



State of Utah

GARY R. HERBERT  
*Governor*

SPENCER J. COX  
*Lieutenant Governor*

Department of  
Environmental Quality

L. Scott Baird  
*Interim Executive Director*

DIVISION OF AIR QUALITY  
Bryce C. Bird  
*Director*

DAQ-071-19

**MEMORANDUM**

**TO:** Air Quality Board

**THROUGH:** Bryce C. Bird, Executive Secretary

**FROM:** Alan Humpherys, Minor New Source Review Section Manager

**DATE:** July 23, 2019

**SUBJECT:** PROPOSE FOR PUBLIC COMMENT: Amend R307-401. Permit: New and Modified Sources.

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Utah Administrative Codes R307-401-15 and 16 exempt an owner or operator at a soil or groundwater remediation site from the new source review (NSR) permitting process as long as volatile organic compound emissions are under five tons per year and hazardous air pollutants are less than their threshold values in R307-410-5(1)(c)(i)(c). The rules require the owner or operator to test to demonstrate compliance with the exemption levels.

Proposed changes include new and updated definitions and updated testing requirements that are applicable in both R307-401-15 and 16. The proposed changes will allow sources to discontinue testing after three years of operation if testing demonstrates the emissions have consistently remained below exemption levels. The option to discontinue testing applies to R307-401-15.

Another proposed amendment to the rule is to exempt sub-slab vapor mitigation systems (VMS) from the testing requirements of the rule. Testing requirements are not necessary because sub-slab VMS are designed to mitigate vapor intrusion into an occupied or occupiable structure, not to remediate the contaminated soil or groundwater. In other words, vapors to be mitigated through a VMS would eventually enter ambient air through natural processes. A VMS simply moves vapors away from occupied or occupiable structures. The exemption for the VMS is in R307-401-15(5).

Staff consulted with an environmental remediation company as well as EPA while developing these proposed changes. During the rule development process, the EPA raised some questions. Those questions

and DAQ's responses are summarized below. At the end of the cooperative rule development process, EPA indicated that the DAQ's responses addressed their concerns and the rule appeared approvable.

EPA Question 1 – Why did DAQ remove the “any combination of” language from R307-401-15(1)(b) when defining notice of intent exemptions for soil vapor extraction remediation systems?

Staff Response: There is no defined “combined or combination HAPs” as listed in the limits from R307-401-15. Limits are based on single HAP thresholds.

EPA Question 2 – Why is the exemption for sub-slab VMS added to the rule?

Staff Response: VMS were unintentionally pulled into the rule in the existing definition. The systems are designed to prevent already-venting emissions from contaminated soil or groundwater from passing through inhabited buildings. The systems redirect emissions so that the building is circumvented from the vapors.

There is no increase in emissions from the addition of a VMS; it only helps to preserve indoor air quality before the emissions eventually pass to the atmosphere. The systems are not an active removal or treatment system. The new definition clarifies this and prevents discouragement of installation due to the rules testing requirements.

EPA Question 3 – Why is the reporting exemption in R307-401-16(3) added to the rule?

Staff Response: Landfills, solid waste management facilities, and third-party landfarms are exempt if the emissions unit is operating under an approval order. The emissions from the excavated soils are addressed in the approval order and are controlled through best available control technology (BACT). As such, this rule is not necessary to capture, control, or report emissions.

Recommendation: Staff recommends that the Board propose amended R307-401 for public comment.

### 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: 161400  
 Utah Admin. Code ref. (R no.): R307-401

#### 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:
Mark Berger	801-536-4000	801-536-0085	mberger@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):  
 Permit: New and Modified Sources.

#### Notice Type

3. Type of notice: Amendment

Rule Purpose

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

These amendments add and update definitions and update testing requirements. These changes will allow sources to discontinue testing after three years of operation if testing demonstrates the emissions have consistently remained below exemption levels. Changes have also been made to clarify that sub-slab vapor mitigation systems are exempt from the rule's testing requirements.

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:

R307-401-2 is amended to add definitions for "air strippers," "soil aeration," "soil vapor extraction," and "vapor mitigation system." R307-401-15 and 16 are being amended to update testing requirements, which will allow sources to discontinue testing after three years of operation if testing demonstrates the emissions have consistently remained below exemption levels. R307-401-15(5) is being added to the rule to clarify that sub-slab vapor mitigation systems are exempt from the testing requirements of the rule.

Aggregate Cost Information

7. Aggregate anticipated cost or savings to:

A) State budget:

Affected:  No  Yes

This rule change is expected to have an unknown savings to the State budget as it will limit the need for DAQ staff to review testing submission. The savings is unknown because information regarding how many of these would be submitted is unavailable.

B) Local government:

Affected:  No  Yes

This rule change is not expected to have a fiscal impact on local government.

C) Small businesses:

Affected:  No  Yes

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

This rule change could result in a cost savings to small businesses who operate or own sub-slab vapor extraction systems, as the rule exempts them from certain notice of intent and approval order requirements of the rule. The aggregate savings is not possible to calculate as the number of SVEs operating at any given time is not readily available. However, the savings are estimated to range between \$2,800 and \$3,500 per sampling event per stack.

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)

This rule change is not expected to have a fiscal impact on persons other than small businesses, businesses, or local government entities.

Compliance Cost Information

8. Compliance costs for affected persons:

There are no additional compliance requirements added to the rule through these amendments; therefore, there are no compliance costs for affected persons.

Department Head Comments

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

These amendments will result in an unknown savings to non-small businesses. Information on how many instances the exemption will apply to an owner or operator of sub-slab vapor mitigation systems is not readily available. However, it is estimated that the savings will range between \$2,800 and \$3,500 per sampling event for each vent riser. Each system will have a specific vent riser count requirement. Stacks can range from four to 10 per project. As currently written, the rule requires each stack to be tested five times in the first year and twice a year after the first year for the life of the project. At a four stack site this could cost up to \$70,000 in the first year, and up to \$28,000 each subsequent year. Testing would be required for the life of the project

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

L. Scott Baird

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) :

19-2-108, 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) : 10/01/2019

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): 11/07/2019

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, permits, greenhouse gasses, approval order

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 Bryce Bird  
title: Director

Date (mm/dd/yyyy): 07/17/2019

**Appendix 1: Regulatory Impact Summary Table\***

<b>Fiscal Costs</b>	FY 2020	FY 2021	FY 2022
State Government	\$0	\$0	\$0
Local Government	\$0	\$0	\$0
Small Businesses	\$0	\$0	\$0
Non-Small Businesses	\$0	\$0	\$0
Other Person	\$0	\$0	\$0
<b>Total Fiscal Costs:</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Fiscal Benefits</b>			
State Government	\$0	\$0	\$0
Local Government	\$0	\$0	\$0
Small Businesses	\$0	\$0	\$0
Non-Small Businesses	\$0	\$0	\$0
Other Persons	\$0	\$0	\$0
<b>Total Fiscal Benefits:</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Net Fiscal Benefits:</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

\*This table only includes fiscal impacts that could be measured. If there are inestimable fiscal impacts, they will not be included in this table. Inestimable impacts for State Government, Local Government, Small Businesses and Other Persons are described in the narrative. Inestimable impacts for Non-Small Businesses are described in Appendix 2.

**Appendix 2: Regulatory Impact to Non-Small Businesses**

These amendments will result in an unknown savings to non-small businesses. Information on how many instances the exemption will apply to an owner or operator of sub-slab vapor mitigation systems is not readily available. However, it is estimated that the savings will range between \$2,800 and \$3,500 per sampling event for each vent riser. Each system will have a specific vent riser count requirement. Stacks can range from four to 10 per project. As currently written, the rule requires each stack to be tested five times in the first year and twice a year after the first year for the life of the project. At a four stack site this could cost up to \$70,000 in the first year, and up to \$28,000 each subsequent year. Testing would be required for the life of the project.

The Interim Executive Director of the Department of Environmental Quality, L. Scott Baird, has reviewed and approved this fiscal analysis.

\*\*"Non-small business" means a business employing 50 or more persons; "small business" means a business employing fewer than 50 persons.

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

**R307-401. Permit: New and Modified Sources.**

**R307-401-1. Purpose.**

This rule establishes the application and permitting requirements for new installations and modifications to existing installations throughout the State of Utah. Additional permitting requirements apply to larger installations or installations located in nonattainment or maintenance areas. These additional requirements can be found in R307-403, R307-405, R307-406, R307-420, and R307-421. Modeling requirements in R307-410 may also apply. Each of the permitting rules establishes independent requirements, and the owner or operator must comply with all of the requirements that apply to the installation. Exemptions under R307-401 do not affect applicability of the other permitting rules.

## **R307-401-2. Definitions.**

"Actual emissions" (a) means the actual rate of emissions of an air pollutant from an emissions unit, as determined in accordance with R307-401-2(b) through R307-401-2(d).

(b) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the air pollutant during a consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The director shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(c) The director may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(d) For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

"Best available control technology" means an emissions limitation (including a visible emissions standard) based on the maximum degree of reduction for each air pollutant which would be emitted from any proposed stationary source or modification which the director, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR parts 60 and 61. If the director determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

"Air Strippers" are systems designed to pump groundwater to the surface for treatment, usually by aeration.

"Building, structure, facility, or installation" means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same Major Group (i.e., which have the same two-digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement (U.S. Government Printing Office stock numbers 4101-0066 and 003-005-00176-0, respectively).

"Construction" means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) that would result in a change in emissions.

"Emissions unit" means any part of a stationary source that emits or would have the potential to emit any air pollutant.

"Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

"Indirect source" means a building, structure, facility,



or installation which attracts or may attract mobile source activity that results in emission of a pollutant for which there is a national standard.

"Potential to emit" means the maximum capacity of a stationary source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

"Secondary emissions" means emissions which occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

"Soil Aeration" is an ex-situ treatment process where excavated soil from a remediation project is spread in a thin layer to encourage biodegradation of soil contamination. Biodegradation may be stimulated through aeration or the addition of minerals, nutrients, and/or moisture.

"Soil Vapor Extraction", or SVE, is a system designed to extract vapor phase contaminants from the subsurface. SVE systems are often combined with other technologies, such as air sparging or vacuum-enhanced recovery systems.

"Stationary source" means any building, structure, facility, or installation which emits or may emit an air pollutant.

"Vapor Mitigation System", or VMS, is a sub-slab system whose primary purpose is mitigating vapor intrusion into an occupied, or occupiable, structure and is not intended or designed for the remediation of contaminated soil or groundwater. This definition includes both active and passive systems. Active systems use a blower or fan to extract vapors from within or beneath a structure. Passive systems consist of a venting layer installed under a structure to divert vapor to the sides of a structure and vent vapors outdoors.

### **R307-401-3. Applicability.**

(1) R307-401 applies to any person intending to:

(a) construct a new installation which will or might reasonably be expected to become a source or an indirect source of air pollution, or

(b) make modifications to or relocate an existing installation which will or might reasonably be expected to increase the amount of, or change the effect of, or the character of, air pollutants discharged, so that such installation may be expected to become a source or indirect source of air pollution, or

(c) install a control apparatus or other equipment intended to control emissions of air pollutants.

(2) R307-403, R307-405 and R307-406 may establish additional permitting requirements for new or modified sources.

(a) Exemptions contained in R307-401 do not affect applicability or other requirements under R307-403, R307-405 or R307-406.

(b) Exemptions contained in R307-403, R307-405 or R307-406 do not affect applicability or other requirements under R307-401, unless specifically authorized in this rule.

#### **R307-401-4. General Requirements.**

The general requirements in R307-401-4(1) through R307-401-4(3) apply to all new and modified installations, including installations that are exempt from the requirement to obtain an approval order.

(1) Any control apparatus installed on an installation shall be adequately and properly maintained.

(2) If the director determines that an exempted installation is not meeting an approval order or State Implementation Plan limitation, is creating an adverse impact to the environment, or would be injurious to human health or welfare, the director may require the owner or operator to submit a notice of intent and obtain an approval order in accordance with R307-401-5 through R307-401-8. The director will complete an appropriate analysis and evaluation in consultation with the owner or operator before determining that an approval order is required.

(3) Low Oxides of Nitrogen Burner Technology.

(a) Except as provided in R307-401-4(3)(b), whenever existing fuel combustion burners are replaced, the owner or operator shall install low oxides of nitrogen burners or equivalent oxides of nitrogen controls, as determined by the director, unless such equipment is not physically practical or cost effective. The owner or operator shall submit a demonstration that the equipment is not physically practical or cost effective to the director for review and approval prior to beginning construction.

(b) The provisions of (a) above do not apply to non-commercial, residential buildings.

#### **R307-401-5. Notice of Intent.**

(1) Except as provided in R307-401-9 through R307-401-17, any person subject to R307-401 shall submit a notice of intent to the director and receive an approval order prior to initiation of construction, modification or relocation. The notice of intent shall be in a format specified by the director.

(2) The notice of intent shall include the following information:

(a) A description of the nature of the processes involved; the nature, procedures for handling and quantities of raw materials; the type and quantity of fuels employed; and the nature and quantity of finished product.

(b) Expected composition and physical characteristics of effluent stream both before and after treatment by any control apparatus, including emission rates, volume, temperature, air pollutant types, and concentration of air pollutants.

(c) Size, type, and performance characteristics of any control apparatus.

(d) An analysis of best available control technology for the proposed source or modification. When determining best available control technology for a new or modified source in an ozone nonattainment or maintenance area that will emit volatile organic compounds or nitrogen oxides, the owner or operator of the source shall consider EPA Control Technique Guidance (CTG) documents and Alternative Control Technique documents that are applicable to the source. Best available control technology shall be at least as stringent as any published CTG that is applicable to the source.

(e) Location and elevation of the emission point and other factors relating to dispersion and diffusion of the air pollutant in relation to nearby structures and window openings, and other information necessary to appraise the possible effects of the effluent.

(f) The location of planned sampling points and the tests of the completed installation to be made by the owner or operator when necessary to ascertain compliance.

(g) The typical operating schedule.

(h) A schedule for construction.

(i) Any plans, specifications and related information that are in final form at the time of submission of notice of intent.

(j) Any additional information required by:

(i) R307-403, Permits: New and Modified Sources in Nonattainment Areas and Maintenance Areas;

(ii) R307-405, Permits: Major Sources in Attainment or Unclassified Areas (PSD);

(iii) R307-406, Visibility;

(iv) R307-410, Permits: Emissions Impact Analysis;

(v) R307-420, Permits: Ozone Offset Requirements in Davis and Salt Lake Counties; or

(vi) R307-421, Permits: PM10 Offset Requirements in Salt Lake County and Utah County.

(k) Any other information necessary to determine if the proposed source or modification will be in compliance with Title R307.

(3) Notwithstanding the exemptions in R307-401-9 through R307-401-16, any person that is subject to R307-403, R307-405, or R307-406 shall submit a notice of intent to the director and receive an approval order prior to initiation of construction, modification, or relocation.

#### **R307-401-6. Review Period.**

(1) Completeness Determination. Within 30 days after receipt of a notice of intent, or any additional information necessary to the review, the director will advise the applicant of any deficiency in the notice of intent or the information submitted.

(2) Within 90 days of receipt of a complete application including all the information described in R307-401-5, the director will

(a) issue an approval order for the proposed construction, installation, modification, relocation, or establishment pursuant to the requirements of R307-401-8, or

(b) issue an order prohibiting the proposed construction, installation, modification, relocation or establishment if it is deemed that any part of the proposal is inadequate to meet the applicable requirements of R307.

(3) The review period under R307-401-6(2) may be extended by up to three 30-day extensions if more time is needed to review the proposal.

#### **R307-401-7. Public Notice.**

(1) Issuing the Notice. Prior to issuing an approval or disapproval order, the director will advertise intent to approve or disapprove in a newspaper of general circulation in the locality of the proposed construction, installation, modification, relocation or establishment.

(2) Opportunity for Review and Comment.

(a) At least one location will be provided where the information submitted by the owner or operator, the director's analysis of the notice of intent proposal, and the proposed approval order conditions will be available for public inspection.

(b) Public Comment.

(i) A 30-day public comment period will be established.

(ii) A request to extend the length of the comment period, up to 30 days, may be submitted to the director within 15 days of the date the notice in R307-401-7(1) is published.

(iii) Public Hearing. A request for a hearing on the proposed approval or disapproval order may be submitted to the director within 15 days of the date the notice in R307-401-7(1) is published.

(iv) The hearing will be held in the area of the proposed construction, installation, modification, relocation or establishment.

(v) The public comment and hearing procedure shall not be required when an order is issued for the purpose of extending the time required by the director to review plans and specifications.

(3) The director will consider all comments received during the public comment period and at the public hearing and, if appropriate, will make changes to the proposal in response to comments before issuing an approval order or disapproval order.

**R307-401-8. Approval Order.**

(1) The director will issue an approval order if the following conditions have been met:

(a) The degree of pollution control for emissions, to include fugitive emissions and fugitive dust, is at least best available control technology. When determining best available control technology for a new or modified source in an ozone nonattainment or maintenance area that will emit volatile organic compounds or nitrogen oxides, best available control technology shall be at least as stringent as any Control Technique Guidance document that has been published by EPA that is applicable to the source.

(b) The proposed installation will meet the applicable requirements of:

(i) R307-403, Permits: New and Modified Sources in Nonattainment Areas and Maintenance Areas;

(ii) R307-405, Permits: Major Sources in Attainment or Unclassified Areas (PSD);

(iii) R307-406, Visibility;

(iv) R307-410, Permits: Emissions Impact Analysis;

(v) R307-420, Permits: Ozone Offset Requirements in Davis and Salt Lake Counties;

(vi) R307-210, Standards of Performance for New Stationary Sources;

(vii) National Primary and Secondary Ambient Air Quality Standards;

(viii) R307-214, National Emission Standards for Hazardous Air Pollutants;

(ix) R307-110, General Requirements: State Implementation Plan; and

(x) all other provisions of R307.

(2) The approval order will require that all pollution control equipment be adequately and properly maintained.

(3) Receipt of an approval order does not relieve any owner or operator of the responsibility to comply with the provisions of R307 or the State Implementation Plan.

(4) To accommodate staged construction of a large source, the director may issue an order authorizing construction of an initial stage prior to receipt of detailed plans for the entire proposal provided that, through a review of general plans, engineering reports and other information the proposal is determined feasible by the director under the intent of R307. Subsequent detailed plans will then be processed as prescribed in this paragraph. For staged construction projects the previous determination under R307-401-8(1) and (2) will be reviewed and modified as appropriate at the earliest reasonable time prior to commencement of construction of each independent phase of the proposed source or modification.

(5) If the director determines that a proposed stationary source, modification or relocation does not meet the conditions established in (1) above, the director will not issue an approval order.

**R307-401-9. Small Source Exemption.**

(1) A small stationary source is exempt from the requirement to obtain an approval order in R307-401-5 through R307-401-8 if the following conditions are met.

(a) its actual emissions are less than 5 tons per year per air pollutant of any of the following air pollutants: sulfur dioxide, carbon monoxide, nitrogen oxides, PM<sub>10</sub>, ozone, or volatile organic compounds;

(b) its actual emissions are less than 500 pounds per year of any hazardous air pollutant and less than 2000 pounds per year of any combination of hazardous air pollutants;

(c) its actual emissions are less than 500 pounds per year of any air pollutant not listed in (a) or (b) above and less than 2000 pounds per year of any combination of air pollutants not listed in (a) or (b) above.

(d) Air pollutants that are drawn from the environment through equipment in intake air and then are released back to the environment without chemical change, as well as carbon dioxide, nitrogen, oxygen, argon, neon, helium, krypton, xenon should not be included in emission calculations when determining applicability under (a) through (c) above.

(2) The owner or operator of a source that is exempted from the requirement to obtain an approval order under (1) above shall no longer be exempt if actual emissions in any subsequent year exceed the emission thresholds in (1) above. The owner or operator shall submit a notice of intent under R307-401-5 no later than 180 days after the end of the calendar year in which the source exceeded the emission threshold.

(3) Small Source Exemption - Registration. The director will maintain a registry of sources that are claiming an exemption under R307-401-9. The owner or operator of a stationary source that is claiming an exemption under R307-401-9 may submit a written registration notice to the director. The notice shall include the following minimum information:

(a) identifying information, including company name and address, location of source, telephone number, and name of plant site manager or point of contact;

(b) a description of the nature of the processes involved, equipment, anticipated quantities of materials used, the type and quantity of fuel employed and nature and quantity of the finished product;

(c) identification of expected emissions;

(d) estimated annual emission rates;

(e) any control apparatus used; and

(f) typical operating schedule.

(4) An exemption under R307-401-9 does not affect the requirements of R307-401-17, Temporary Relocation.

(5) A stationary source that is not required to obtain a permit under R307-405 for greenhouse gases, as defined in R307-405-3(9) (a), is not required to obtain an approval order for greenhouse gases under R307-401. This exemption does not affect the requirement to obtain an approval order for any other air pollutant emitted by the stationary source.

#### **R307-401-10. Source Category Exemptions.**

The source categories described in R307-401-10 are exempt from the requirement to obtain an approval order found in R307-401-5 through R307-401-8. The general provisions in 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 R307-101-2, and is registered with the Division as required by R307-505.

(6) A gasoline dispensing facility as defined in 40 CFR 63.11132 that is not a major source as defined in R307-101-2. These sources shall comply with the applicable requirements of R307-328 and 40 CFR 63 Subpart CCCCCC: National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities.

#### **R307-401-11. Replacement-in-Kind Equipment.**

(1) Applicability. Existing process equipment or pollution control equipment that is covered by an existing approval order or State Implementation Plan requirement may be replaced using the procedures in (2) below if:

(a) the potential to emit of the process equipment is the same or lower;

(b) the number of emission points or emitting units is the same or lower;

(c) no additional types of air pollutants are emitted as a result of the replacement;

(d) the process equipment or pollution control equipment is identical to or functionally equivalent to the replaced equipment;

(e) the replacement does not change the basic design parameters of the process unit or pollution control equipment;

(f) the replaced process equipment or pollution control equipment is permanently removed from the stationary source, otherwise permanently disabled, or permanently barred from operation;

(g) the replacement process equipment or pollution control equipment does not trigger New Source Performance Standards or National Emissions Standards for Hazardous Air Pollutants under 42 U.S.C. 7411 or 7412; and

(h) the replacement of the control apparatus or process equipment does not violate any other provision of Title R307.

(2) Replacement-in-Kind Procedures.

(a) In lieu of filing a notice of intent under R307-401-5, the owner or operator of a stationary source shall submit a written notification to the director before replacing the equipment. The notification shall contain a description of the replacement-in-kind equipment, including the control capability of any control apparatus and a demonstration that the conditions of (1) above are met.

(b) If the replacement-in-kind meets the conditions of (1) above, the director will update the source's approval order and notify the owner or operator. Public review under R307-401-7 is not required for the update to the approval order.

(3) If the replaced process equipment or pollution control equipment is brought back into operation, it shall constitute a new emissions unit.

#### **R307-401-12. Reduction in Air Pollutants.**

(1) Applicability. The owner or operator of a stationary source of air pollutants that reduces or eliminates air pollutants is exempt from the requirement to submit a notice of intent and obtain an approval order prior to construction if:

(a) the project does not increase the potential to emit of any air pollutant or cause emissions of any new air pollutant, and

(b) the director is notified of the change and the reduction of air pollutants is made enforceable through an approval order in accordance with (2) below.

(2) Notification. The owner or operator shall submit a written description of the project to the director no later than 60 days after the changes are made. The director will update the source's approval order or issue a new approval order to include the project and to make the emission reductions enforceable. Public review under R307-

401-7 is not required for the update to the approval order.

**R307-401-13. Plantwide Applicability Limits.**

A plantwide applicability limit under R307-405-21 does not exempt a stationary source from the requirements of R307-401.

**R307-401-14. Used Oil Fuel Burned for Energy Recovery.**

(1) Definitions.

"Boiler" means boiler as defined in R315-1-1(b).

"Used Oil" is defined as any oil that has been refined from crude oil, used, and, as a result of such use contaminated by physical or chemical impurities.

(2) Boilers burning used oil for energy recovery are exempt from the requirement to obtain an approval order in R307-401-5 through R307-401-8 if the following requirements are met:

(a) the heat input design is less than one million BTU/hr;

(b) contamination levels of all used oil to be burned do not exceed any of the following values:

- (i) arsenic - 5 ppm by weight,
- (ii) cadmium - 2 ppm by weight,
- (iii) chromium - 10 ppm by weight,
- (iv) lead - 100 ppm by weight,
- (v) total halogens - 1,000 ppm by weight,
- (vi) Sulfur - 0.50% by weight; and

(c) the flash point of all used oil to be burned is at least 100 degrees Fahrenheit.

(3) Testing. The owner or operator shall test each load of used oil received or generated as directed by the director to ensure it meets these requirements. Testing may be performed by the owner/operator or documented by test reports from the used fuel oil vendor. The flash point shall be measured using the appropriate ASTM method as required by the director. Records for used oil consumption and test reports are to be kept for all periods when fuel-burning equipment is in operation. The records shall be kept on site and made available to the director or the director's representative upon request. Records must be kept for a three-year period.

**R307-401-15. Air Strippers and Soil Vapor Extraction Systems [Venting Projects].**

R307-401-15 applies to remediation systems with the potential to generate air emissions, such as air strippers and soil vapor extraction (SVE) as defined in R307-401-2.

(1) The owner or operator of an air stripper or SVE remediation system [soil venting system that is used to remediate contaminated groundwater or soil] is exempt from the notice of intent and approval order requirements of R307-401-5 through R307-401-8 if the following conditions are met:

(a) [the estimated total air] actual emissions of volatile organic compounds from a given project are less than 5 tons per year; and [the de minimis emissions listed in R307-401-9(1)(a), and]

(b) emission rates of [the level of any one hazardous air pollutant or any combination of] hazardous air pollutants are [is] below their respective threshold values contained [the levels listed] in R307-410-5(1)(c)(i)(C).

(2) The owner or operator shall submit documentation to the director that demonstrates the project meets the exemption criteria [requirements] in R307-401-15(1) [to the director prior to beginning the remediation project]. Required documentation includes, but is not limited to:

(a) project summary, including location, system description, operational schedule, and schedule for construction;

(b) emission calculations and any laboratory sampling data used in calculations; and

(c) plans and specifications for the system and equipment.

(3) After beginning the soil remediation project, the owner [or operator shall submit emissions information to the director to verify that the emission rates of the volatile organic compounds and hazardous air pollutants in R307 401 15(1) are not exceeded.] or operator shall conduct testing to demonstrate compliance with the exemption levels in R307-401-15(1) (a) and (b). Monitoring and reporting shall be conducted as follows:

(a) [Emissions estimates of volatile organic compounds shall be based on test data obtained in accordance with the test method in the EPA document SW 846, Test #8260e or 8261a, or the most recent EPA revision of either test method if approved by the director.] Emissions for air strippers shall be based on the following:

(i) influent and effluent water samples analyzed for volatile organic compounds and hazardous air pollutants using the most recent version of USEPA Test Method 8260, Method 8021, or other EPA approved testing methods acceptable to the director; and

(ii) design water flow rate of the system or the water flow rates measured during the sample period.

(b) [Emissions estimates of hazardous air pollutants shall be based on test data obtained in accordance with the test method in EPA document SW 846, Test #8021B or the most recent EPA revision of the test method if approved by the director.] Emissions for SVE systems shall be based on the following:

(i) Air samples collected from a sample port in the exhaust stack of the SVE system and analyzed for volatile organic compounds and hazardous air pollutants using USEPA test method TO-15, or other EPA approved testing methods acceptable to the director.

(ii) Design air flow rate of the system or the air flow rates measured at the outlet of the SVE system during the sample period.

(c) [Results of the test and calculated annual quantity of emissions of volatile organic compounds and hazardous air pollutants shall be submitted to the director within one month of sampling.] Within one month of sampling, the owner or operator shall submit to the director the sample results, estimated emissions of volatile organic compounds, and estimated emission rates of hazardous air pollutants.

(d) [The test samples shall be drawn on intervals of no less than twenty eight days and no more than thirty one days (i.e., monthly) for the first quarter, quarterly for the first year, and semi annually thereafter or as determined necessary by the director.] Samples shall be collected at the following frequencies or more frequently as determined necessary by the director:

(i) no less than twenty-eight days and no more than thirty-one days (i.e., monthly) after startup for the first quarter;

(ii) quarterly for the remainder of the first year; and

(iii) semi-annually thereafter for the life of the project or as allowed in R307-401-15(3) (f).

(e) If an SVE or air sparge system is restarted after rehabilitation or an extended period of shutdown, the owner or operator shall recommence the sampling schedule in R307-415(3) (d), unless otherwise approved by the director.

(f) The owner or operator may request to discontinue sampling after three years of operation. To discontinue sampling, the owner or operator must submit to the director a request to discontinue monitoring.

(i) The request must include documentation demonstrating emissions have consistently remained below the exemption levels in R307-401-15(1) (a) and (b) for the entirety of the project.

(ii) The request is subject to approval from the director upon consultation with other regulatory agencies involved in the project,



such as Division of Environmental Response and Remediation or Division of Waste Management and Radiation Control.

(4) The following control devices do not require a notice of intent or approval order when used in relation to an air stripper or soil vapor extraction system that is~~[venting project]~~ exempted under R307-401-15:

(a) thermodestruction unit with a rated input capacity of less than five million BTU per hour using no other auxiliary fuel than natural gas or LPG, or

(b) carbon adsorption unit.

(5) Exemption for Sub-slab Vapor Mitigation Systems (VMS): The owner or operator of an active or passive VMS is exempt from the notice of intent and approval order requirements of R307-401-5 through R307-401-8 and the documentation and sampling requirements in R307-401-15(2) and (3).

#### **R307-401-16. ~~[De minimis Emissions From ]~~Soil Aeration Projects.**

R307-401-16 applies to soil aeration projects used to conduct soil remediation. [An owner or operator of a soil remediation project is not subject to the notice of intent and approval order requirements of R307-401-5 through R307-401-8 when soil aeration or land farming is used to conduct a soil remediation, if the owner or operator submits the following information to the director prior to beginning the remediation project:]

(1) [documentation that the estimated total air emissions of volatile organic compounds, using an appropriate sampling method, from the project are less than the de minimis emissions listed in R307-401-9(1)(a);]The owner or operator of a soil aeration project is not subject to the notice of intent and approval order requirements of R307-401-5 through R307-401-8, if the following conditions are met:

(a) emissions of volatile organic compounds from a given soil aeration project are less than 5 tons per year; and

(b) emission rates of hazardous air pollutants are below their respective threshold values contained in R307-410-(1)(c)(i)(C).

(2) [documentation that the levels of any one hazardous air pollutant or any combination of hazardous air pollutants are less than the levels in R307-410-5(1)(d); and]The owner or operator shall submit documentation to the director demonstrating the project meets the exemption criteria in R307-401-16(1). The owner or operator shall receive approval from the director for the exemption prior to beginning the remediation project. Required documentation includes, but is not limited to:

(a) calculated emissions of volatile organic compounds and estimated emission rates of hazardous air pollutants from all soils to be treated from the soil aeration project.

(b) Emission calculations shall be based on soil samples of the soils to be remediated. Samples shall be analyzed for volatile organic compounds and hazardous air pollutants using the most recent version of USEPA Test Method 8260, Method 8021, or other EPA approved testing methods acceptable to the director.

(c) Location where soil aeration will occur and where the remediated material originated.

(3) [the location of the remediation and where the remediated material originated.]The owner or operator is exempt from the reporting requirements in R307-401-16(2) if excavated soils are disposed of at a disposal or treatment facility, such as a landfill, solid waste management facility, or a landfarm facility, that is owned or operated by a third party and operates under an existing approval order.

#### **R307-401-17. Temporary Relocation.**

The owner or operator of a stationary source previously approved under R307-401 may temporarily relocate and operate the

stationary source at any site for up to 180 working days in any calendar year not to exceed 365 consecutive days, starting from the initial relocation date. The director will evaluate the expected emissions impact at the site and compliance with applicable Title R307 rules as the basis for determining if approval for temporary relocation may be granted. Records of the working days at each site, consecutive days at each site, and actual production rate shall be submitted to the director at the end of each 180 calendar days. These records shall also be kept on site by the owner or operator for the entire project, and be made available for review to the director as requested. R307-401-7, Public Notice, does not apply to temporary relocations under R307-401-17.

**R307-401-18. Eighteen Month Review.**

Approval orders issued by the director in accordance with the provisions of R307-401 will be reviewed eighteen months after the date of issuance to determine the status of construction, installation, modification, relocation or establishment. If a continuous program of construction, installation, modification, relocation or establishment is not proceeding, the director may revoke the approval order.

**R307-401-19. General Approval Order.**

(1) The director may issue a general approval order that would establish conditions for similar new or modified sources of the same type or for specific types of equipment. The general approval order may apply throughout the state or in a specific area.

(a) A major source or major modification as defined in R307-403, R307-405, or R307-420 for each respective area is not eligible for coverage under a general approval order.

(b) A source that is subject to the requirements of R307-403-5 is not eligible for coverage under a general approval order.

(c) A source that is subject to the requirements of R307-410-4 is not eligible for coverage under a general approval order unless a demonstration that meets the requirements of R307-410-4 was conducted.

(d) A source that is subject to the requirements of R307-410-5(1)(c)(ii) is not eligible for coverage under a general approval order unless a demonstration that meets the requirements of R307-410-5(1)(c)(ii) was conducted.

(e) A source that is subject to the requirements of R307-410-5(1)(c)(iii) is not eligible for coverage under a general approval order.

(2) A general approval order shall meet all applicable requirements of R307-401-8.

(3) The public notice requirements in R307-401-7 shall apply to a general approval order except that the director will advertise the notice of intent in a newspaper of statewide circulation.

(4) Application.

(a) After a general approval order has been issued, the owner or operator of a proposed new or modified source may apply to be covered under the conditions of the general approval order.

(b) The owner or operator shall submit the application on forms provided by the director in lieu of the notice of intent requirements in R307-401-5 for all equipment covered by the general approval order.

(c) The owner or operator may request that an existing, individual approval order for the source be revoked, and that it be covered by the general approval order.

(d) The owner or operator that has applied to be covered by a general approval order shall not initiate construction, modification, or relocation until the application has been approved by the director.

(5) Approval.

(a) The director will review the application and approve or deny the request based on criteria specified in the general approval order for that type of source. If approved, the director will issue an

authorization to the applicant to operate under the general approval order.

(b) The public notice requirements in R307-401-7 do not apply to the approval of an application to be covered under the general approval order.

(c) The director will maintain a record of all stationary sources that are covered by a specific general approval order and this record will be available for public review.

(6) Exclusions and Revocation.

(a) The director may require any source that has applied for or is authorized by a general approval order to submit a notice of intent and obtain an individual approval order under R307-401-8. Cases where an individual approval order will be required include, but are not limited to, the following:

(i) the director determines that the source does not meet the criteria specified in the general approval order;

(ii) the director determines that the application for the general approval order did not contain all necessary information to evaluate applicability under the general approval order;

(iii) modifications were made to the source that were not authorized by the general approval order or an individual approval order;

(iv) the director determines the source may cause a violation of a national ambient air quality standard; or

(v) the director determines that one is required based on the compliance history and current compliance status of the source or applicant.

(b)(i) Any source authorized by a general approval order may request to be excluded from the coverage of the general approval order by submitting a notice of intent under R307-401-5 and receiving an individual approval order under R307-401-8.

(ii) When the director issues an individual approval order to a source subject to a general approval order, the applicability of the general approval order to the individual source is revoked on the effective date of the individual approval order.

(7) Modification of General Approval Order. The director may modify, replace, or discontinue the general approval order.

(a) Administrative corrections may be made to the existing version of the general approval order. These corrections are to correct typographical errors or similar minor administrative changes.

(b) All other modifications or the discontinuation of a general approval order shall not apply to any source authorized under previous versions of the general approval order unless the owner or operator submits an application to be covered under the new version of the general approval order. Modifications under R307-401-19(7)(b) shall meet the public notice requirements in R307-401-19(3).

(c) A general approval order shall be reviewed at least every three years. The review of the general approval order shall follow the public notice requirements of R307-401-19(3).

(8) Modifications at a source covered by a general approval order. A source may make modifications only as authorized by the approved general approval order. Modifications outside the scope authorized by the approved general approval order shall require a new application for either an individual approval order under R307-401-8 or a general approval order under R307-401-19.

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