

Department of Environmental Quality

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GUIDELINES

TO: New Source Review Sections

FROM: Joe Thomas, Permitting Branch Manager

Joe Thomas (May 17, 2021 14:56 MDT)

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SUBJECT: Source Category Exemption

INTRODUCTION

The purpose of this guideline is to clarify the Source Category Exemptions rule in R307-401-10. This guideline clarifies the type of categories covered under this rule and describes how to evaluate and document these categories in the New Source Review (NSR) process.

Administrative Rule R307-401-10 reads as follows:

The source categories described in Section R307-401-10 are exempt from the requirement to obtain an approval order found in Sections R307-401-5 through R307-401-8. The general provisions in Section R307-401-4 shall apply to these sources.

- (1) Fuel-burning equipment in which combustion takes place at no greater pressure than one inch of mercury above ambient pressure with a rated capacity of less than five million BTU per hour using no other fuel than natural gas or LPG or other mixed gas that meets the standards of gas distributed by a utility in accordance with the rules of the Public Service Commission of the State of Utah, unless there are emissions other than combustion products.
- (2) Comfort heating equipment such as boilers, water heaters, air heaters and steam generators with a rated capacity of less than one million BTU per hour if fueled only by fuel oil numbers 1 6.
- (3) Emergency heating equipment, using coal or wood for fuel, with a rated capacity less than 50,000 BTU per hour.
- (4) Exhaust systems for controlling steam and heat that do not contain combustion products.

- (5) A well site as defined in 40 CFR 60.5430a, including centralized tank batteries, that is not a major source as defined in Section R307-101-2, and is registered with the Division as required by Rule R307-505.
- (6) A gasoline dispensing facility as defined in 40 CFR 63.11132 that is not a major source as defined in Section R307-101-2. These sources shall comply with the applicable requirements of Rule R307-328 and 40 CFR 63 Subpart CCCCC: National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities.

CATEGORY DETAILS

There are six different category types that are subject to this rule. The list below provides an overview of each category.

R307-401-10 (1) - Fuel Burning Equipment

1007-401-10 (1) - 1 uci	K307-401-10 (1) - Fuel Bulling Equipment	
Fuel	a) Natural Gas	
	b) LPG	
	c) Other mixed gas that meets the standards of gas distributed by a	
	utility in accordance with the rules of the Public Service	
	Commission of the State of Utah.	
Exempt Rating	< 5 MMBtu/hr	
Purpose	All purposes	
Example Equipment	Boilers, furnaces, and ovens etc.	
Notes	a) Not exempt if combustion takes place at a pressure greater than	
	1" Hg above ambient pressure. Combustion above this pressure	
	is considered internal combustion. In other words, internal	
	combustion equipment is not exempt under this rule (i.e. turbines, engines).	
	b) Not exempt if there are non-combustion related emissions. For	
	example: furnaces used to dry paint.	
	c) Equipment that uses two or more types of fuel is not exempt	
	under this rule.	

R307-401-10 (2) - Comfort Heating Equipment

Fuel Oil No. 1 - 6
< 1 MMBtu/hr
Comfort Heating
Boilers, water heaters, air heaters, and steam generators.
Comfort heating equipment generally defined as heating units used for human comfort that do not provide heat for any nanufacturing or industrial process.
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R307-401-10 (3) - Emergency Heating Equipment

Fuel	Coal or Wood
Exempt Rating	< 50,000 Btu/hr
Purpose	Emergency Heating
Example Equipment	Boilers, water heaters, air heaters, and steam generators.
Notes	a) Emergency heating not defined in state rules.
	b) This type of equipment is very rare. It is usually found in
	buildings that still use coal or wood-fired heating.

R307-401-10 (4) - Exhaust Systems

Fuel	Not applicable
Exempt Rating	Not applicable
Purpose	Not applicable
Example Equipment	Radiant heating distribution systems (boiler generating the heat
	may not be exempt, but the heat distribution system is exempt
	under this rule).
Notes	This category was included in the rules but there are no emissions
	associated with this equipment.

R307-401-10 (5) - Well Site

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Fuel	Not applicable
Exempt Rating	Must meet each of the following criteria in order to be exempt:
	a) Well site as defined in 40 CFR 60.5430a, including
	centralized tank batteries.
	b) Not a major source as defined in R307-101-2.
	c) Registered with the Division of Air Quality as required by
	R307-505.
Purpose	Drilling and operation of oil, natural gas, or injection wells.
Example Equipment	Oil well, natural gas well, or injection well, including centralized
	tank batteries.
Notes	Definition of a well site according to 40 CFR 60.5430a:
	"Well site means one or more surface sites that are constructed for
	the drilling and subsequent operation of any oil well, natural gas
	well, or injection well."

R307-401-10 (6) - Gasoline Dispensing Facility

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Fuel	Gasoline
Exempt Rating	Must meet each of the following criteria in order to be exempt:
	a) Gasoline dispensing facility as defined in 40 CFR 63.11132.
	b) Not a major source as defined in R307-101-2.
Purpose	Gasoline dispensing
Example Equipment	Facilities that dispense gasoline into on- and off-road, street, or
	highway motor vehicles, lawn equipment, boats, test engines,
	landscaping equipment, generators, pumps, and other gasoline-fueled
	engines and equipment. The term "facilities" can refer to an entire
	site or to a single gasoline storage tank at a facility.
Notes	As per 40 CFR 63.11132 a gasoline dispensing facility (GDF) means
	any stationary facility which dispenses gasoline into the fuel tank of a
	motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad
	engine, including a nonroad vehicle or nonroad engine used solely
	for competition.
	These sources shall comply with the applicable requirements of
	R307-328 and 40 CFR 63 Subpart CCCCC: National Emission
	Standards for Hazardous Air Pollutants for Source Category:
	Gasoline Dispensing Facilities.

NSR PROCESS

The guidelines below describe how to evaluate and document exempt source categories in the NSR process. The guidelines below are applicable to all categories in this rule, except exhaust systems defined in R307-401-10(4). Exhaust systems have no emissions and do not impact the PTE, so they do not need to be considered in the NSR process.

- 1. The source's PTE must include emissions from exempt source categories.
- 2. A BACT analysis is not required for exempt categories. The permit engineer should include a comment in the BACT Analysis section of the Engineering Review to document this. See example below:

"Equipment is exempt from the requirement to obtain an approval order as per R307-401-10, so a BACT analysis is not required."

3. Exempt equipment may be listed in Section II.A of the Approval Order (AO) for informational purposes. Equipment rating should not be included. Equipment may be grouped into one item in the equipment list. See example below:

II.A.3 **Boilers & Heaters**

Various boilers and heaters less than 5 MMBtu/hr

Fuel: Natural Gas

Included for informational purposes only.

- 4. There should be no operational limits associated with exempt equipment, such as a limit on operational hours or fuel consumption.
- 5. The source is not required to modify their AO if they add or remove exempt categories or equipment even if an existing approval order lists the rating of exempt categories or equipment. For instance, the existing AOs for oil and gas sites list the total rating of exempt natural gas-fired boilers and heaters at the site. These sources are not required to modify their AOs if they make changes to the exempt equipment, such as adding or replacing equipment, that result in a different onsite total.
- 6. If a source has several exempt pieces of equipment and no other emission sources, the source is exempt from obtaining an AO regardless of the number of exempt pieces of equipment or the PTE totals, unless it exceeds any major source threshold.
- 7. Exempt equipment should not disqualify a source from registering for a small source exemption. If a source has both exempt and non-exempt equipment and emissions from the non-exempt equipment are below the thresholds in R307-401-9(1), the source can still register for a small source exemption even if the exempt equipment causes facility emissions to exceed the thresholds in R307-401-9(1). This determination should be made on a case-by-case basis, but is intended to avoid issuing unnecessary AOs. For instance, a source that operates a paint booth and several exempt boilers and whose PTE exceeds the thresholds in R307-401-9(1) could be a candidate for a small source exemption. If an AO were to be issued for this source, the paint booth would be the only piece of equipment subject to the requirements of the AO and there are no requirements that could be included in the AO that are not already included in a state rule and/or applied as a best operating practice.
- 8. Exempt equipment shall meet all applicable state and federal rules. For instance, a new natural gas-fired boiler with a heat input capacity less than 5 MMBtu/hr is still subject to the low NOx requirement in R307-401-4.

This guideline shall be audited every five years by the major NSR section manager to determine the current status and relevance of the information.