



State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Alan Matheson
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQ-044-16

MEMORANDUM

TO: Air Quality Board

THROUGH: Bryce C. Bird, Executive Secretary

FROM: Joel Karmazyn, Environmental Scientist

DATE: August 24, 2016

SUBJECT: PROPOSE FOR PUBLIC COMMENT: Amend R307-302. Solid Fuel Burning Devices.

On February 25, 2016, the Environmental Protection Agency (EPA) approved all but two of the area source rules that were included as control measures in the PM_{2.5} State Implementation Plan. R307-302, Solid Fuel Burning Devices in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah, and Weber Counties, was one of those rules. The EPA informed staff that amendments to R307-302 were needed before it could be approved. The EPA suggested that R307-302 be amended to include continuous controls in the form of a list of prohibited burning materials. These controls would apply at all times, including during start-up and refueling.

On June 1, 2016, staff brought R307-302 to the Board with the changes the EPA had requested. Several Board members had suggestions on how to improve the rule before it was put out for public comment. Staff has considered those suggestions, and the rule has been amended to include the following changes:

- A definition for “seasoned wood” was added.
- The word “fireplace” was removed because it was redundant.
- R307-302-5(3) was amended to clarify that a person burning wood in a solid fuel burning device may only burn seasoned wood.
- The term “facilities” was removed because “facility” is defined in R307-101-2.
- “Phase 2” was removed from R307-302-6 to be consistent with the terminology used in the 2015 New Source Performance Standard.
- The option to register a solid fuel burning device with the local health district was removed because Utah Code 19-2-107.5 requires registration with the Division.

On August 18, 2016, the EPA published a conditional approval of R307-302 based on the Division's commitment to include a list of prohibited fuels in the rule. The EPA also stated that the rule would satisfy the Clean Air Act requirement to implement Reasonably Available Control Measures (RACM). If the Board promulgates R307-302 as amended, EPA has indicated that they can approve it, and it will become part of Utah's PM_{2.5} State Implementation Plan.

Staff Recommendation: Staff recommends that the Board propose the amended R307-302 for public comment.

1 **R307. Environmental Quality, Air Quality.**

2 **R307-302. Solid Fuel Burning Devices [~~in Box Elder, Cache, Davis,~~**
3 **~~Salt Lake, Tooele, Utah, and Weber Counties~~].**

4 **R307-302-1. Purpose and Definitions.**

5 (1) R307-302 establishes emission standards for [~~fireplaces~~
6 ~~and]all solid fuel burning devices [~~used in residential,~~~~

7 ~~commercial, institutional and industrial facilities and associated~~
8 ~~outbuildings] used to provide comfort heating.~~

9 (2) The following additional definitions apply to R307-302:

10 "Seasoned wood" means wood that has a moisture content of
11 less than or equal to 25%.

12 "Sole source of heat" means the solid fuel burning device is
13 the only available source of heat for the entire residence, except
14 for small portable heaters.

15 "Solid fuel burning device" means fireplaces, wood stoves and
16 boilers used for burning wood, coal, or any other nongaseous and
17 non-liquid fuel, both indoors and outdoors, but excluding outdoor
18 wood boilers, which are regulated under R307-208.

19
20 **R307-302-2. Applicability.**

21 (1) R307-302-3 and R307-302-6 shall apply to any solid fuel
22 burning device used to provide comfort heating in PM10 [~~and]or~~
23 PM2.5 nonattainment [~~and]or~~ maintenance areas as defined in 40 CFR
24 81.345 (July 1, 2011). [~~and geographically described as all~~
25 ~~regions of Salt Lake and Davis counties; all portions of the Cache~~
26 ~~Valley; all regions in Weber and Utah counties west of the Wasatch~~
27 ~~mountain range;] Collectively, The PM10 and PM2.5 nonattainment
28 and maintenance plan areas are geographically defined as all
29 regions of Salt Lake and Davis counties; all portions of the Cache
30 Valley; all regions in Weber County west of the Wasatch mountain
31 range; all regions of Utah County; in Box Elder County, from the
32 Wasatch mountain range west to the Promontory mountain range and
33 south of Portage; and in Tooele County, from the northernmost part
34 of the Oquirrh mountain range to the northern most part of the
35 Stansbury mountain range and north of Route 199.~~

36 (2) R307-302-4 shall apply only within the city limits of
37 Provo in Utah County.

38 (3) R307-302-5 shall apply in all portions of Box Elder,
39 Cache, Davis, Salt Lake, Tooele, Utah and Weber counties.

40 (4) The following exemptions apply to R307-302:

41 (a) R307-302 does not apply to restaurant and institutional
42 food preparation.

43 (b) R307-302 does not apply to commercial and industrial
44 boilers subject to an approval order issued under R307-401.

45 (c) R307-302-3 does not apply to sources located above 7,000
46 feet in elevation within Box Elder, Davis, Salt Lake, Tooele, Utah
47 and Weber counties.

48 (d) R307-302 does not apply to firefighting training devices
49 that meet the definition of a solid fuel burning device.

50
51 **R307-302-3. No-Burn Periods for [Fine] Particulates.**

52 (1) [~~By June 1, 2015,~~] A person using a solid fuel burning

1 ~~device as a sole source[s] of [residential] heat[ing using solid~~
2 ~~fuel burning devices]~~ must [be] register[ed] with the director in
3 order to be exempt during mandatory no-burn periods.

4 (2) When the ambient concentration of PM10 measured by the
5 monitors in Salt Lake, Davis, Weber, or Utah counties reaches the
6 level of 120 micrograms per cubic meter and the forecasted weather
7 for the specific area includes a temperature inversion which is
8 predicted to continue for at least 24 hours, the director will
9 issue a public announcement and will distribute such announcement
10 to the local media notifying the public that a mandatory no-burn
11 period for solid fuel burning devices [~~and fireplaces~~] is in
12 effect. The mandatory no-burn periods will only apply to those
13 areas or counties impacting the real-time monitoring site
14 registering the 120 micrograms per cubic meter concentration.
15 [~~Residents, commercial, institutional and industrial facilities~~
16 ~~of]~~ A person in the affected areas shall not use a solid fuel
17 burning device[s or fireplaces except those that are]unless it is
18 the sole source of heat for [the]an entire residence and
19 registered with the director.

20 (3) PM10 Contingency Plan. If the PM10 Contingency Plan
21 described in Section IX, Part A, of the State Implementation Plan
22 has been implemented, the trigger level for no-burn periods as
23 specified in R307-302-3(2) will be 110 micrograms per cubic meter
24 for that area where the PM10 Contingency Plan has been
25 implemented.

26 (4) When the ambient concentration of PM2.5 measured by
27 monitors in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah or
28 Weber counties are forecasted to reach or exceed 25 micrograms per
29 cubic meter, the director will issue a public announcement to
30 provide broad notification that a mandatory no-burn period for
31 solid fuel burning devices [~~and fireplaces~~] is in effect. The
32 mandatory no-burn periods will only apply to those counties
33 identified by the director. [~~Residents, commercial, institutional~~
34 ~~and industrial facilities]~~ A person within the geographical
35 boundaries described in R307-302-2(1) shall not use a solid fuel
36 burning device[s or fireplaces except those that are]unless it is
37 the sole source of heat for [the]an entire residence and
38 registered with the director.

39 (5) PM2.5 Contingency Plan. If the PM2.5 contingency plan of
40 the State Implementation Plan has been implemented, the trigger
41 level for no-burn periods as specified in R307-302-3(4) shall be
42 15 micrograms per cubic meter for the area where the PM2.5
43 contingency plan has been implemented.

44 45 **R307-302-4. No-Burn Periods for Carbon Monoxide.**

46 (1) Beginning on November 1 and through March 1, the
47 director will issue a public announcement and will distribute such
48 announcement to the local media notifying the public that a
49 mandatory no-burn period for solid fuel burning devices [~~and~~
50 ~~fireplaces~~] is in effect when the running eight-hour average
51 carbon monoxide concentration as monitored by the state at 4:00 PM
52 reaches a value of 6.0 ppm or more.

1 (2) In addition to the conditions contained in R307-302-
2 4(1), the director may use meteorological conditions to initiate a
3 no-burn period. These conditions are:

4
5 (a) A national weather service forecasted clearing index
6 value of 250 or less;

7 (b) Forecasted wind speeds of three miles per hour or less;

8 (c) Passage of a vigorous cold front through the Wasatch
9 Front; or

10 (d) Arrival of a strong high pressure system into the area.

11 (3) During the no-burn periods specified in R307-302-4(1)
12 and (2), ~~[residents, commercial, institutional and industrial~~
13 ~~facilities]~~ a person in Provo City shall not use a solid fuel
14 burning device ~~[s or fireplaces except those that are]~~ unless it is
15 the sole source of heat for ~~[the]~~ an entire residence and ~~[are]~~ is
16 registered with the director ~~[or the local health district~~
17 ~~office]~~.

18
19 **R307-302-5. Opacity and Prohibited Fuels for Heating Appliances.**

20 (1) Except during no-burn periods as required by R307-302-3
21 and 4, visible emissions from solid fuel burning devices ~~[and~~
22 ~~fireplaces]~~ shall be limited to a shade or density no darker than
23 20% opacity as measured by EPA Method 9, except for the following:

24 (1) a) An initial fifteen minute start-up period, and

25 (2) b) A period of fifteen minutes in any three-hour period
26 in which emissions may exceed the 20% opacity limitation for
27 refueling.

28 (2) Prohibited Fuels: A person shall not cause or allow any
29 of the following materials to be burned in a solid fuel burning
30 device at any time:

31 (a) asphaltic products;

32 (b) books and magazines;

33 (c) garbage;

34 (d) paints;

35 (e) colored/wrapping paper;

36 (f) plastic;

37 (g) rubber products;

38 (h) treated wood;

39 (i) waste petroleum products; or

40 (j) any other material not intended by a manufacturer for
41 use as a fuel in a solid fuel burning device.

42 (3) A person burning wood in a solid fuel burning device
43 shall only burn seasoned wood.

44
45 **R307-302-6. Prohibition.**

46 (1) ~~[Beginning September 1, 2013, n]~~ No person shall sell,
47 offer for sale, supply, install, or transfer a wood burning stove
48 that is not EPA ~~[Phase 2]~~ certified or a fireplace that is not EPA
49 qualified.

50 (2) Ownership of a non EPA ~~[Phase 2]~~ certified stove within
51 a residential dwelling installed prior to March 6, 2014 may be
52 transferred as part of a real estate transaction, so long as the

1 unit remains intact within the real property of sale.

2

3 **KEY: air pollution, fireplaces, stoves, solid fuel burning**

4 **Date of Enactment or Last Substantive Amendment: [~~February 4,~~**
5 **2015]2016**

6

7 **Notice of Continuation: May 6, 2015**

8 **Authorizing, and Implemented or Interpreted Law: 19-2-101; 19-2-**
9 **104**

NOTICE OF
PROPOSED RULE AMENDMENT

- The agency identified below in box 1 provides notice of proposed rule change pursuant to Utah Code Section 63G-3-301.
- Please address questions regarding information on this notice to the agency.
- The full text of all rule filings is published in the Utah State Bulletin unless excluded because of space constraints.
- The full text of all rule filings may also be inspected at the Office of Administrative Rules.

Rule Information

DAR file no: _____ Date filed: _____
 State Admin Rule Filing Key: 157553
 Utah Admin. Code ref. (R no.): R307-302-5

Agency Information

1. Agency: ENVIRONMENTAL QUALITY - Air Quality
 Room no.: Fourth Floor
 Building:
 Street address 1: 195 N 1950 W
 Street address 2:
 City, state, zip: SALT LAKE CITY UT 84116-3085
 Mailing address 1: PO BOX 144820
 Mailing address 2:
 City, state, zip: SALT LAKE CITY UT 84114-4820

Contact person(s):

Name:	Phone:	Fax:	E-mail:	Remove:
Ryan Stephens	801-536-4419	801-536-0085	rstephens@utah.gov	

(Interested persons may inspect this filing at the above address or at DAR during business hours)

Rule Title

2. Title of rule or section (catchline):
 Opacity for Heating Appliances.

Notice Type

3. Type of notice: Amendment

Rule Purpose

4. Purpose of the rule or reason for the change:

This rule change is being proposed for the purpose of developing an EPA approvable PM2.5 State Implementation Plan. The amendment is being proposed in response to a request from the EPA that the rule should provide controls during start-up and refueling processes.

Response Information

5. This change is a response to comments by the Administrative Rules Review Committee.

No Yes

Rule Summary

6. Summary of the rule or change:

The rule has been amended to include the following changes: 1) A definition for “seasoned wood” was added; 2) The word “fireplace” was removed because it was redundant; 3) R307-302-5(3) was amended to clarify that a person burning wood in a solid fuel burning device may only burn seasoned wood; 4) The term “facilities” was removed because “facility” is defined in R307-101-2; 5) “Phase 2” was removed from R307-302-6 to be consistent with the terminology used in the 2015 New Source Performance Standard; 6) The option to register a solid fuel burning device with the local health district was removed because Utah Code 19-2-107.5 requires registration with the Division; and 7) A list of continuous controls in the form of prohibited burning materials was added.

Aggregate Cost Information

7. Aggregate anticipated cost or savings to:

A) State budget:

Affected: No Yes

There will be minimal impact on the state budget. If the state owns a regulated heating appliance as described in the rule, then the state may have a small cost associated with switching to non-prohibited materials.

B) Local government:

Affected: No Yes

There will be minimal impact on local governments. If a government owns a regulated heating appliance as described in the rule, then the government may have a small cost associated with switching to non-prohibited materials.

C) Small businesses:

Affected: No Yes

("small business" means a business employing fewer than 50 persons)

There will be minimal impact on small businesses. If a small business owns a regulated heating appliance as described in the rule, then the small business may have a cost associated with switching to non-prohibited materials.

D) Persons other than small businesses, businesses, or local government entities:

Affected: No Yes

("person" means any individual, partnership, corporation, association, governmental entity, or public or private organization of any character other than an agency)

Persons other than small businesses, businesses, or local government entities will be impacted in a small way. "Other persons" will not be able to burn materials on the prohibited burn list in regulated devices. They will have to purchase an approved solid fuel as described in the rule in order to use their device.

Compliance Cost Information

8. Compliance costs for affected persons:

People who use solid fuel burning devices will have to take on the cost of switching fuels, if their fuel is on the prohibited list.

Department Head Comments

9. A) Comments by the department head on the fiscal impact the rule may have on businesses:

This rule amendment will have a minimal fiscal impact on businesses. Some businesses may be impacted by the rule if they are burning prohibited items in a solid fuel burning device used for comfort heating. The fiscal impact to these businesses will be the cost of switching to an approved fuel.

B) Name and title of department head commenting on the fiscal impacts:

Citation Information

10. This rule change is authorized or mandated by state law, and implements or interprets the following state and federal laws.

State code or constitution citations (required) (e.g., Section 63G-3-402; Subsection 63G-3-601(3); Article IV) :
19-2-104

Incorporated Materials

11. This rule adds, updates, or removes the following title of materials incorporated by reference (a copy of materials incorporated by reference must be submitted to DAR; if none, leave blank) :

Official Title of Materials Incorporated (from title page)
Publisher
Date Issued (mm/dd/yyyy)
Issue, or version (including partial dates)
ISBN Number
ISSN Number
Cost of Incorporated Reference
Adds, updates, removes-- SELECT ONE --

Comments

12. The public may submit written or oral comments to the agency identified in box 1. (The public may also request a hearing by submitting a written request to the agency. The agency is required to hold a hearing if it receives requests from ten interested persons or from an association having not fewer than ten members. Additionally, the request must be received by the agency not more than 15 days after the publication of this rule in the Utah State Bulletin. See Section 63G-3-302 and Rule R15-1 for more information.)

A) Comments will be accepted until 5:00 p.m. on (mm/dd/yyyy) : 10/31/2016

B) A public hearing (optional) will be held:

On (mm/dd/yyyy): At (hh:mm AM/PM): At (place):

Proposed Effective Date

13. This rule change may become effective on (mm/dd/yyyy): 11/07/2016

NOTE: The date above is the date on which this rule MAY become effective. It is NOT the effective date. After a minimum of seven days following the date designated in Box 12(A) above, the agency must submit a Notice of Effective Date to the Office of Administrative Rules to make this rule effective. Failure to submit a Notice of Effective Date will result in this rule lapsing and will require the agency to start the rulemaking process over.

Indexing Information

14. Indexing information - keywords (maximum of four, one term per field, in lower case, except for acronyms (e.g., "GRAMA") or proper nouns (e.g., "Medicaid")):
air pollution, fireplaces, solid fuel burning, stoves

File Information

15. Attach an RTF document containing the text of this rule change (filename):
No document is associated with this filing.

To the Agency

Information requested on this form is required by Sections 63G-3-301, 302, 303, and 402. Incomplete forms will be returned to the agency for completion, possibly delaying publication in the Utah State Bulletin, and delaying the first possible effective date.

Agency Authorization

Agency head or designee, and title: -- SELECT ONE -- Date (mm/dd/yyyy): 08/24/2016