

Oil-Fired Appliances Working Group

Action Plan and Recommendations

2012

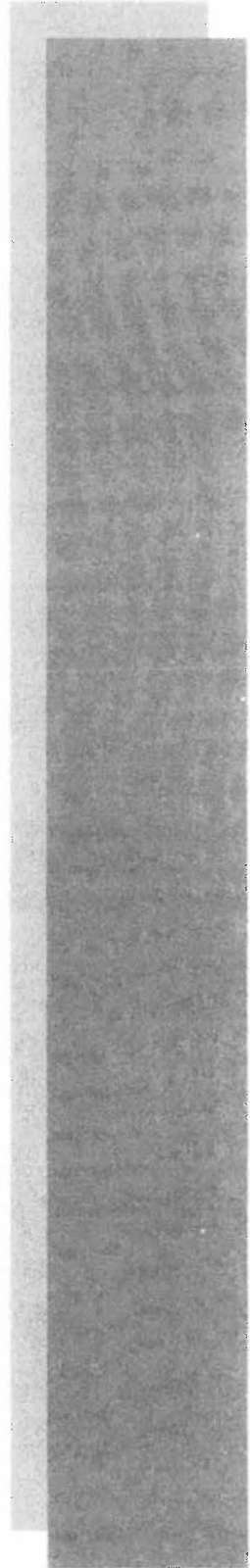


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Message from the Working Group

On behalf of all members of the Oil-Fired Appliances working group, I wish to thank the honourable Minister Scott Kent and the honourable Minister Elaine Taylor for their initiative in forming our group. They share our common desire to make safer the systems that are, for many of us, essential in keeping our homes warm.

The group recognizes the challenges that lie ahead. We believe that the time is now to move forward with important changes to enhance the safety of Yukon residents.

This action plan is focused. We identified key areas after reviewing all the information that was available to us, and our recommendations specifically target these priorities.

The plan takes into consideration the significant work that has already taken place, and provides a means of moving forward with resolve. To ensure continuity, the working group recommends that an implementation committee be created to facilitate and oversee progress.

The changes we recommend will not all happen overnight. While some action items can be applied immediately, others will take time.

Raising public awareness is a fundamental component of this plan, and it starts now. Owners of oil-fired appliances must understand the operating principles of their heating system and take the necessary steps to ensure it is operating as safely as possible. We must all be aware of the important aspects of oil-fired appliances and accept the responsibilities we share.

Safety begins with knowledge; we must raise awareness on how crucial it is to properly install new systems and to modify, service or inspect existing systems. It is time to combat the complacency many have adopted regarding oil-fired appliances and the supporting systems. Standards must be followed and work must be completed by people who have the skills and knowledge to do so properly and safely.

We recognize and appreciate the work that has been completed by so many dedicated individuals, enterprises and organizations in the past. Your efforts have contributed to the steady improvement of the state of oil-fired appliances in Yukon. Your work, along with the numerous individuals and groups who contributed their input, time, and knowledge to the development of this current action plan, will benefit all Yukoners.

There has been progress on the industry side. We observed numerous examples of industry representatives who took additional training and who incorporated better practices within their companies. This has been a positive step forward.

In terms of training, the department of Education and Yukon College developed and offered an Oil Burner Technician program, in addition to the existing apprenticeship program. This program supported efforts by the industry to improve the services they provide. There has also been training available to building inspectors, technical officers and industry representatives.

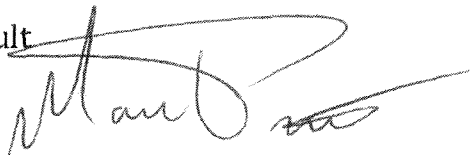
There have been regulatory improvements: the Yukon Government amended the Building Standards Regulations to clarify that a valid permit is needed to install or modify a heating device, including fuel tank and/or chimney.

We note these examples to illustrate we are not starting from scratch; while much remains to be done, many improvements have been made.

The Oil-Fired Appliances working group has determined the need to implement balanced measures that are relevant and that address the challenges Yukon residents face today. It is important to continue the work that has already begun, and to progressively take the necessary steps to enhance the safety of our friends and families. We, as Yukoners, share this responsibility and together we can succeed.

As Chair of the working group, I sincerely wish to thank every member of the group for their dedication and time to the realization of this report.

Marc Perreault



Chair, Oil-Fired Appliances Working Group

Executive Summary

In March 2012, the Yukon Government requested a working group be formed specifically to develop an action plan to enhance public safety as it pertains to oil-fired appliances in Yukon.

The Oil-Fired Appliances working group (OFA working group) was formed in April with representatives from the industry, the City of Whitehorse, Yukon Association of Communities and the Yukon government departments of Community Services, Education and Yukon Housing Corporation. The group members brought forth expertise covering all aspects of the oil-fired appliance industry and focused on challenges specific to Yukon.

The group consulted with many stakeholders, received input from the public, reviewed previous and current research and relevant information, and compared oil-fired industry regulations across Canada.

In developing the recommendations, the group considered key principles such as:

- a) Applicability - can the recommendations be applied throughout Yukon?
- b) Acceptability - will the public accept the recommendations?
- c) Effectiveness - will the recommendations make a significant difference?
- d) Focus - are the recommendations the most suitable solution?
- e) Impact - who will be affected by the recommendations?
- f) Safety - do the recommendations improve public safety?

The Oil-Fired Appliances working group respectfully submit the following three action items and recommendations.

1. Develop and implement a public awareness campaign.
2. Develop new and enhance existing opportunities for training.
3. Create an Act specific to oil-fired appliances.

We believe these three action items will provide a balanced approach which is focused and addresses the needs of Yukon residents throughout the territory.

'Public' is defined as anyone living in public, private or rental housing.

'Oil-Fired Appliance' is defined as anything covered under the CSA B139.

Action items and recommendations:

1-Public Awareness

Develop and implement a public awareness campaign that targets Yukon residents in all communities, with the following objectives:

- All owners of oil-fired appliances understand the operation and the associated risks of improperly installed and/or poorly maintained oil-fired appliances.
- Emphasizes the responsibilities of homeowners, landlords and tenants relating to oil-fired appliances.
- Informs the public that only licenced individuals and companies can install, modify or service oil-fired appliances.
- Highlights the importance of the proper installation, use and maintenance of residential carbon monoxide monitors and smoke detectors.

Recommendations

- 1) Develop a checklist for the public and industry which identifies all the relevant points of proper installation, modification and service of oil-fired appliances.
- 2) Develop a website where all information relevant to oil-fired appliances can be found.
- 3) Ensure that messaging is clear and understandable.

2-Education and Training

Develop and implement opportunities for training using the following principles:

- Identify a variety of training methods such as online training, evening and/or weekend offerings and block release to facilitate maximum participation.
- Encourage individuals who are already qualified to participate in training to upgrade their skills to current standards.
- Offer training programs in Yukon through Yukon College, where feasible.
- Ensure training programs use the most up to date curriculum and standards.
- Promote opportunities that currently exist to become a qualified oil-burner mechanic journeyman.

Recommendations

- 1) Develop and implement a course specifically designed to assist eligible individuals to become qualified oil-burner mechanic journeymen through a Trade Qualifier.
- 2) Enhance the existing apprenticeship program and develop options to allow registered apprentices to participate in in-school technical training in Yukon.
- 3) Ensure appropriate training is available for those responsible for the administration and inspection of oil-fired appliances.

'Block Release' is defined as when individuals leave work to attend full-time training for a specified period of time.

3-Legislation

Create an Act specific to oil-fired appliances with the following provisions:

Permits

- A permit must be obtained from the authority having jurisdiction in order to install or modify an oil-fired appliance. Only persons holding a valid licence issued by the authority having jurisdiction may apply for a permit.

Licencing

- A licence must be obtained from the authority having jurisdiction in order to install, modify, service or authorize the installation, modification or service of an oil-fired appliance.
- To apply for a licence to install, modify, service or authorize the installation, modification or service of an oil-fired appliance;
 - An individual must be a qualified oil-burner mechanic journeyman;
 - A company must have a qualified oil-burner mechanic journeyman on staff and;
 - A company or individual must possess proof of bond and insurance.
- Terms of licencing will be determined by the authority having jurisdiction.
- The authority having jurisdiction may suspend a licence and issue penalties for violation of the legislation.

Code

- The minimum code for installation, modification and service of an oil-fired appliance will be CSA B139 entitled Installation Code for Oil Burning Equipment as amended from time to time.

'Authority Having Jurisdiction' is defined as the organization, office, or individual responsible for enforcing the requirements of a code, legislation or policy.

Owner Responsibility

- It is the owner's responsibility to ensure that oil-fired appliances are installed and maintained by licenced oil-burner mechanic journeypersons as per CSA B139 as amended from time to time.

Recommendations:

- 1) Begin work on an Act specific to oil-fired appliances.
- 2) Consult with the appropriate departments and authorities having jurisdiction regarding the applicable regulations and processes.
- 3) Ensure that the *Landlord and Tenant Act* and regulations contain provisions to enforce the recommendations of the OFA working group.
- 4) Qualified oil-burner mechanic journeypersons must provide their licence number to members of the public upon request.
- 5) Ensure that applicable regulations have provisions to provide persons or companies presently working in the affected industry sufficient time to become qualified.

Notes

Appendix A – Public Input Received

Beginning in March, the OFA working group sought public input to assist with the development of recommendations to enhance public safety as it pertains to oil-fired appliances in Yukon. Ads were placed in local newspapers to invite groups and individuals to submit comments and information. The working group received in excess of 30 e-mail submissions, many of them from groups. The working group also held individual consultations with numerous stakeholders.

Comments received by the group are below.

General

- There should be some way, for example through a database, for the public to verify that a person offering to install or service oil-fired appliances is certified.
- Discuss creating a specialized inspector dedicated to oil-fired appliances who has the authority to shut down unsafe systems.
- There needs to be more inspectors.
- The working group should discuss the safety of all fuel-burning appliances.
- The OFA working group should hold a public hearing prior to submitting its recommendations to the government.
- Discuss the pros and cons of requiring carbon monoxide monitors in homes including cost to the home owner and how much it increases safety.
- Solutions should be practical and sustainable in a Yukon context.
- Need to make sure that any regulation of the industry does not pass significant cost increases onto the consumer.
- The group should make sure that any changes made can be applied throughout the Yukon.
- As an interim measure prior to development of legislation and regulations, the Government of Yukon should immediately update building standard regulations to require that permits for oil-fired appliance installations and alterations be issued only to certified oil burner mechanics.

Minor edits were made for spelling and grammar.
Longer submissions were summarized.

- The Government of Yukon should ensure adequate resources are available to enable government inspectors to enforce compliance in new construction and rental properties of all national minimum oil burner code requirements.

Legislation

- There should be different rules for business properties and residential properties when it comes to oil-fired appliances.
- Commercial buildings should be required to have their oil-fired appliances, tank and chimneys checked annually, as well as anyone who rents their home.
- Grant industry the legislative ability to refuse service on oil-fired appliances.
- Any legislation or regulation needs to be very clear so there is no uncertainty.
- The Government of Yukon should bring forward oil burner legislation and regulations that require technical standards and the licencing and certification of tradespeople in Yukon who install and service oil burning appliances.
- The Government of Yukon should update Yukon standards to comply with new national safety standards whenever national safety code standards are updated.
- The Government of Yukon should develop residential tenancy standards in updated legislation governing the responsibilities and obligations of landlords and tenants to ensure the safety of all persons living in rental accommodations. This would include a requirement that oil-fired appliances in rental accommodations be installed and inspected by a certified oil burner mechanic, and that carbon monoxide detectors be installed and regularly serviced.

Certification

- Residents should not have to rely on certified people to install oil-fired appliances because there are many qualified people who may not be certified but can still do it properly.
- There needs to be the expertise to approve an installation in any discipline whether it is electrical, mechanical or structural because of the difficulty getting inspectors out to communities.

- The Government of Yukon should support training courses for local residents to obtain certification of oil burner mechanics to the highest interprovincial standard.

Public Awareness

- The owners of oil-fired appliances should familiarize themselves with the maintenance instructions provided by the manufacturer, most require regular cleanings.
- The Government of Yukon should prepare a public awareness campaign plan that encourages people to have their oil-burning appliances regularly inspected by a certified oil burner mechanic, and to install and regularly inspect carbon monoxide detectors. The campaign would also include information about the implementation of the new legislative and regulatory safety standards recommended in parts 1 [The Government of Yukon should bring forward oil burner legislation and regulations that require technical standards and the licencing and certification of tradespeople in Yukon who install and service oil-burning appliances] and 2 [As an interim measure prior to development of legislation and regulations, the Government of Yukon should immediately update building standards regulations to require that permits for oil-fired appliance installations and alterations be issued only to certified oil burner mechanics].

Technical

- The air intake should be free from any obstruction inside as well as outside so the air flows better.
- Oil-fired appliances should be serviced every year.
- Appliances should be cleaned about every one to five years depending on the appliance, the amount of soot accumulated and the use of the unit.
- An electric solenoid shut off valve should be installed on all oil burner systems, supplied by fuel tank with a minimum three foot elevation higher than the burner unit.

- All fuel tanks should be required to have either an oil filter of good quality or a sediment bowl of large capacity, or both, installed in the fuel line in front of the burner unit and the solenoid valve.
- Ideally the fuel supply lines to the burner unit from the main fuel tank should be the “two pipe” system, as opposed to the “single pipe system”.
- Clarify between NBC and B-139 regarding chimney lining.
- Discuss or address the safety of outdoor chimneys.
- Address distribution issues because many systems run too hot.
- Address depressurization issues including test procedures and make testing part of the commissioning.
- Discuss ventilation issues, especially in the context of specific challenges in Yukon.
- Chimneys should be sized (diameter and height) correctly to ensure good draft.
- Chimneys and flue pipes should be cleaned regularly and inspected at least every year to ensure they are in good and safe working condition (no leaks, rust, dents, loose screws or any kind of deterioration).
- Combustibles (anything that can catch on fire) should be kept away. The manufacturer’s clearance instructions should always be respected.

Appendix B – Cross-Jurisdictional Analysis

The oil-fired appliances industry is regulated to various degrees in some jurisdictions across Canada.

The highest level of regulation for the oil-fired appliance industry is in Ontario, where the trade is one of several governed by the *Technical Standards & Safety Act* and applicable regulations. Under this legislation, a non-profit, self-funded organization, the Technical Standards & Safety Authority (TSSA), is responsible for the enforcement of the Act and regulations. The TSSA is in charge of several areas including the licencing and certification of tradespeople, inspection of equipment, enforcement of standards and education of the industry and the general public. Authorization from the TSSA is required in order to do any work in the oil-fired appliance industry in Ontario. This authorization can be suspended, revoked or not renewed for reasons including, but not limited to lacking competence or skill and fraud. The offence and penalty structure for violation of the Act differs for individuals and corporations. Individuals who violate the Act or regulations face fines of up to \$50,000 and/or imprisonment for up to a year. Penalties for corporations charged with an offence under the Act and regulations are elaborate and can include fines of up to \$1,000,000.

In Nova Scotia, the *Technical Safety Act* and regulations govern the oil-fired appliance industry. The legislation is similar to that found in Ontario and states that an appointed administrator has the power and authority to enforce compliance with the Act, the regulations and the standards. An advisory board created under the Act is responsible for several areas including issuance, expiry, suspension and revocation of licences, registrations, permits or certifications or other matters. A licence is required to install, repair or maintain an oil-fired appliance, install or work on venting used to exhaust gases to a chimney or flue and wire control components and connecting power from a power supply that is fed from a furnace emergency shut-off. Offences under the Act can result in fines of up to \$25,000 and imprisonment to a term not greater than six months.

In Manitoba, legislation provides a moderate amount of regulation for the oil-fired appliance industry. The *Gas and Oil Burner Act* and applicable regulations establish a board of examiners which is responsible for administration of the Act.

The board's responsibilities include setting the examination standards to qualify for a licence, which is required to work in the oil-fired appliances industry, reviewing licence applications and hearing appeals for violations of the legislation. The regulations provide the board means for suspension, revocation and non-renewal of licences for reasons including failing to rectify faulty installations or failing to pay the required fees. If the board finds reason, fines ranging from \$100 to \$300 per day, per violation can be issued for breaches.

The oil-fired (or petroleum) appliance industry in Québec is legislated by the *Building Act* and regulations. The legislation is managed by a board of representatives from several stakeholder groups including home owners, contractors and municipalities. Its duties are similar to those of other boards created under oil-fired appliance legislation in other jurisdictions. The board determines the necessary qualifications for obtaining a licence, which is required to install oil-fired appliances. The board has the power to suspend or cancel licences for several reasons including submitting false documents, or when the board believes the contractor holding the licence no longer merits the public's trust. Violations of the act or regulations can also result in fines ranging from \$2,570 to \$154,215.

In contrast, oil-fired appliances are not specifically regulated by a territorial or provincial law in Alberta, British Columbia, Newfoundland and Labrador, New Brunswick, Northwest Territories, Nunavut, Prince Edward Island and Saskatchewan.

Currently in Yukon, the only territorial legislation that regulates oil-fired appliances is the *Building Standards Act* and regulations. The legislation states that a permit is required to install or make modifications to a heating device. Through the *Building Standards Act* and regulations, the *National Building Code*, which includes the Canadian Standards Association B139 entitled Installation Code for Oil-Burning Equipment, is adopted as the minimum code in Yukon.