



**Public Health**  
Prevent. Promote. Protect.

Linn County, Iowa

<b>LCPH USE ONLY</b>	<b>Site No:</b>
	<b>Date Received:</b>

**LINN COUNTY PUBLIC HEALTH  
AIR QUALITY DIVISION  
REGISTRATION FORM FOR  
RESIDENTIAL HEATERS**

**Background & Instructions:** On September 16, 2009, the Linn County Board of Supervisors approved revisions to the Linn County Code of Ordinances (LCCO) requiring owners or operators of indirect-fired residential heaters to submit a registration permit for these emission units. Completion of this form is intended to allow individuals to register each residential heater instead of obtaining a standard air construction permit while complying with the applicable requirements. An owner or operator planning to install, modify or reconstruct a residential heater must submit a registration permit. Additionally, owners or operators of existing residential heaters must submit a registration permit, unless otherwise exempt or required. If you are unclear as to whether or not your facility must obtain a standard air construction permit or qualifies for this registration call (319) 892-6000.

**This registration must be completed if either of the following is true unless the owner or operator wishes to apply for a standard air construction permit in accordance with LCCO 10.5(2):**

- The individual owner or operator is planning to install, modify, or reconstruct a residential heater <sup>(1)</sup> **after** October 1, 2009.
- Or, the owner or operator has installed a residential heater **prior to** October 1, 2009.

**IMPORTANT!!! ALL** indirect-fired residential heaters installed after October 1, 2009 must show proof the unit meets the 0.6 lb/mmBTU Particulate Matter (PM) emissions standards of LCCO 10.8(2)“b”. The owner or operator will be required to provide proof the unit can attain this emission standard.

<sup>(1)</sup> Residential Heater means fuel burning equipment used for the primary purpose of heating dwellings of four family units or less. Residential Heater does not mean fuel burning equipment used for the primary purpose of heating a commercial business (including farming and ranching).

If your residence meets one of the conditions above submit a complete registration form to: Linn County Public Health, 501 13<sup>th</sup> St. NW, Cedar Rapids, Iowa 52405. Existing owners of residential heaters must submit a registration no later than March 1, 2010. Individuals proposing to install a residential heater after October 1, 2009 must do so prior to installation of the unit. **Retain a copy of the completed form for your records. The registration becomes effective upon the Linn County’s receipt of this signed registration. There is not an initial registration fee. A renewal registration fee will be required subsequent to the initial registration annually. Linn County Public Health Air Quality Division will notify you in writing by mail or E-mail within two (2) weeks of receipt of this registration. If you do not receive written notification within this time period please contact (319) 892-6000.**

**Section 1 – Residence Information**

Equipment Location – Street:	City:	State:	Zip:
		IA	
Mailing Address (if different):	City:	State:	Zip:
Person to Contact:	Phone Number:	Email (if available):	

**\*\*\*Residents living in Linn County must also contact Planning & Development to determine whether or not a Mechanical Permit is required. Contact (319) 892-5130 for further details.\*\*\***

All indirect-fired residential heaters installed, modified or reconstructed after October 1, 2009 must meet the 0.6 lb/MMBTU PM emissions standard. If the owner or operator is unable to provide documentation certifying this emission rate, the owner or operator will be required to demonstrate compliance pursuant to LCCO 10.17. Failure to demonstrate compliance will result in the unit being sealed pursuant to LCCO 10.23. Individuals proposing to install an outdoor wood boiler should visit <http://www.epa.gov/burnwise/owhlist.html> for information on EPA Phase I and 2 qualified units which will meet the 0.6 lb/mmBTU PM emission standard pursuant to LCCO 10.8(2)“b”.

## Section 2 – Residential Heater Information

Residential Heater (EMISSION UNIT) DESCRIPTION AND SPECIFICATIONS		
<input type="checkbox"/> New Unit <input type="checkbox"/> Unpermitted Existing Unit <input type="checkbox"/> Modification to an unit with Registration Permit #:		
Rated Capacity (BTU/hr heat input):		Construction Date:
Manufacturer:	Model:	Date of Modification (if applicable): <sup>(1)</sup>
Serial Number (if available):	Control Device (if any):	Installation Date:

<sup>(1)</sup> (A modification is a physical or operational change that can increase the emissions of a regulated air pollutant. Reconstruction is replacing the components on an existing residential heater and the cost of the replacement components exceeds 50% the cost of a new residential heater. See 40 CFR §60.14 and §60.15 for complete definitions.)

FUEL DESCRIPTION AND SPECIFICATIONS					
Fuel Type:	<input type="checkbox"/> Natural Gas <sup>(1)</sup>	<input type="checkbox"/> Fuel Oil (# ) <sup>(2)</sup>	<input type="checkbox"/> Waste Oil <sup>(3)</sup>	<input type="checkbox"/> Wood	<input type="checkbox"/> Other Fuels Describe:
Full Load Consumption Rate	(cf/hr)	(gal/hr)	(gal/hr)	(lb/load) <sup>(4)</sup>	( ) <sup>(5)</sup>

<sup>(1)</sup> Pursuant to LCCO 10.5(9)“a”, fuel-burning equipment for indirect heating and re-heating furnaces or cooling units using natural or liquefied petroleum gas exclusively, with a capacity less than ten million BTU per hour input (< 10 mmBTU/hr) per combustion unit, does not require a construction permit. This will also relieve the owner responsibility to submit this registration permit.

<sup>(2)</sup> Pursuant to LCCO 10.5(9)“b”, fuel-burning equipment for indirect heating or cooling with a capacity less than one million BTU per hour input (< 1 mmBTU/hr) when burning fuel oil grade #1 and #2, does not require a construction permit. This will also relieve the owner responsibility to submit this registration permit.

**STOP** <sup>(3)</sup> If waste oil is combusted a construction permit must be applied for pursuant to LCCO 10.5.2. This registration permit does not apply. The forms can be found at <http://www.linncleanair.org>.

<sup>(4)</sup> Estimate the weight of wood used to initially fire the residential heater.

<sup>(5)</sup> Identify units (i.e. gal/hr, lb/hr, etc.) of the fuel type.

## Section 3 – Applicability Determination

- Is the heater used at a commercial business and/or used for a purpose other than heating a residence?
  - No. Go to question 2.
  - Yes. Stop, a construction permit is required. The forms can be found at <http://www.linncleanair.org> or call (319) 892-6000 for assistance.
- Does the heater combust natural gas, liquefied petroleum gas, or fuel oil grade #1 or #2, exclusively, or in combination thereof?
  - No. Go to question 3.
  - Yes. Stop. This registration permit is NOT required.
- Does the heater combust waste oil alone or in combination with any other fuel?
  - No. Go to question 4.

Yes. Stop. A construction permit must be applied for pursuant to LCCO 10.5.2. This registration permit does not apply. The forms can be found at <http://www.linncleanair.org> or call (319) 892-6000 for assistance.

4. Was the heater installed **prior to** October 1, 2009 **and** is compliant with the 0.6 lb/mmBTU PM emissions standards (e.g. Phase 1 qualified unit) for indirect-fired fuel-burning equipment as specified in LCCO 10.8(2)?

No. Go to question 5.

Yes. Stop, the unit meets the Exemption for Residential Heaters Burning Solid Fuels. Read Section 7 of this form, sign and date Section 8 and submit to the Linn County Public Health Air Quality Division. Submit a copy of documentation showing the residential heater meets the 0.6 lb/mmBTU PM emissions standard.

5. Was the heater installed **prior to** October 1, 2009 **and** is not compliant with the 0.6 lb/mmBTU PM emissions standards? (e.g. Phase 1 qualified unit) for indirect-fired fuel-burning equipment as specified in LCCO 10.8(2)?

No. Go to question 6.

Yes. Skip questions 6 and 7 and go to question 8.

6. Was the heater been modified or reconstructed after October 1, 2009?

(A modification is a physical or operational change that can increase the emissions of a regulated air pollutant. Reconstruction is replacing the components on an existing residential heater and the cost of the replacement components exceeds 50% the cost of a new residential heater. See 40 CFR §60.14 and §60.15 for complete definitions.)

No. Go to question 7.

Yes. Stop. Read Section 7 of this form, sign and date Section 8 and submit to the Linn County Public Health Air Quality Division. A modified or reconstructed residential heater must meet the 0.6 lb/mmBTU PM emissions standards for indirect-fired fuel-burning equipment as specified in LCCO 10.8(2). Submit a copy of documentation showing the residential heater meets the 0.6 lb/mmBTU PM emissions standard.

7. Was the heater installed after October 1, 2009?

No. Go to question 8.

Yes. Stop. Read Section 7 of this form, sign and date Section 8 and submit to the Linn County Public Health Air Quality Division. All residential heaters installed after October 1, 2009 must meet the 0.6 lb/mmBTU PM emissions standards for indirect-fired fuel-burning equipment as specified in LCCO 10.8(2). Submit a copy of documentation showing the residential heater meets the 0.6 lb/mmBTU PM emissions standard.

8. Check the box identifying the location of the residential heater by the zoning designation, or is otherwise incorporated, of the residence identified in Section 1. To determine what the property is zoned please visit <http://linncounty-gis.maps.arcgis.com/home/>.

Incorporated;  Urban Service Residential (USR);  Rural Residential 1 (RR1);

Rural Residential 2 (RR2);  Rural Residential 3 (RR3);  Village Residential (VR);

Village Mixed-Use (VM);  Agricultural (AG)

9. Did you check one of the following zoning designations in Question 8: Incorporated, USR, RR1, RR2, RR3, VR or VM?

No. Go to question 10.

Yes. Stop. Go to Section 4.1 "Stack Heights and Setback Requirements of Residential Heaters".

10. Did you check the following zoning designation in Question 8: AG?

Yes. Stop. Go to Section 4.2 "Stack Heights and Setback Requirements of Residential Heaters".

## Section 4 – Stack Height and Setback Requirements of Residential Heaters

### 4.1 For Owners and Operators incorporated, zoned USR, RR1, RR2, RR3, VR, or VM

#### Check the box that applies:

A.  The residential heater is no closer than 200 feet to the nearest property zoned USR, RR1, RR2, RR3, VM or VR not served by the heater.

B.  The residential heater is within 300 feet of the residence not served by the residential heater.

(1)  The permanent stack is currently two (2) feet higher than the peak of any occupied structure within 300 feet of the residence not served by the residential heater but not less than 15 feet above ground level and no greater than 25 feet above ground level.

(2)  The permanent stack will be extended prior to October 1, 2012 to be two (2) feet higher than the peak of any roof structure within 300 feet of the residence not served by the residential heater but not less than 15 feet above ground level and no greater than 25 feet above ground level.



Stop. Read Sections 5.1 “Operating Restrictions,” Section 6 “Nuisance Conditions,” Section 7 “Transferability,” sign and date Section 8 “Disclaimer and Operator Certification” and submit to the Linn County Public Health Air Quality Division.

## 4.2 For Owners and Operators zoned Ag

### Check the box that applies

- A.  The residential heater is no closer than 500 feet to the nearest occupied structure not served by the heater.
- B.  The residential heater is within 500 feet of the nearest occupied structure not served by the heater.
  - (1)  The permanent stack is currently fifteen (15) feet above ground level.
  - (2)  The permanent stack will be extended prior to October 1, 2012 to be fifteen (15) feet above ground level.

Or, the owner of a residential heater zoned AG may elect to comply with the following:

- C.  The residential heater is within 300 feet of the residence not served by the residential heater.
  - (1)  The permanent stack is currently two (2) feet higher than the peak of any occupied structure within 300 feet of the residence not served by the residential heater but not less than 15 feet above ground level and no greater than 25 feet above ground level.
  - (2)  The permanent stack will be extended prior to October 1, 2012 to be two (2) feet higher than the peak of any roof structure within 300 feet of the residence not served by the residential heater but not less than 15 feet above ground level and no greater than 25 feet above ground level.



Stop. Read Section 5.2 “Operating Restrictions,” Section 6 “Nuisance Conditions,” Section 7 “Transferability,” sign and date Section 8 “Disclaimer and Operator Certification” and submit to the Linn County Public Health Air Quality Division.

## Section 5 – Operating Restrictions

### 5.1 For Owners and Operators incorporated, zoned USR, RR1, RR2, RR3, VR, or VM

- A. The owner shall not operate the residential heater during the period starting May 15 and ending September 15.
- B. The owner shall not combust more than 18,000 lbs (5 cords) of fuel per annual heating season in the residential heater.
- C. The owner is limited to burning the following solid fuels in the residential heater:
  - (1) Untreated wood;
  - (2) Wood pellets made from untreated wood;
  - (3) Home heating oil in compliance with the applicable sulfur content limit, propane or natural gas may be used as starter fuels for dual-fired residential heaters as specifically permitted by the manufacturer’s instructions;
  - (4) Trees, tree trimmings, branches, and stumps, but does not include brush, weeds, leaves, grass, shrubbery, yard trimmings, or other landscape wastes as allowed pursuant to Section 10.10 of the LCCO.
  - (5) Biomass as defined in Section 10.2 of the LCCO.

### 5.2 For Owners and Operators zoned Ag

- A. The owner has no seasonal operating restrictions.
- B. The owner shall not combust more than 54,000 lbs (15 cords) of fuel per annual heating season in the residential heater.
- C. The owner is limited to burning the following solid fuels in the residential heater:
  - (1) Untreated wood;
  - (2) Wood pellets made from untreated wood;
  - (3) Home heating oil in compliance with the applicable sulfur content limit, propane or natural gas may be used as starter fuels for dual-fired residential heaters as specifically permitted by the manufacturer’s instructions;
  - (4) Trees, tree trimmings, branches, and stumps, but does not include brush, weeds, leaves, grass, shrubbery, yard trimmings, or other landscape wastes as allowed pursuant to Section 10.10 of the LCCO.
  - (5) Biomass as defined in Section 10.2 of the LCCO.

## Section 6 – Nuisance Conditions

- A. Pursuant to LCCO 10.8(4) no person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration that are injurious to human, plant or animal life or to property, or that unreasonably interfere with the comfortable enjoyment of life or property, or that unreasonably interfere with the comfortable enjoyment of life or property. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to any particulate, fume, gas, mist, odor, smoke, vapor, toxic, or deleterious emission, either alone or in combination with others.
- B. If existing fuel burning equipment is, through the course of a proper investigation by the Department, creating a verifiable nuisance, the following steps shall be taken by the owner at the direction of the Department.
- (1) Modifications made to the unit to eliminate the nuisance such as extending the chimney, fuel management, or relocating the residential heater or both.
  - (2) Cease and desist operating the unit until reasonable steps can be taken to ensure that the residential heater will not be a nuisance.

## Section 7 – Transferability

As limited by LCCO 10.5(6)"b" and "c", this permit is not transferable from one piece of equipment to another or from one person to another. In the event the residential heater is replaced or an ownership change takes place, a new registration permit must be applied for pursuant to LCCO 10.5(6).

## Section 8 – Disclaimer and Operator Certification

**Summaries and other statements in this registration form and its appendix are intended solely as guidance, cannot be used to bind the agency, and are not a substitute for reading applicable statutes, rules and regulations (including, but not limited to, LCCO 10.2, 10.8, 10.10 and 10.24). The local regulations referenced in this form are available on-line at <http://www.linncleanair.org>.**

### CERTIFICATION

***"I certify that residential heater identified in this completed registration form is in compliance with the requirements of LCCO 10.8 or will be by October 1, 2012. This certification is based on information and belief formed after reasonable inquiry, the statements and information in the document is true, accurate, and complete. I understand failure to comply with the requirements could result in penalty pursuant to LCCO 10.24(3)".***

Responsible Official's Printed Name/Title<sup>1</sup>

Mr.  Mrs.  Ms.  Dr.

Signature

Date Signed: / /

<sup>(1)</sup> Fill in the certification section with a signature, name, title and date. The certification must be signed by a responsible official. A responsible official could be the owner or the designated representative of the owner.

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