing" language from proposed section 13.7.1 subsection 2 because that language eliminates the ability of many members of the Bath Group to convert our systems to natural gas unless we purchase entirely new heating systems. The boiler manufacturers will never test our existing boilers with gas burners because they have absolutely no financial incentive to do so. The specific "make and model" requirement in proposed subsection 2 would thus require burner manufacturers to identify every single make and model of heating plant in our homes and then separately test each one, a time and money burden that no burner manufacturer would undertake. Retaining this "testing" requirement thus denies many of us the option to convert our existing heating systems from fuel oil to natural gas.

Moreover, in subsection 3, the state has already proposed a safe harbor eliminating the testing requirement if the boiler manufacturer is no longer in business, so long as the conversion installation meets the applicable code requirements. The Bath Group fails to see how the boiler manufacturer's continued existence should be the determining factor; instead, complying with the relevant code provisions should provide the necessary safety assurance. Because the state is already satisfied that compliance with the burner manufacturer's installation instructions and the relevant code provisions provides sufficient assurance that the conversion installation will be safe for homeowners whose boiler manufacturers are no longer around, why would it impose an impossible testing burden for those homeowners whose boiler manufacturers remain in business? Under the changes the Bath Group proposed, the standards are the same whether the boiler manufacturer is in business or not.

In addition the code requirements not only provide the necessary safety standard, they are national in scope. The proposed individual testing requirement says nothing about testing standards or how they are to be implemented or evaluated. Thus, the testing would end up being company by company and unit by unit, a standard far more likely to create problems than simply following the national code standards.

The Bath Group does not understand why the state would adopt a rule that would require its citizens to continue to retain fuel oil for heat or spend an excessive amount for the opportunity to convert. The state's rules and regulations should exist to benefit the citizenry of Maine, not to make life more cumbersome and expensive.

13.7.1 400,000 btu or less

When converting to propane or natural gas from another fuel source where the input of the burner is 400,000 btu or less, the following requirements must be met:

1. The conversion burner must be a listed conversion burner;
2. ~~The burner must be tested by the burner or appliance manufacturer to ensure safe operation in the make and model of the appliance to be converted. The burner manufacturer must supply installation and combustion set-up instructions for that operation in the appliance for which the burner is to be installed; and~~
3. ~~In the case of an appliance the manufacturer of which longer available, the burner selection criteria included in ANSI Z21.8, and the burner manufacturer's combustion setup instructions may be used.~~
- 4.3. The installation must conform to NFPA #54 (2012) and ANSI Z 21.8, as incorporated by reference into NFPA #54 (2012).

Carroll, Catherine M.

From: Bruce Damon <bdamon@damonmechanical.com>
Sent: Monday, May 12, 2014 10:33 AM
To: Carroll, Catherine M.
Subject: Written comments relative to conversion burner regulation

Catherine

I would add my support to the comments made by Mechanical Services. As a long time contractor installing gas fired equipment both propane and natural gas we have the same concerns. There are hundreds of different combinations for conversions of not only boilers but furnaces as well. With the availability of efficient clean burning natural gas finally coming to much of our state, now is not the time to inflict cost prohibitive over regulation on our long suffering consumers. Those of us who have worked closely with the gas utilities for many years, have demonstrated a consistent record of safety that speaks for itself. This current regulation as presented works to the detriment of not only the installers, the utilities, but the end user as well. The natural gas extensions are a huge shot in the arm for our economy, preventing more people from accessing it by these unwarranted rules, is unnecessary and counter to good economic and environmental policy. Please consider the overall impact before issuing this new section.

If there is one area that should be added for emphasis when doing conversions it would be a restatement of the venting requirements when connecting to existing chimneys. I have a much greater concern about that than I do about the application of the burner itself. Regardless of a proper "approved" burner installation, major problems that are absolutely untestable by either manufacturer, due to field conditions, can create a health hazard that must be considered. Many of the existing oil fired systems fail to meet all of the current requirements yet they exist. By doing our job well we may be able to correct some of those issues. At the same time improving our environment and promoting job growth in a safe sensible manner.

Thank You

Bruce Damon
President Damon Mechanical
PNT 1250

Carroll, Catherine M.

From: adlermpj@aol.com
Sent: Monday, May 12, 2014 10:49 AM
To: Carroll, Catherine M.
Subject: Re: 13.7.1

Catherine

As per our phone conversation I feel that the the wording should be changed in 13.7.1 line 2. It should read as follows:
2. The burner must be tested by the burner manufacturer and the appliance manufacturer to ensure safe operation in the make and model of the appliance to be converted. The burner manufacturer must supply installation and combustion set-up instructions for that appliance.

2a. The installer must obtain a letter on the appliance manufacturers letter head that the appliance to be converted is capable of using gas as a fuel be it propane or natural gas.

Sincerely
Michael Adler
Adler's Plumbing & Heating
82 Loring Avenue
Auburn, Maine
783-7114
Lic. #PNT350

-----Original Message-----

From: Carroll, Catherine M. <Catherine.M.Carroll@maine.gov>
To: adlermpj <adlermpj@aol.com>
Sent: Mon, May 12, 2014 9:39 am

Yours truly,

Catherine
Catherine M. Carroll
Board Administrator
Office of Professional and Occupational Regulation
www.maine.gov/pfr/professionallicensing

 Tel: (207) 624-8605 (direct)

 Tel: Maine relay 711 (TTY)

 Fax: (207) 624-8636

 Address: Department of Professional and Financial Regulation
35 State House Station, Augusta, Maine 04333-0035
Office Located At: 76 Northern Avenue, Gardiner, Maine

Carroll, Catherine M.

From: adlermpj@aol.com
Sent: Monday, May 26, 2014 12:38 PM
To: Carroll, Catherine M.
Subject: Re: Clarifying Language to Section 13.7.2 from Maine Fuel Board Staff - Comments Welcome from Interested Parties

Cathrine

Upon reading the changes that have been made to the gas code 13.7 I still feel that the board is doing a disservice to the general public for the under 400,000 BTU appliances. Code number 13.7.1 should read the same as 13.7.2. This will only cause confusion among the general public and owners of larger properties that require larger boilers. It also creates a problem with insurance companies that will be looking to place blame on the licensed person who installed a conversion burner on a appliance that caused damage. In talking with inspectors for the insurance companies I have found that all of the inspectors have told me that if that if you do not have a letter from the appliance manufacturer that a gas burner is allowed on their appliance do not install it because the licensed person will take the hit if something should go wrong. As far as the ANSI STD. Z21.8 It is just a testing standard, not a license to install a conversion burner on a appliance. PLEASE STRESS THE FACT THAT 13.7.1 MUST READ THE SAME AS 13.7.2.

Thanks

Mike Adler
Auburn, Maine
Lic. PNT350

-----Original Message-----

From: Carroll, Catherine M. <Catherine.M.Carroll@maine.gov>
To: Stacey Fitts (SFitts@summitnaturalgas.com) <SFitts@summitnaturalgas.com>; Chris Green, Jr. (chriscgreen@mechanicalservices.com) <chriscgreen@mechanicalservices.com>; Chris Green (cgreen@mechanicalservices.com) <cgreen@mechanicalservices.com>; rcote <rcote@carlincombustion.com>; Laurie Balzanelli (LBalzanelli@mainenaturalgas.com) <LBalzanelli@mainenaturalgas.com>; Smith, Lisa J <Lisa.J.Smith@maine.gov>; Lambert, Mark (lambert@unitil.com) (lambert@unitil.com) <lambert@unitil.com>; adlermpj <adlermpj@aol.com>; BDamon <BDamon@damonmechanical.com>; JOHN SUNDERLAND (jtsunderland@myfairpoint.net) <jtsunderland@myfairpoint.net>; jwjamesiv <jwjamesiv@gmail.com>; Gavin McCarthy (GMcCarthy@PierceAtwood.com) <GMcCarthy@PierceAtwood.com>; dburnell <dburnell@nemech.com>; Mark Anderson (Mark.Anderson@deadriver.com) (Mark.Anderson@deadriver.com) <Mark.Anderson@deadriver.com>; propane <propane@maine.rr.com>; mmoya <mmoya@cq.com>; moody <moody@uninets.net>; dawn.slater <dawn.slater@thomsonreuters.com>; jamie <jamie@maineenergymarketers.com>; jrose <jrose@pgane.org>; Stewart, Timothy (LNG-SA2) (timothy.stewart@lexisnexis.com) (LNG-SA2) <timothy.stewart@lexisnexis.com>; ffitzpatrick <ffitpatrick@beckettcorp.com>
Cc: Head, Anne L <Anne.L.Head@maine.gov>; Holmes, Peter T <Peter.T.Holmes@maine.gov>; Leclair, Robert V <Robert.V.Leclair@maine.gov>; Perkins, Bob <Bob.Perkins@maine.gov>; Gray, Vickey L <Vickey.L.Gray@maine.gov>
Sent: Fri, May 23, 2014 3:58 pm
Subject: Clarifying Language to Section 13.7.2 from Maine Fuel Board Staff - Comments Welcome from Interested Parties

Dear Interested Parties ~ Thank you to those of you who have submitted written comments, thus far, regarding changes to Section 13.7 of the Maine Fuel Board rules. As you know, the comment period ends at the close of business **Friday, May 30, 2014**. Please refer to the email I sent to you on May 23rd stating that there was a typographical error and that the day the comment period actually ends is on May 30th.

Board staff raise the following changes to 13.7.2 that would clarify and not modify the language in the rule. Specifically, the staff proposes deleting the word in paragraph 2 "tested" and replacing it with "selected". The words "for use" are added in paragraph 2. A. And, in the NOTE paragraph the words "and/or" are added and the words "or licensed professional engineer" are deleted. I have inserted a comment next to each of the proposed changes for purposes of making these changes stand out.

We hope that those who are interested will comment on this clarifying language. Any additional comments are welcome until the close of business Friday, May 30, 2014. Thank you.

Carroll, Catherine M.

From: Dan Burnell <DBurnell@Nemtech.com>
Sent: Friday, May 30, 2014 5:00 PM
To: Carroll, Catherine M.
Cc: Jack Griffith; Mark Caron
Subject: Maine Fuel Board Staff - - Northeast Mechanical Written Response 13.7.2.2
Attachments: State of Maine Fuel Board Blake-NEM Letter 5-30-14 Gas Conversion.pdf; Cleaver-Brooks Cover Page 750-91 O&M.pdf; Maine Fuel Board -Cleaver-Brooks Letter 28May 14 - RE- Conversion Burners.doc; Conversion of Boiler 08-07R3.pdf; Conversion of Boilers 06-02.pdf; State of Maine Additional Cleaver-Brooks letter 30 May 14 -.doc

Importance: High

Catherine, Attached please find our written comments to the proposed changes to rules regarding gas conversions.

Regards,

Dan Burnell
Engineered Products Group
DD: 207-400-8312



Yours truly,

Catherine
Catherine M. Carroll
Board Administrator
Office of Professional and Occupational Regulation
www.maine.gov/pfr/professionallicensing

 Tel: (207) 624-8605 (direct)
 Tel: Maine relay 711 (TTY)
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 Address: Department of Professional and Financial Regulation
35 State House Station, Augusta, Maine 04333-0035
Office Located At: 76 Northern Avenue, Gardiner, Maine



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Portland, ME 04103
800-308-2213
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www.blakeequip.com

Peak Performance Solutions

Page 1 of 2

May 30, 2014

Members of the Maine Fuel Board
35 State House Station
Augusta, ME 04333

Blake Equipment/Northeast Mechanical Division is a manufacturer representative for Cleaver-Brooks Boilers. As their representative, we have been providing boilers into Maine for over 60 years. We would first like to applaud the Maine Fuel Board for developing new rules to address the expansion of natural and propane gas sources within Maine in a safe manner. This letter strictly pertains to 13.7.2 burners greater than 400,000 BTUH.

We recently attended the Public Hearing on May 10, 2014 and read a letter from Cleaver-Brooks regarding the conversion of oil fired Cleaver-Brooks boilers with a gas conversion burner. Please see the attachment: *Maine Fuel Board -Cleaver-Brooks Letter 28May 14 - RE- Conversion Burners.*

Cleaver- Brooks and Northeast Mechanical have significant safety concerns regarding gas conversions on Cleaver-Brooks Model CB and CBLE boilers, as well as some of the language that has been suggested to the Maine Fuel Board. As stated within the Cleaver-Brooks letter, these boiler/burner packages are fully engineered and UL tested with all fuel oils and natural gas. As a result they bear a UL Package listing. When a Cleaver-Brooks CB or CBLE is to be converted, it is simply a matter adding a gas train and updating the site with current code compliance requirements, all at a very affordable cost to the owner. In most cases, the owner will also elect to add energy saving and safety improvement devices. Case in point, we have recently been the low bidder for multiple gas conversion burners on several large boilers owned by the State of Maine.

All conversions for Cleaver-Brooks boilers are submitted and review by Cleaver-Brooks Engineering to insure that the conversion meets the OEM requirements for a safe and reliable conversion package. They further provide revised wiring diagrams and new name plates to identify the revised Boiler/Burner Model and Serial number, as well as a complete boiler/burner package operation and maintenance manual (*see Attachment: Cleaver-Brooks 750-91 O&M*). Therefore, all changes are fully documented within the OEM-Cleaver Brooks. We strongly urge the Maine Fuel Board to require that boiler/burner packages that carry a UL or Certified Package label be converted within their package listing.

As you are aware, the majority of natural gas that is used in Maine comes from resources in Canada. The New Brunswick government was also faced with the same concerns of conversion burners on existing oil fired boilers, and has adopted standards to protect the general public. I respectfully submit for your consideration Attachments: *Fuel Safety Bulletin 2006-02 and Fuel Safety Bulletin 2008-07.*



As is evident by their standards, they specifically have addressed conversion burners on equipment that has not be otherwise been certified (UL, ULC or CSA) or the manufacturer is no longer in business. We encourage the Maine Fuel Board to adopt similar standards, while maintaining that certified or packaged listed boilers/burners be converted per their listing.

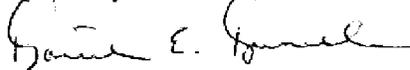
Please consider that nearly 90% of the major hospitals that are in Maine have Cleaver-Brooks high pressure ASME Section I –Power Boilers. Allowing a burner manufacturer to make a “selected” (13.7.2.2) burner choice is very subjective and arguably potentially dangerous. Please consider that without a burner being tested on a given boiler /burner package..... a misapplied burner could be installed that could create significant damage to the pressure vessel with the potential of a burner or boiler explosion.

We take complete exception to the following comment submitted by another party: “since a boiler or pressure vessel is essentially just a metal box, there is no safety combustion testing that would vary from boiler to boiler”.

We clearly know that is not the case and that boilers and pressure vessels contain a significant amount of stored energy, which must be safely controlled and can be heavily impacted or damaged by the burner/combustion control systems. Furthermore, combustion variables and setting can vary significantly depending on firing rates, emission control equipment and the design and construction of a given boiler or pressure vessel.

We sincerely appreciate the hard work and tough decisions that the Maine Fuel Board will make to insure that the people of Maine are well represented and protected by the Maine Fuel Board and that conversion burners are installed to the highest safety standards available.

Respectfully Submitted,



Daniel E. Burnell
Senior Vice President
Blake Equipment
Northeast Mechanical Division



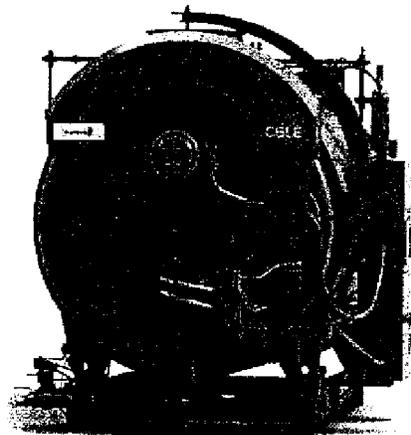
Model CBLE

Packaged Boiler

250 - 350 HP

Light Oil, Heavy Oil, Gas, or Combination

Operation and Maintenance Manual



750-91
12/09



221 Law Street
Thomasville, GA 31792
229.226.3024
cleaverbrooks.com

May 28, 2014

The Blake Group / Northeast Mechanical
70 Ingersol Dr., Unit 1
Portland, ME 04103

Attention: Member of the Maine Fuel Board

Re: Alternate Burner Manufacturers

Dear Board Members:

The following is with regard to the use of "alternate manufacturers" burners to retrofit or replace the factory supplied burners on Cleaver-Brooks model CB, CBLE, and CBEX-Elite series boilers.

The CB, CBLE, and CBEX-Elite series boilers all utilize a Cleaver-Brooks integral burner that is built into the front head of the boiler. These boiler-burner units have been engineered, designed, tested and built as a UL approved and UL listed packaged unit that is unique to the industry.

We have no experience with the use of burner products supplied by "alternate manufacturers" and in no way condone the use of their product on our boiler models referenced above. In addition we feel that the integrity, efficiency, and safety of the boiler would be compromised by the use of any alternate product and in no way will stand behind the performance of the boiler if modified with the use of alternate burner manufacturers.

Please feel free to contact me at 414-232-1680 or jgriffith@cleaverbrook.com if there any questions of if I can be of any further assistance on this matter.

Sincerely yours,

Jack Griffith

Regional Vice President
Cleaver-Brooks, Inc.



221 Law Street
Thomasville, GA 31792
229 226.3024
cleaverbrooks.com

May 30, 2014

The Blake Group / Northeast Mechanical
70 Ingersol Dr., Unit 1
Portland, ME 04103

Attention: Member of the Maine Fuel Board

Re: Alternate Burner Manufacturers

Dear Board Members:

Cleaver Brooks boilers are designed to work as a package with an integral burner. Our engineering team carefully sizes the furnace/combustion chamber for safe and complete combustion of fuel. Boiler package undergoes extensive testing at our Research & Development lab to shape the flame within furnace dimensions. Burner changes are made to achieve acceptable performance. Proper match up leads to stable combustion across wide range of operating conditions. Our boiler-burner is UL listed as a package.

If a different burner is installed on Cleaver Brooks boiler, flame diameter and length may not be compatible with furnace dimensions. Too large of a flame diameter can lead to impingement, dirty and unstable combustion. If the flame length is too long for available furnace length, can lead to incomplete combustion, higher rear turnaround flue gas temperature and high thermal stress at tube to tubesheet attachment. High thermal stresses can lead to 2nd pass tube leaks and expensive pressure vessel repairs.

On a Firetube boiler, combustion gases pass through multiple tube passes after exiting from the furnace. Convective heat transfer takes place in these tube passes with associated pressure drop. Burner combustion fan has to be sized correctly to achieve rated input by overcoming combustion head and boiler pressure drops. If the fan sizing is not addressed during boiler-burner match up, boiler may not reach rated capacity. On the flip side, if the fan is too large, might be possible to overfire the unit. Exceeding the rated capacity can lead to pressure vessel failure.

Rakesh Zala
Director, Product Engineering
Packaged Boiler Systems



See our video on
**THE POWER OF
TOTAL INTEGRATION**

Office: 414.438.5455 | Mobile: 414.312.2004 | Fax: 414.438.5446
rzala@cleaverbrooks.com
cleaverbrooks.com

Fuel Safety Bulletin

2006-02

Dated: February 23, 2006

Rev. 1 - July 19, 2006

Rev 2 - Sept. 12, 2006

Subject: Conversion of existing certified boilers from oil or propane to natural gas

This policy refers to *existing, in-service* boilers for which the manufacturer does not make a certified gas conversion burner or one for which the manufacturer is no longer in business. *New boilers must be certified for the fuel to be used.*

This does not apply to uncertified boilers presently in use, nor does it apply to new boilers. All boilers to be converted must bear a recognized certification label for the fuel used at present.

The following information shall be submitted to Fuel Safety Section for plan review prior to starting the conversion. Upon review of the submitted documents Fuel Safety Section may or may not grant approval for the boiler to be converted.

The Fuel Safety Section will require that a testing agency such as CSA perform the evaluation.

1. A letter from the Boiler manufacturer (if possible) or Burner manufacturer, on company letterhead, stating that the burner (make model and serial number) is compatible with the appliance (make model and serial number). The letter shall also include as a minimum the following supporting documentation;
 - a. Combustion chamber geometry,
 - b. Flame dimensions,
 - c. Min and max pressures, and
 - d. Required combustion setup (acceptable O₂, CO, CO₂ and stack temperatures).
2. A letter stating that the boiler will be thoroughly cleaned and inspected before conversion, and
3. A CSA Special Inspection form and the applicable fee. This form is available from our website at: http://www.gov.ns.ca/snsmr/forms/pdf/fuel_safety/Special_Appliance_Label_Application_rev03.pdf

Sincerely,

Dale C. Stewart
Chief Inspector, Fuel Safety

Fuel Safety Bulletin

2008-07

Conversion of existing oil/propane boilers to natural gas

Dated: July 08, 2008

Revised: Feb. 17, 2009

Revised: April 14, 2009

Revised: May 05, 2011

This policy refers to the conversion of *existing, Certified, in-service* boilers for which the manufacturer does not make a certified gas conversion burner, one for which the manufacturer is no longer in business, or one into which the installer will install a burner not tested and certified for use in the particular boiler.

New boilers must be certified for the fuel to be used.

Boilers must bear a recognized certification mark in order to be eligible for conversion.

The following information shall be submitted to Fuel Safety Section for plan review prior to starting the conversion. Upon review of the submitted documents Fuel Safety Section may or may not grant approval for the boiler to be converted.

The Fuel Safety Section will require that a testing agency such as CSA perform the evaluation.

1. A letter from the Boiler manufacturer or Burner manufacturer, on company letterhead, stating that the burner (make, model and serial number) is compatible with the appliance (make model and serial number). The letter shall also include, as a minimum, the following supporting documentation;
 - a. Combustion chamber geometry,
 - b. Flame dimensions,
 - c. Min and max pressures, and
 - d. Required combustion setup (acceptable O₂, CO, CO₂ and stack temperatures).
2. A letter stating that the boiler will be thoroughly cleaned and inspected before conversion, and
3. A CSA Special Inspection form and the applicable fee. This form is available from our website at: http://www.gov.ns.ca/snsmt/forms/pdf/fuel_safety/Application_for_CSA_Special_Appliance_Label.pdf
4. Upon startup, forward a copy of the commissioning report to Fuel Safety.

NOTES:

1. Please note that this procedure applies **ONLY** to boilers bearing a recognized certification mark. Existing, uncertified boilers, will **NOT** be considered for field conversion.

2. It is the responsibility of the Gas Technician involved in a conversion, to ensure that all aspects of the appliance (boiler) installation fully comply with the presently adopted CSA B149 codes. This includes, but is not limited to, clearances, the venting system (chimney and breaching), the boiler room air supply and ventilation air, and the gas supply system. Special care must be taken as many aspects of these boiler installations never met any applicable codes. There is no "Grand fathering" of any aspect of the existing installation.

Dale C. Stewart
Chief Inspector, Fuel Safety



PAUL R. LEPAGE
GOVERNOR

STATE OF MAINE
OFFICE OF THE GOVERNOR
1 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0001

PATRICK C. WOODCOCK
DIRECTOR OF GOVERNOR'S
ENERGY OFFICE

May 23, 2014

Members of the Maine Fuel Board
C/O Catherine Carroll, Board Administrator
35 State House Station
Augusta, ME 04333

Dear Members of the Fuel Board,

I appreciate the opportunity to comment regarding a proposed rule change under Chapter 13, Section 13.7 with respect to conversion burners.

The Maine Energy Office believes that the requirement of testing of burners for specific boilers would seriously undermine our State's energy goals of providing affordable energy to Maine homes. Mainers are looking to propane and natural gas to reduce energy bills, and placing potential barriers to this conversion should require clear evidence that there would be material safety improvements. At this time, the Energy Office is not aware of a need for the requirement to test of burners for specific boilers.

It is our understanding that the natural gas distribution companies have proposed an amendment that would simply require that burners have "written documentation" that the burner has been approved using standard engineering practices. The Energy Office supports that proposed modification and urges that the Board adopt these changes.

I thank you for consideration of these comments and please do not hesitate to contact me if I may be of assistance as you finalize this important rule.

Sincerely,

Patrick C. Woodcock
Director
Governor's Energy Office

Carroll, Catherine M.

From: rcote@carlincombustion.com
Sent: Friday, May 23, 2014 3:56 PM
To: Carroll, Catherine M.
Subject: Proposed Rules for section 13.7.1 and 13.7.2
Attachments: Proposed 5-11-14.doc; Proposed over 400,000 BTU.doc

Members of the Maine Fuel Board
C/O Catherine Carroll, Board Administrator
35 State House Station
Augusta, ME 04333

Dear Members of the Fuel Board,

I want to thank the fuel board members for the opportunity to speak to them in regards to proposed changes under Chapter 13, Section 13.7 with respect to conversion burners.

I have presented both verbal and written comments to the board during the two public meetings held in regards to the proposed rules.

I have done hundreds of training classes for dealers, utilities, contractors and technicians on the safe installation of our UL listed conversion burners. I have also assisted many contractors and technicians when they have requested my assistance when installing our conversion burners in the field. In every instance I have never had an occasion where the burner or installation was not done safely.

Carlin, in our instruction manual, mandates that the UL burners be installed by properly licensed technicians, and that they follow ANSI Z21.8, NFPA-54, NFPA-70 and all applicable codes for the safe and legal installation of our equipment. We want to make sure that consumers in ME as well as the US and Canada are allowed to choose the fuel source that meets their needs and in their best interest in this changing environment we find ourselves in.

Proposed wording that mandates specific make and model testing , I believe, is unnecessary when all codes are followed.

I have attached two documents, one for my proposed language for up to 400,000 BTU as well as one word document, I created, from Mechanical Services for their proposed language for over 400,000 BTU'S, which I support.

Thanks and best regards,

Ron Cote
Regional Territory Manager (ME, NH, VT)
Carlin Combustion Technology
1-207-653-0874
email: rcote@carlincombustion.com

13.7 Conversion Burners

13.7.1 400,000 Btu or less

When converting to propane or natural gas from another fuel source where the input of the burner is 400,000 Btu or less, the following requirements must be met:

1. The conversion burner must be a listed conversion burner;
2. The burner must be tested by the burner or appliance manufacturer to insure safe operation in the appliance to be converted. The burner manufacturer must supply installation and combustion set-up instructions for the appliance; and
3. In the case of an appliance that is no longer being manufactured or the manufacturer of which is no longer available, the burner selection criteria included in ANSI Z21.8, and the burner manufacture's combustion setup instructions may be used.
4. The installation must conform to NFPA #54 (2012) and ANSI Z 21.8, as incorporated by reference into NFPA #54 (2012).

13.7.2 Greater than 400,000 btu

When converting to propane and natural gas from another fuel source where the input of the burner is over 400,000 btu, the burner must be listed by Underwriters' Laboratory or by an independent nationally recognized testing laboratory and the following requirements must be met:

1. The installer must verify from the manufacturer of the appliance to be converted that the appliance is capable of being used with gas as a fuel.
2. The burner must be ~~tested~~selected for use in the make and model of appliance in which it is intended to be installed and must meet one of the following conditions:
 - A. ~~The burner has been tested by the burner manufacturer in the make and model of appliance in which it is intended to be installed and has been approved for use in such appliance by a licensed professional engineer with the proper disciplines~~The burner manufacturer must provide written documentation that the burner has been approved, using accepted engineering practices, for use in the appliance intended to be converted;
 - B. The burner has been tested by an independent testing laboratory in the make and model of appliance in which it is intended to be installed and has been certified for use in such appliance by the nationally recognized independent testing laboratory;
 - C. The burner has been tested by the appliance manufacturer in the make and model appliance in which it is intended to be installed and has been approved for use in such appliance by the appliance manufacturer.

[NOTE: The appliance ~~and or~~ ~~burner manufacturer or licensed professional engineer~~ must provide installation and combustion set-up instructions for the appliance.]

3. The installation must conform to the requirements of NFPA #54 and NFPA #211 for the installation of a gas appliance.



442 Civic Center Drive, Ste. 100 – Augusta, ME 04330 – Phone (207) 621-8000 – www.SummitNaturalGasMaine.com

May 23, 2014

VIA E-Mail

Chairman Austin and Members of the Maine Fuel Board
c/o Catherine M. Carroll, Board Administrator
Office of Professional and Occupational Regulation
35 State House Station
Augusta, ME 04333

RE: Comments Concerning Section 13.7, “Conversion Burners”

Chairman Austin and Members of the Maine Fuel Board,

I participated in the public hearing on the Section 13.7 proposed rules held on May 14, 2014 on behalf of Summit Natural Gas of Maine, Inc. (“Summit”). At that hearing, I provided written testimony along with my verbal remarks. I am writing to reinforce my remarks about Summit’s concerns about the proposed rule and the negative impact on consumers if the State were to adopt such a high standard of testing of conversion burners. We were also struck by the absence of clear evidence justifying the particular approach taken in these rules, and we are unaware that any other state has adopted similar rules.

Recently, Summit participated in discussions with the other natural gas utilities that provide service in Maine regarding this rulemaking and specifically the proposed language in the rule. Alternate language has been cooperatively drafted by the Maine natural gas utilities to replace the language proposed in the current rulemaking. This revised language is included as an attachment to this letter. Summit feels that this revised language will adequately address any safety concerns related to the installation of conversion burners without compromising the financial ability of consumers to undertake conversions.

Once again, thank you for the opportunity to provide written comments on this proposed rule.

Sincerely,

A handwritten signature in cursive script, appearing to read "Stacey A. Fitts".

Stacey A. Fitts
Regulatory Manager

Attachment

cc: Patrick Woodcock, Director Governor’s Energy Office

Maine Natural Gas Utilities Proposed Chapter 13 Rules
May 23, 2014

13.7 Conversion Burners

13.7.1 400,000 Btu or less

When converting to propane or natural gas from another fuel source where the input of the burner is 400,000 Btu or less, the following requirements must be met:

1. The conversion burner must be a listed conversion burner;
2. The burner must be tested by the burner or appliance manufacturer to ensure safe operation in the make and model of the appliance to be converted. The burner manufacturer must supply installation and combustion set-up instructions for ~~that~~ the appliance; and
3. In the case of an appliance that is no longer being manufactured or the manufacturer of which is no longer available, the burner selection criteria included in ANSI Z21.8, and the burner manufacturer's combustion setup instruction may be used.
4. The installation must conform to NFPA #54 (2012) and ANSI Z 21.8, as incorporated by reference into NFPA #54 (2012).

13.7.2 Greater than 400,000 btu

When converting to propane and natural gas from another fuel source where the input of the burner is over 400,000 btu, the burner must be listed by Underwriters' Laboratory or by an independent nationally recognized testing laboratory and the following requirements must be met:

1. The installer must verify from the manufacturer of the appliance to be converted or if the manufacturer is no longer available, verify using acceptable engineering practices that the appliance is capable of being used with gas as a fuel.
2. The burner must be selected for use in the make and model of appliance in which it is intended to be installed and must meet one of the following conditions:
 - A. The burner manufacturer must provide written documentation that the burner has been tested by the burner manufacturer in the make and model of appliance in which it is intended to be installed and has been approved, using accepted engineering practices, for use in such the appliance by a licensed professional engineer with the proper disciplines intended to be converted;
 - B. The burner has been tested by an independent testing laboratory in the make and model of appliance in which it is intended to be installed and

has been certified for use in such appliance by the nationally recognized independent testing laboratory;

C. The burner has been tested by the appliance manufacturer in the make and model appliance in which it is intended to be installed and has been approved for use in such appliance by the appliance manufacturer.

[NOTE: The appliance and/or burner manufacturer must provide installation and combustion set-up instructions for the appliance.]

3. The installation must conform to the requirements of NFPA #54 and NFPA #211 for the installation of a gas appliance.

13.7.3 Oil Tank Requirements Upon Conversion to an Alternative Fuel

If an oil burning appliance is converted to an alternative fuel, but the tank is left in place so that it can be returned to service at some future date, the following requirements must be met before the alternative fuel is used:

1. The vent piping must remain intact and open to the outside of the building;
2. The fill pipe must be removed completely and the tank must be plugged with a threaded malleable iron plug;
3. The burner supply line must be removed and the valves on both the tank and burner must be capped or plugged; and
4. The requirements of this Section must be performed by a master or journeyman Oil Burner Technician.
5. The installation must conform to the requirements of NFPA #54 and NFPA #211 for the installation of a gas appliance.



442 Civic Center Drive, Ste. 100 - Augusta, ME 04330 - Phone (207) 621-8000 - www.SummitNaturalGasMaine.com

May 30, 2014

VIA E-Mail

Chairman Austin and Members of the Maine Fuel Board
c/o Catherine M. Carroll, Board Administrator
Office of Professional and Occupational Regulation
35 State House Station
Augusta, ME 04333

RE: Comments Concerning Clarifying Language to Section 13.7, "Conversion Burners"

Chairman Austin and Members of the Maine Fuel Board,

Summit Natural Gas of Maine (Summit) has reviewed the proposed "Clarifying Language" on the Section 13.7 Rulemaking circulated by Maine Fuel Board Staff on May 23, 2014. We do not find these language changes to be sufficient to address the concerns that have been raised by Summit and the other Maine natural gas utilities as well as the conversion burner supply chain and the consumers who have participated in this process.

We are concerned about the negative impacts on consumers if the State were to adopt such a high standard of testing of conversion burners as is in the proposed rule with the clarifying language.

Summit reiterates its support for the suggested language proposed by the Maine natural gas utilities on May 23, 2014 in our comments to the Maine Fuel Board.

Summit feels that this revised language will adequately address any safety concerns related to the installation of conversion burners without compromising the financial ability of consumers to undertake conversions.

Once again, thank you for the opportunity to provide written comments on this proposed rule.

Sincerely,

A handwritten signature in black ink, appearing to read "Stacey A. Fitts".

Stacey A. Fitts
Regulatory Manager

cc: Patrick Woodcock, Director Governor's Energy Office



Mark Lambert

Director,
Government Affairs

May 23, 2014

Chairman Austin and Members of the Maine Fuel Board
c/o Catherine M. Carroll, Board Administrator
Office of Professional and Occupational Regulation
35 State House Station
Augusta, ME 04333

VIA E-MAIL

Re: Comments Concerning Section 13.7, "Conversion Burners"

Chairman Austin and Members of the Maine Fuel Board,

I am writing on behalf of Unitil in support of the attached language, entitled Maine Natural Gas Utilities Proposed Chapter 13 Rules, to serve as a substitute for the proposed changes to Section 13.7 that were originally suggested by the Board.

Unitil acquired Northern Utilities, Inc. ("Northern" or NUI) in 2008. Northern Utilities is a local distribution company providing natural gas distribution service to customers in the states of Maine and New Hampshire. Unitil is Maine's largest natural gas distribution company, serving roughly 30,000 customers in 22 communities spanning the coastline from Kittery to Portland including the towns of Westbrook, Lewiston and Auburn. Unitil's Northern Utilities also serves 30,000 customers in the Seacoast region of New Hampshire and also owns Unitil Energy Systems, Inc. (UES), a New Hampshire electric distribution company, and Fitchburg Gas and Electric Light Company (FG&E) in Massachusetts.

Since the acquisition of Northern Utilities, Unitil has committed to making significant growth and improvement related capital investments in the state which has opened greater opportunities for Maine's citizens to access natural gas for their homes and businesses. Our current growth plan calls for the Company to add thousands of new customers each year, and specifically over the next five years, the Company expects to invest more than \$100 million in the state upgrading the present infrastructure and expanding natural gas service to new customers in Maine. The Company is making investments to safely and reliably bring natural gas to more

Unitil Service Corp.
6 Liberty Lane West
Hampton, NH 03842-1720
Phone: 603-773-6470
Fax: 603-773-6670
lambert@unitil.com

citizens in Maine and is committed to the replacement of the aging natural gas infrastructure.

Maine is driven to provide more low-cost heating options to consumers and we are concerned that this proposed rule change is a step-back for homeowners and commercial customers interested in converting to clean and affordable natural gas. As the Board heard at the May 14th public hearing, the installation of conversion burners is governed by a number of guidelines, including NFPA codes, ANSI standards and manufacturer instructions. The additional testing proposed in Section 13.7 does not enhance safety, but, rather, creates an unreasonable impediment to the use of conversion burners.

Upgrading customers to high efficient equipment provides a direct savings to customers on their energy costs which equates to a positive impact to Maine's state and local economies, a reduction in greenhouse gas emissions and an improvement to the air quality in the communities we serve.

Reducing customer's energy costs: Due to the historic low costs of natural gas and technological improvements made to improve the efficiency rating as measured by the annual fuel utilization efficiency (AFUE), customer's annual energy costs are dramatically reduced by as much as \$1,500.

Reducing Carbon Dioxide: The principle greenhouse gases include carbon dioxide, methane, nitrogen oxides, and some engineered chemicals such as chlorofluorocarbons. The most notable greenhouse gas is carbon dioxide. Because carbon dioxide makes up such a high proportion of U.S. greenhouse gas emissions, reducing carbon dioxide emissions by installing high efficient equipment can play a pivotal role to achieving the state's goal of avoiding CO2 emissions in the future. The combustion of converting from an 80% oil boiler to an Energy Star natural gas boiler would emit 30 percent less carbon dioxide. To put this reduction into context, for every 100 homes that convert to natural gas, it would be like taking 62 cars off the road.

Economic Benefits: Reduced energy costs are diverted back in the state and local economies.

Customers choosing to convert from oil to natural gas have two options; they can replace their entire heating system or they can replace just their burner. We have found that the single greatest impediment to customer conversions is the customers inability to pay the upfront cost of replacing their entire heating system, especially when the customer's current system is still in working order. While a typical residential customer could save up to \$1,500/year, the initial estimated cost of \$8,000 to \$10,000 to replace their heating system is a barrier for many homeowners. Conversion burners can serve as a safe, lower-cost option for homeowners and commercial customers who are converting to natural gas. Burner replacement simply requires that the components of the oil-burning furnace be removed and

replaced per already stringent safety standards. Unfortunately, Unitil is concerned that the Board's proposed revisions to Section 13.7 would unnecessarily limit access to this conversion burner option. As proposed, Section 13.7 would require testing of boilers and conversion burners regardless of burner size (i.e., both 400,000 btu or less and greater than 400,000 btu). Testing each configuration of conversion burner and boiler, however, is impractical, cost prohibitive and even impossible to achieve in many cases.

Unitil's top priority is safety for our customers and the communities that we serve. The attached language, entitled Maine Natural Gas Utilities Proposed Chapter 13 Rules, proposes a revision of Section 13.7 that is more practical in its application without compromising safety. Unitil requests that the Board adopt the attached language in place of the rule as proposed.

Thank you for the opportunity to provide comments on this proposed rule.

Sincerely,



Mark A. Lambert

Director, Government Affairs
Unitil Service Corporation
6 Liberty Lane West
Hampton, NH 03842

Maine Natural Gas Utilities Proposed Chapter 13 Rules
May 23, 2014

13.7 Conversion Burners

13.7.1 400,000 Btu or less

When converting to propane or natural gas from another fuel source where the input of the burner is 400,000 Btu or less, the following requirements must be met:

1. The conversion burner must be a listed conversion burner;
2. The burner must be tested by the burner or appliance manufacturer to ensure safe operation ~~in the make and model of the appliance to be converted.~~ The burner manufacturer must supply installation and combustion set-up instructions for ~~that~~ the appliance; and
3. In the case of an appliance that is no longer being manufactured or the manufacturer of which is no longer available, the burner selection criteria included in ANSI Z21.8, and the burner manufacturer's combustion setup instruction may be used.
4. The installation must conform to NFPA #54 (2012) and ANSI Z 21.8, as incorporated by reference into NFPA #54 (2012).

13.7.2 Greater than 400,000 btu

When converting to propane and natural gas from another fuel source where the input of the burner is over 400,000 btu, the burner must be listed by Underwriters' Laboratory or by an independent nationally recognized testing laboratory and the following requirements must be met:

1. The installer must verify from the manufacturer of the appliance to be converted or if the manufacturer is no longer available, verify using acceptable engineering practices that the appliance is capable of being used with gas as a fuel.
2. The burner must be selected for use in the make and model of appliance in which it is intended to be installed and must meet one of the following conditions:
 - A. The burner manufacturer must provide written documentation that the burner has been tested by the burner manufacturer in the make and model of appliance in which it is intended to be installed and has been approved, using accepted engineering practices, for use in such the appliance by a licensed professional engineer with the proper disciplines intended to be converted;
 - B. The burner has been tested by an independent testing laboratory in the make and model of appliance in which it is intended to be installed and

has been certified for use in such appliance by the nationally recognized independent testing laboratory;

C. The burner has been tested by the appliance manufacturer in the make and model appliance in which it is intended to be installed and has been approved for use in such appliance by the appliance manufacturer.

[NOTE: The appliance and/or burner manufacturer must provide installation and combustion set-up instructions for the appliance.]

3. The installation must conform to the requirements of NFPA #54 and NFPA #211 for the installation of a gas appliance.

13.7.3 Oil Tank Requirements Upon Conversion to an Alternative Fuel

If an oil burning appliance is converted to an alternative fuel, but the tank is left in place so that it can be returned to service at some future date, the following requirements must be met before the alternative fuel is used:

1. The vent piping must remain intact and open to the outside of the building;
2. The fill pipe must be removed completely and the tank must be plugged with a threaded malleable iron plug;
3. The burner supply line must be removed and the valves on both the tank and burner must be capped or plugged; and
4. The requirements of this Section must be performed by a master or journeyman Oil Burner Technician.
5. The installation must conform to the requirements of NFPA #54 and NFPA #211 for the installation of a gas appliance.

Carroll, Catherine M.

From: Lambert, Mark <lambert@unitil.com>
Sent: Wednesday, May 28, 2014 3:52 PM
To: Carroll, Catherine M.
Cc: 'Avery T. Day'
Subject: RE: Clarifying Language to Section 13.7.2 from Maine Fuel Board Staff - Comments Welcome from Interested Parties
Attachments: Unitil Chapter 13.7 Conversion Burner Rule Change.pdf; Final Red Line Language from Utilities .pdf

Thank you Catherine for the opportunity to further comment on the proposed rule. Unitil finds the 13.7.2 language that is proposed here is unnecessary and overly restrictive. It is our understanding also that the boiler and burner manufacturers will not likely be able to provide the testing required under this proposed change for the small size of the Maine market. So, in essence we believe our comments that we filed on Friday along with the suggested redlined proposed amended rules provides a fair and reasonable solution to this effort.

Please don't hesitate to contact me with any questions and again I appreciate the heads up.
Mark

Mark Lambert
Director, Government Affairs



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From: Carroll, Catherine M. [<mailto:Catherine.M.Carroll@maine.gov>]
Sent: Friday, May 23, 2014 4:59 PM
To: Stacey Fitts (SFitts@summitnaturalgas.com); Chris Green, Jr. (chriscgreen@mechanicalservices.com); Chris Green (cgreen@mechanicalservices.com); rcote@carlincombustion.com; Laurie Balzanelli (LBalzanelli@mainenaturalgas.com); Smith, Lisa J; Lambert, Mark; adfermpj@aol.com; BDamon@damonmechanical.com; JOHN SUNDERLAND (jtsunderland@myfairpoint.net); jwjamesiv@gmail.com; Gavin McCarthy (GMcCarthy@PierceAtwood.com); dburnell@nemech.com; Mark Anderson (Mark.Anderson@deadriver.com) (Mark.Anderson@deadriver.com); propane@maine.rr.com; mmoya@cq.com; moody@uninets.net; dawn.slater@thomsonreuters.com;

jamie@maineenergymarketers.com; jrose@pgane.org; Stewart, Timothy (LNG-SA2) (timothy.stewart@lexisnexis.com);
ffitzpatrick@beckettcorp.com

Cc: Head, Anne L; Holmes, Peter T; Leclair, Robert V; Perkins, Bob; Gray, Vickey L

Subject: Clarifying Language to Section 13.7.2 from Maine Fuel Board Staff - Comments Welcome from Interested Parties

Importance: High

Dear Interested Parties ~ Thank you to those of you who have submitted written comments, thus far, regarding changes to Section 13.7 of the Maine Fuel Board rules. As you know, the comment period ends at the close of business **Friday, May 30, 2014**. Please refer to the email I sent to you on May 23rd stating that there was a typographical error and that the day the comment period actually ends is on May 30th.

Board staff raise the following changes to 13.7.2 that would clarify and not modify the language in the rule. Specifically, the staff proposes deleting the word in paragraph 2 "tested" and replacing it with "selected". The words "for use" are added in paragraph 2. A.. And, in the NOTE paragraph the words "and/or" are added and the words "or licensed professional engineer" are deleted. I have inserted a comment next to each of the proposed changes for purposes of making these changes stand out.

We hope that those who are interested will comment on this clarifying language. Any additional comments are welcome until the close of business Friday, May 30, 2014. Thank you.

Yours truly,

Catherine

Catherine M. Carroll

Board Administrator

Office of Professional and Occupational Regulation

www.maine.gov/pfr/professionallicensing

 Tel: (207) 624-8605 (direct)

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Carroll, Catherine M.

From: ABBarrowman@ewst.com
Sent: Wednesday, May 28, 2014 4:30 PM
To: Carroll, Catherine M.
Subject: 13.72 Maine Fuel Board Conversion Burners
Attachments: 13.7alt.docx; Bangor Gas final Written comments on Chapter 13. 5-27-2014doc.doc

Catherine,

Good afternoon,

Bangor Gas supports the changes to 13.7.2 and I have also updated those changes to our comments below.

regards

Andrew

Andrew B Barrowman, CEM, RCGC
Manager Sales & Marketing
Bangor Gas Company
498 Maine Avenue Bangor,
Maine 04401
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Written comments on Chapter 13-Installation of Propane & Natural Gas Burner Equipment: Section 13.7 "Conversion Burners"

Catherine M. Carroll, Board Administrator and Members of the Maine Fuel Board, my name is Jonathan Kunz, former Marketing & Sales Manager from 1998 to 2013 and current Energy Consultant for Bangor Natural Gas Company. My background also includes six years of managing an oil and propane company, and four years of heating equipment replacement, estimating and pipeline design.

I had the pleasure of working with the Maine Fuel Board in 2008 for an estimated eight months attending meetings and discussing the proper procedures for installation of conversions burners and fuel switching. During that period, burner manufactures, boiler manufactures, independent contractors, industry professionals and other New England State officials gave testimony surrounding safety issues, proper conversion procedures, and how to address boiler and furnace fuel switching.

Testimony from the boiler manufacturers concluded that there was not a safety issue when converting oil boilers to propane and natural gas, but a liability issue. They had not and would not test any of their oil boilers with natural gas burners which prevented them from approving conversions of those boilers to other fuels. However, the burner manufacturers' testimony, "Carlin & Ricello", stated that their testing of the burners and having them UL listed and certified as a conversion burner removes the liability from the boiler manufacturer and concludes that these burners are safe and meet the boiler standards.

The Maine Fuel Board, after reviewing all the information and testimony, approved the use of Certified Conversion Burners for the purpose of switching oil boilers to propane or natural gas, with the understanding that the burner manufacturers would provide each burner with an installation and combustion set-up manual. The Maine Fuel Board also agreed that the boiler manufacturer would not have to be contacted for their approval due to the fact that they would not accept any liability when oil boilers are converted from one fuel to another.

Since 1999 independent contractors, major oil companies including Dead River, Webber Energy, Irving Oil, R.H. Foster Energy, Mechanical Services, Northeast Mechanical and AAA Energy Services have converted thousands of residential, commercial and municipalities oil boilers to natural gas without any safety issues or issues related to those conversions. Therefore, I would like to submit the following revised wording to clarify the proposed "Conversion Burners section 13.7":

13.7 Conversion Burners

13.7.1 400,000 btu or less

When converting to propane or natural gas from another fuel source where the input of the burner is 400,000 btu or less, the following requirements must be met:

1. The conversion burner must be a listed conversion burner;
2. The burner must be tested by the burner or appliance manufacturer to ensure safe operation in the make and model of the appliance to be converted. The burner manufacturer must supply installation and combustion set-up instructions for that appliance; and
3. In the case of an appliance the manufacturer of which longer available, the burner selection criteria included in ANSI Z21.8, and the burner manufacturer's combustion setup instructions may be used.
4. The installation must conform to NFPA #54 (2012) and ANSI Z 21.8, as incorporated by reference into NFPA #54 (2012).

13.7.2 Greater than 400,000 btu

When converting to propane and natural gas from another fuel source where the input of the burner is over 400,000 btu, the burner must be listed by Underwriters' Laboratory or by an independent nationally recognized testing laboratory and the following requirements must be met:

1. The installer must verify from the manufacturer of the appliance to be converted that the appliance is capable of being used with gas as a fuel.
2. The burner must be selected for use in the make and model of appliance in which it is intended to be installed and must meet one of the following conditions:
 - A. The burner has been tested by the burner manufacturer for use in the make and model of appliance in which it is intended to be installed and has been approved for use in such appliance by a licensed professional engineer with the proper disciplines;
 - B. The burner has been tested by an independent testing laboratory in the make and model of appliance in which it is intended to be installed and has been certified for use in such appliance by the nationally recognized independent testing laboratory;
 - C. The burner has been tested by the appliance manufacturer in the make and model appliance in which it is intended to be installed and has been approved for use in such appliance by the appliance manufacturer.

[NOTE: The appliance and or burner manufacturer must provide installation and combustion set-up instructions for the appliance.]

3. The installation must conform to the requirements of NFPA #54 and NFPA #211 for the installation of a gas appliance.

13.7.3 Oil Tank Requirements Upon Conversion to an Alternative Fuel

If an oil burning appliance is converted to an alternative fuel, but the tank is left in place so that it can be returned to service at some future date, the following requirements must be met before the alternative fuel is used:

1. The vent piping must remain intact and open to the outside of the building;
2. The fill pipe must be removed completely and the tank must be plugged with a threaded malleable iron plug;
3. The burner supply line must be removed and the valves on both the tank and burner must be capped or plugged; and
4. The requirements of this Section must be performed by a master or journeyman Oil Burner Technician.

In reviewing the "**Rule Making Fact Sheet**" section "Findings Under Criteria Contained in Executive Order 20 FY 11/12": Subsection "A": The proposed wording of 13.7.2 & 13.7.3 **does** negatively impact job growth by making it impossible for independent contractors and energy companies from converting existing oil boilers to propane and natural gas. Maine is currently estimated at being 80% dependent on foreign oil and will not be allowed to become energy independent should the proposed wording become approved.

Subsection "C": There are **excessive costs not minimal costs** to both businesses and consumers should the proposed wording become approved. The conversions from oil to propane and natural gas will not be feasible and fuel switching will require complete boiler replacement which would change the estimated conversion cost from \$2,400 to an estimated replacement cost of between \$5,000 and \$10,000.

For Rules With Fiscal Impact Of \$ One Million Or More, Also Include: Individuals and groups and how they will be affected:

Currently Bangor Natural Gas, Maine Natural Gas and Summit Natural Gas are expanding natural gas service to residential, commercial and Industrial customers in Lincoln, Bucksport, Waterville, Augusta, Cumberland and Falmouth. If we consider an estimated 10,000 customers were to switch to natural gas and 50% of those were conversions with an average estimated savings of \$2,000 each, the \$ lost by these customers not being able to use conversion burners due to the proposed wording in 13.7.2 & 13.7.3 could amount to over \$10,000,000.

13.7 Conversion Burners

13.7.1 400,000 btu or less

When converting to propane or natural gas from another fuel source where the input of the burner is 400,000 btu or less, the following requirements must be met:

1. The conversion burner must be a listed conversion burner;
2. The burner must be tested ~~for use in the appliance for which it is intended for use and the burner manufacturer must supply combustion installation instructions for that appliance by the burner or appliance manufacturer to ensure safe operation in the make and model of the appliance to be converted.~~ The burner manufacturer must supply installation and combustion set-up instructions for that appliance; and
3. ~~In the case of an appliance the manufacturer of which longer available, the burner selection criteria included in ANSI Z21.8, and the burner manufacturer's combustion setup instructions may be used.~~
- 4.3- The installation must conform to NFPA #54 (2012) and ANSI Z 21.8, as incorporated by reference into NFPA #54 (2012).

13.7.2 Greater than 400,000 btu

When converting to propane and natural gas from another fuel source where the input of the burner is over 400,000 btu, the burner must be listed by Underwriters' Laboratory or by an independent nationally recognized testing laboratory and the following requirements must be met:

1. The installer must verify from the manufacturer of the appliance to be converted that the appliance is capable of being used with gas as a fuel.
2. The burner must be tested ~~selected~~ for use in the ~~individual make and model of~~ appliance in which it is intended to be installed and must meet one of the following conditions:
 - A. The burner has been tested by the burner manufacturer ~~for use in the individual make and model of~~ appliance in which it is intended to be installed and has been approved for use in such appliance by a licensed professional engineer with the proper disciplines;
 - B. The burner has been tested by an independent testing laboratory in the ~~individual make and model of~~ appliance in which it is intended to be installed and has been certified for use in such appliance by the nationally recognized independent testing laboratory;
 - C. The burner has been tested by the appliance manufacturer in the ~~individual make and model~~ appliance in which it is intended to be installed and has been approved for use in such appliance by the appliance manufacturer.

Comment [CMC1]: Clarifying term proposed.

Comment [CMC2]: Clarifying words.

[NOTE: The appliance and/or burner manufacturer or licensed professional engineer must provide installation and combustion set-up instructions for the appliance.]

Comment [CMC3]: Clarifying wording to NOTE section

3. The installation must conform to the requirements of NFPA #54 and NFPA #211 for the installation of a gas appliance.

13.7.3 Oil Tank Requirements Upon Conversion to an Alternative Fuel

If an oil burning appliance is converted to an alternative fuel, but the tank is left in place so that it can be returned to service at some future date, the following requirements must be met before the alternative fuel is used:

1. The vent piping must remain intact and open to the outside of the building;
2. The fill pipe must be removed completely and the tank must be plugged with a threaded malleable iron plug;
3. The burner supply line must be removed and the valves on both the tank and burner must be capped or plugged; and
4. The requirements of this Section must be performed by a master or journeyman Oil Burner Technician.



MAINE NATURAL GAS

Via Email

Chairman Austin and Members of the Maine Fuel Board
c/o Catherine Carroll, Board Administrator
Office of Professional and Occupational Regulation
35 State House Station
Augusta, ME 04333
catherine.m.carroll@maine.gov

RE: Comments Concerning Proposed Rule Section 13.7, "Conversion Burners"

Chairman Austin and Members of the Maine Fuel Board,

I am writing on behalf of Maine Natural Gas Corporation ("MNG") in support of the amendments to Proposed Chapter 13, Section 13.7 submitted by Maine's natural gas utilities, Unitil Service Corporation, Summit Natural Gas of Maine, Bangor Gas Company and Maine Natural Gas (collectively, "the Natural Gas Utilities").

MNG is one of the Iberdrola USA ("IUSA") network utilities and currently serves the towns and communities of Bath, West Bath, Brunswick, Topsham, Windham, Gorham, Bowdoin, Freeport, Pownal and Augusta. MNG has approximately 3,700 residential and commercial customers in the State and is working diligently to expand service within MNG's existing territories.

One of the critical components to MNG's ability to expand service is the willingness of customers to convert from their existing fuel to natural gas. As the initial estimated cost of between \$8,000 and \$10,000 to replace a residential heating system is a financial barrier for many homeowners to convert to natural gas, conversion burners are a safe, lower-cost option. Conversion burners, which can be installed on many oil-fired heating systems, simply replace the components of the oil-burning furnace with a burner that will allow the system to burn natural gas. This conversion process is subject to stringent safety standards and is used by many homeowners to take advantage of the current cost-savings associated with burning natural gas rather than oil.

MNG is concerned that the requirement in the Board's proposed rule, Section 13.7, that boilers and conversion burners be tested regardless of burner size (*i.e.* both 400,000 btu or less and greater than 400,000 btu) will create additional financial and practical impediments to converting to natural gas. As the proposed rules already require written documentation that the burner has been approved, using accepted engineering practices, for use in the appliance intended to be converted, there does not seem to be a specific safety reason for the burner to be tested. Additionally, given that there are a variety of different combinations of furnaces and burners, testing may be impractical. The Natural Gas Utilities' proposed

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amendments to section 13.7 provide the proper balance of sufficient regulation to comply with applicable standards, without compromising safety or imposing unnecessary barriers to natural gas conversion.

MNG appreciates the opportunity to provide comments on this proposed rule and encourages the Board to adopt the attached Maine Natural Gas Utilities Proposed Chapter 13 Rules covering section 13.7.

Sincerely,

Brian K. Hawley
Director, Maine Natural Gas Corporation
9 Industrial Parkway
Brunswick, ME 04011



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Maine Natural Gas Utilities Proposed Chapter 13 Rules

May 23, 2014

13.7 Conversion Burners

13.7.1 400,000 Btu or less

When converting to propane or natural gas from another fuel source where the input of the burner is 400,000 Btu or less, the following requirements must be met:

1. The conversion burner must be a listed conversion burner;
2. The burner must be tested by the burner or appliance manufacturer to ensure safe operation in the make and model of the appliance to be converted. The burner manufacturer must supply installation and combustion set-up instructions for ~~that~~ the appliance; and
3. In the case of an appliance that is no longer being manufactured or the manufacturer of which is no longer available, the burner selection criteria included in ANSI Z21.8, and the burner manufacturer's combustion setup instruction may be used.
4. The installation must conform to NFPA #54 (2012) and ANSI Z 21.8, as incorporated by reference into NFPA #54 (2012).

13.7.2 Greater than 400,000 btu

When converting to propane and natural gas from another fuel source where the input of the burner is over 400,000 btu, the burner must be listed by Underwriters' Laboratory or by an independent nationally recognized testing laboratory and the following requirements must be met:

1. The installer must verify from the manufacturer of the appliance to be converted or if the manufacturer is no longer available, verify using acceptable engineering practices that the appliance is capable of being used with gas as a fuel.
2. The burner must be selected for use in the make and model of appliance in which it is intended to be installed and must meet one of the following conditions:

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- A. The burner ~~manufacturer must provide written documentation that the burner has been tested by the burner manufacturer in the make and model of appliance in which it is intended to be installed and~~ has been approved, using accepted engineering practices, for use in such the appliance by a licensed professional engineer with the proper disciplines intended to be converted;
- B. The burner has been tested by an independent testing laboratory in the make and model of appliance in which it is intended to be installed and has been certified for use in such appliance by the nationally recognized independent testing laboratory;
- C. The burner has been tested by the appliance manufacturer in the make and model appliance in which it is intended to be installed and has been approved for use in such appliance by the appliance manufacturer.

[NOTE: The appliance and/or burner manufacturer must provide installation and combustion set-up instructions for the appliance.]

3. The installation must conform to the requirements of NFPA #54 and NFPA #211 for the installation of a gas appliance.

13.7.3 Oil Tank Requirements Upon Conversion to an Alternative Fuel

If an oil burning appliance is converted to an alternative fuel, but the tank is left in place so that it can be returned to service at some future date, the following requirements must be met before the alternative fuel is used:

1. The vent piping must remain intact and open to the outside of the building;
2. The fill pipe must be removed completely and the tank must be plugged with a threaded malleable iron plug;
3. The burner supply line must be removed and the valves on both the tank and burner must be capped or plugged; and
4. The requirements of this Section must be performed by a master or journeyman Oil Burner Technician.
5. The installation must conform to the requirements of NFPA #54 and NFPA #211 for the installation of a gas appliance.

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Maine Natural Gas Utilities Proposed Chapter 13 Rules
May 23, 2014

13.7 Conversion Burners

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3. In the case of an appliance that is no longer being manufactured or the manufacturer of which is no longer available, the burner selection criteria included in ANSI Z21.8, and the burner manufacturer's combustion setup instruction may be used.
4. The installation must conform to NFPA #54 (2012) and ANSI Z 21.8, as incorporated by reference into NFPA #54 (2012).

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1. The installer must verify from the manufacturer of the appliance to be converted or if the manufacturer is no longer available, verify using acceptable engineering practices that the appliance is capable of being used with gas as a fuel.
2. The burner must be selected for use in the make and model of appliance in which it is intended to be installed and must meet one of the following conditions:
 - A. The burner manufacturer must provide written documentation that the burner has been tested by the burner manufacturer in the make and model of appliance in which it is intended to be installed and has been approved, using accepted engineering practices, for use in such the appliance by a licensed professional engineer with the proper disciplines intended to be converted;
 - B. The burner has been tested by an independent testing laboratory in the make and model of appliance in which it is intended to be installed and

has been certified for use in such appliance by the nationally recognized independent testing laboratory;

C. The burner has been tested by the appliance manufacturer in the make and model appliance in which it is intended to be installed and has been approved for use in such appliance by the appliance manufacturer.

[NOTE: The appliance and/or burner manufacturer must provide installation and combustion set-up instructions for the appliance.]

3. The installation must conform to the requirements of NFPA #54 and NFPA #211 for the installation of a gas appliance.

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4. The requirements of this Section must be performed by a master or journeyman Oil Burner Technician.
5. The installation must conform to the requirements of NFPA #54 and NFPA #211 for the installation of a gas appliance.



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May 30, 2014

Via Email

Chairman Austin and Members of the Maine Fuel Board
c/o Catherine Carroll, Board Administrator
Office of Professional and Occupational Regulation
35 State House Station
Augusta, ME 04333
catherine.m.carroll@maine.gov

RE: Additional Maine Natural Gas Comments Concerning Proposed Rule Section 13.7, "Conversion Burners"

Chairman Austin and Members of the Maine Fuel Board,

On May 23, 2014, Maine Natural Gas Corporation ("MNG") provided comments in support of the amendments to Proposed Chapter 13, Section 13.7 submitted by Maine's natural gas utilities, Unitil Service Corporation, Summit Natural Gas of Maine, Bangor Gas Company and Maine Natural Gas (collectively, "the Natural Gas Utilities").

On that same day, the Maine Fuel Board ("Fuel Board") issued a revised version of its Proposed Chapter 13, Section 13.7 incorporating some additional clarifying language. See Email from Catherine Carroll to Interested Parties dated May 13, 2014. The Fuel Board invited additional comments on the Revised Proposed Rule as clarified.

MNG reiterates its May 23, 2014 support of the Natural Gas Utilities' amendments to Proposed Chapter 13, Section 13.7. While MNG appreciates the Fuel Board's efforts to clarify the Proposed Rule, it still requires testing the conversion burner for use in the make and model of the appliance to be converted. For the reasons stated in MNG's May 23, 2014 comments, this requirement is unnecessary and overly restrictive. Accordingly, MNG believes that the Amended Proposed Rule proffered by the Natural Gas Utilities strikes the proper balance between sufficient regulation, safety, and facilitating natural gas conversion.

MNG appreciates the opportunity to provide comments on this Proposed Rule and encourages the Board to adopt the Section 13.7 amendments proposed by the Natural Gas Utilities.

Sincerely,

Brian K. Hawley
Director, Maine Natural Gas Corporation
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Brunswick, ME 04011

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