



State of Utah

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Department of
Environmental Quality

Alan Matheson
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQ-057-15

MEMORANDUM

TO: Air Quality Board

THROUGH: Bryce C. Bird, Executive Secretary

THROUGH: Regg Olsen, Permitting Branch Manager

FROM: David Beatty, Operating Permit Section Manager

DATE: September 23, 2015

SUBJECT: PROPOSE FOR PUBLIC COMMENT: Amend R307-405-3. Definitions; and R307-415-3. Definitions.

On August 12, 2015, the Environmental Protection Agency (EPA) issued a good cause final rule to remove portions of its Prevention of Significant Deterioration (PSD) and title V permitting regulations that were initially promulgated in 2010 and that the Court of Appeals for the District of Columbia Circuit (D.C. Circuit) specifically identified as vacated in the amended version of *Coalition for Responsible Regulation v. EPA*. The amended judgment was a response to the U.S. Supreme Court decision in *Utility Air Regulatory Group (UARG) v. EPA*.

In *UARG v. EPA*, the U.S. Supreme Court said that the EPA may not treat greenhouse gases (GHG) as an air pollutant for the specific purpose of determining whether a source (or modification thereof) is required to obtain a PSD or title V permit, and thus declared that the EPA regulations implementing that approach for determining whether a PSD or title V permit is necessary (i.e., Step 2 of the Tailoring Rule) are invalid.

Following the aforementioned federal changes, the Division of Air Quality is proposing changes to R307-405-3 and R307-415-3 so that Utah's rules align with federal regulations and case law. The result of these changes will be the withdrawal of five title V sources that were identified as GHG sources when the tailoring rule was implemented.

Staff Recommendation: Staff recommends that the Board propose amendments to R307-405-3 and R307-415-3 for public comment.

BACKGROUND

- New Source Review (NSR) is a preconstruction permitting program established under the 1977 Clean Air Act (CAA) Amendments that serves two important purposes: 1) It ensures the maintenance of air quality standards when major stationary sources such as factories, industrial boilers and power plants are constructed or modified. In areas that do not meet the national air quality standards, nonattainment NSR ensures that new emissions do not slow progress toward cleaner air. In areas that meet the standards, including pristine areas like national parks, NSR's PSD program ensures that new emissions will not cause air quality to deteriorate significantly and that these areas will continue to attain air quality standards. 2) The NSR program ensures that state of the art control technology is installed at new plants or at existing plants that are undergoing a major modification.
- The title V operating permit program, established under the 1990 CAA Amendments, is a vehicle for ensuring that air quality control requirements are appropriately applied to facility emission units and for assuring compliance with such requirements, but does not generally impose new substantive air quality control requirements.
- On June 3, 2010, the EPA published the final Tailoring Rule, which phased in permitting requirements for greenhouse gas emissions from stationary sources under the CAA permitting programs. The final Tailoring Rule set thresholds for GHG emissions that define when permits under the NSR PSD and title V permit programs were required for new and existing industrial facilities based on the level of greenhouse gas emissions from a source.
- Step 1 of the Tailoring Rule (January 2, 2011 to June 30, 2011) only applied to sources that were subject to the program before greenhouse gases were regulated under the Clean Air Act (i.e., those sources that were newly-constructed or modified in a way that significantly increased emissions of a pollutant other than GHGs). During this time, no sources were subject to CAA permitting requirements due solely to GHG emissions.
- Step 2 of the Tailoring Rule began on July 1, 2011, and allowed PSD and title V requirements to apply to additional sources based solely on GHG emissions if those emissions exceeded certain regulatory limits. The Step 2 permitting regulations for GHG only sources are the portion of the GHG permitting regulations that the U.S Supreme Court found to be invalid in *UARG v EPA*.

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

2 **R307-405. Permits: Major Sources in Attainment or Unclassified**
3 **Areas (PSD).**

4

5 **R307-405-3. Definitions.**

6 (1) Except as provided in (2) and (9) below, the definitions
7 contained in 40 CFR 52.21(b) are hereby incorporated by reference.

8 (2)(a) In the definition of "baseline area" in 40 CFR
9 52.21(b)(15)(ii)(b) insert the words "or R307-405" after "Is
10 subject to 40 CFR 52.21".

11 (b) "Reviewing Authority" means the director.

12 (c)(i) The term "Administrator" shall be changed to
13 "director" throughout R307-405, except as provided in (ii).

14 (ii) The term "Administrator" shall be changed to "EPA
15 Administrator" in the following incorporated sections:

- 16 (A) 40 CFR 52.21(b)(17),
17 (B) 40 CFR 52.21(b)(37)(i),
18 (C) 40 CFR 52.21(b)(43),
19 (D) 40 CFR 52.21(b)(48)(ii)(c),
20 (E) 40 CFR 52.21(b)(50)(i),
21 (F) 40 CFR 52.21(l)(2),
22 (G) 40 CFR 52.21(p)(2), and
23 (H) 40 CFR 51.166(q)(2)(iv).

24 (d) The following definitions or portions of definitions
25 that apply to the equipment repair and replacement provisions are
26 not incorporated because these provisions were vacated by the DC
27 Circuit Court of Appeals on March 17, 2006:

28 (i) in the definition major modification in 40 CFR
29 52.21(b)(2), the second sentence in subparagraph (iii)(a),

30 (ii) the definition of "process unit" in 40 CFR
31 52.21(b)(55),

32 (iii) the definition of "functionally equivalent component"
33 in 40 CFR 52.21(b)(56),

34 (iv) the definition of "fixed capital cost" in 40 CFR 52.21
35 (b)(57), and

36 (v) the definition of "total capital investment" in 40 CFR
37 52.21(b)(58).

38 (e) In the definition of "Regulated NSR pollutant" in 40 CFR
39 52.21(b)(50), subparagraph (iv) shall be changed to read, "Any
40 pollutant that otherwise is subject to regulation under the Act."
41 A new subparagraph (v) shall be added that reads, "The term
42 regulated NSR pollutant shall not include any or all hazardous air
43 pollutants either listed in section 112 of the federal Clean Air
44 Act, or added to the list pursuant to section 112(b)(2) of the
45 federal Clean Air Act, and which have not been delisted pursuant

1 to section 112(b)(3) of the federal Clean Air Act, unless the
2 listed hazardous air pollutant is also regulated as a constituent
3 or precursor of a general pollutant listed under section 108 of
4 the federal Clean Air Act."

5 (3) "Air Quality Related Values," as used in analyses under
6 40 CFR 52.21 (p) that is incorporated by reference in R307-405-17,
7 means those special attributes of a Class I area, assigned by a
8 federal land manager, that are adversely affected by air quality.

9 (4) "Heat input" means heat input as defined in 40 CFR
10 52.01(g), that is hereby incorporated by reference.

11 (5) "Title V permit" means any permit or group of permits
12 covering a Part 70 source that is issued, renewed, amended, or
13 revised pursuant to R307-415.

14 (6) "Title V Operating Permit Program" means R307-415.

15 (7) The definition of "Good Engineering Practice (GEP) Stack
16 Height" as defined in R307-410 shall apply in this rule.

17 (8) The definition of "Dispersion Technique" as defined in
18 R307-410 shall apply in this rule.

19 (9) "Subject to regulation" means, for any air pollutant,
20 that the pollutant is subject to either a provision in the federal
21 Clean Air Act, or a nationally-applicable regulation codified by
22 the Administrator in subchapter C of 40 CFR Chapter I, that
23 requires actual control of the quantity of emissions of that
24 pollutant, and that such a control requirement has taken effect
25 and is operative to control, limit or restrict the quantity of
26 emissions of that pollutant released from the regulated activity.
27 Except that:

28 (a) "Greenhouse gases (GHGs)," the air pollutant defined in
29 40 CFR 86.1818-12(a) (Federal Register, Vol. 75, Page 25686) as
30 the aggregate group of six greenhouse gases: carbon dioxide,
31 nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and
32 sulfur hexafluoride, shall not be subject to regulation except as
33 provided in paragraph[s] (d) [~~through~~-(e)] of this section.

34 (b) For purposes of paragraphs (c) through ([e]d) of this
35 section, the term "tons per year (tpy) CO2 equivalent emissions
36 (CO2e)" shall represent an amount of GHGs emitted, and shall be
37 computed as follows:

38 (i) Multiplying the mass amount of emissions (tpy), for each
39 of the six greenhouse gases in the pollutant GHGs, by the gas's
40 associated global warming potential published at Table A-1 to
41 subpart A of 40 CFR Part 98 - Global Warming Potentials, that is
42 hereby incorporated by reference (Federal Register, Vol. 74, Pages
43 56395-96).

44 (ii) Sum the resultant value from paragraph (b)(i) of this
45 section for each gas to compute a tpy CO2e.

1 (c) The term "emissions increase" as used in paragraph[s]
2 (d) [~~through~~-(e)]of this section shall mean that both a
3 significant emissions increase (as calculated using the procedures
4 in 40 CFR 52.21 (a)(2)(iv) that is incorporated by reference in
5 R307-405-2) and a significant net emissions increase (as defined
6 in paragraphs 40 CFR 52.21(b)(3) and (b)(23) that is incorporated
7 by reference in R307-405-3) occur. For the pollutant GHGs, an
8 emissions increase shall be based on tpy CO₂e, and shall be
9 calculated assuming the pollutant GHGs is a regulated NSR
10 pollutant, and "significant" is defined as 75,000 tpy CO₂e
11 instead of applying the value in paragraph 40 CFR
12 52.21(b)(23)(ii).

13 (d) Beginning January 2, 2011, the pollutant GHGs is subject
14 to regulation if:

15 (i) The stationary source is a new major stationary source
16 for a regulated NSR pollutant that is not GHGs, and also will emit
17 or will have the potential to emit 75,000 tpy CO₂e or more; or

18 (ii) The stationary source is an existing major stationary
19 source for a regulated NSR pollutant that is not GHGs, and also
20 will have an emissions increase of a regulated NSR pollutant, and
21 an emissions increase of 75,000 tpy CO₂e or more[~~+~~and,

22 ~~—(e) Beginning July 1, 2011, in addition to the provisions in~~
23 ~~paragraph (d) of this section, the pollutant GHGs shall also be~~
24 ~~subject to regulation:~~

25 ~~—(i) At a new stationary source that will emit or have the~~
26 ~~potential to emit 100,000 tpy CO₂e; or~~

27 ~~—(ii) At an existing stationary source that emits or has the~~
28 ~~potential to emit 100,000 tpy CO₂e, when such stationary source~~
29 ~~undertakes a physical change or change in the method of operation~~
30 ~~that will result in an emissions increase of 75,000 tpy CO₂e or~~
31 ~~more].~~

32

33

34 **KEY: air pollution, PSD, Class I area, greenhouse gases**

35 **Date of Enactment or Last Substantive Amendment: [February 27,**
36 **2012]2015**

37 **Notice of Continuation: January 28, 2014**

38 **Authorizing, and Implemented or Interpreted Law: 19-2-104**

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

2 **R307-415. Permits: Operating Permit Requirements.**

3

4 **R307-415-3. Definitions.**

5 (1) The definitions contained in R307-101-2 apply throughout
6 R307-415, except as specifically provided in (2).

7 (2) The following additional definitions apply to R307-415.

8 "Act" means the Clean Air Act, as amended, 42 U.S.C. 7401, et
9 seq.

10 "Administrator" means the Administrator of EPA or his or her
11 designee.

12 "Affected States" are all states:

13 (a) Whose air quality may be affected and that are
14 contiguous to Utah; or

15 (b) That are within 50 miles of the permitted source.

16 "Air Pollutant" means an air pollution agent or combination
17 of such agents, including any physical, chemical, biological, or
18 radioactive (including source material, special nuclear material,
19 and byproduct material) substance or matter which is emitted into
20 or otherwise enters the ambient air. Such term includes any
21 precursors to the formation of any air pollutant, to the extent
22 the Administrator has identified such precursor or precursors for
23 the particular purpose for which the term air pollutant is used.

24 "Applicable requirement" means all of the following as they
25 apply to emissions units in a Part 70 source, including
26 requirements that have been promulgated or approved by the Board
27 or by the EPA through rulemaking at the time of permit issuance
28 but have future-effective compliance dates:

29 (a) Any standard or other requirement provided for in the
30 State Implementation Plan;

31 (b) Any term or condition of any approval order issued under
32 R307-401;

33 (c) Any standard or other requirement under Section 111 of
34 the Act, Standards of Performance for New Stationary Sources,
35 including Section 111(d);

36 (d) Any standard or other requirement under Section 112 of
37 the Act, Hazardous Air Pollutants, including any requirement
38 concerning accident prevention under Section 112(r)(7) of the Act;

39 (e) Any standard or other requirement of the Acid Rain
40 Program under Title IV of the Act or the regulations promulgated
41 thereunder;

42 (f) Any requirements established pursuant to Section 504(b)
43 of the Act, Monitoring and Analysis, or Section 114(a)(3) of the
44 Act, Enhanced Monitoring and Compliance Certification;

45 (g) Any standard or other requirement governing solid waste
46 incineration, under Section 129 of the Act;

47 (h) Any standard or other requirement for consumer and

1 commercial products, under Section 183(e) of the Act;

2 (i) Any standard or other requirement of the regulations
3 promulgated to protect stratospheric ozone under Title VI of the
4 Act, unless the Administrator has determined that such
5 requirements need not be contained in an operating permit;

6 (j) Any national ambient air quality standard or increment
7 or visibility requirement under part C of Title I of the Act, but
8 only as it would apply to temporary sources permitted pursuant to
9 Section 504(e) of the Act;

10 (k) Any standard or other requirement under rules adopted by
11 the Board.

12 "Area source" means any stationary source that is not a major
13 source.

14 "Designated representative" shall have the meaning given to
15 it in Section 402 of the Act and in 40 CFR Section 72.2, and
16 applies only to Title IV affected sources.

17 "Draft permit" means the version of a permit for which the
18 director offers public participation under R307-415-7i or affected
19 State review under R307-415-8(2).

20 "Emissions allowable under the permit" means a federally-
21 enforceable permit term or condition determined at issuance to be
22 required by an applicable requirement that establishes an
23 emissions limit, including a work practice standard, or a
24 federally-enforceable emissions cap that the source has assumed to
25 avoid an applicable requirement to which the source would
26 otherwise be subject.

27 "Emissions unit" means any part or activity of a stationary
28 source that emits or has the potential to emit any regulated air
29 pollutant or any hazardous air pollutant. This term is not meant
30 to alter or affect the definition of the term "unit" for purposes
31 of Title IV of the Act, Acid Deposition Control.

32 "Final permit" means the version of an operating permit
33 issued by the director that has completed all review procedures
34 required by R307-415-7a through 7i and R307-415-8.

35 "General permit" means an operating permit that meets the
36 requirements of R307-415-6d.

37 "Hazardous Air Pollutant" means any pollutant listed by the
38 Administrator as a hazardous air pollutant under Section 112(b) of
39 the Act.

40 "Major source" means any stationary source (or any group of
41 stationary sources that are located on one or more contiguous or
42 adjacent properties, and are under common control of the same
43 person (or persons under common control)) belonging to a single
44 major industrial grouping and that are described in paragraphs
45 (a), (b), or (c) of this definition. For the purposes of defining
46 "major source," a stationary source or group of stationary sources
47 shall be considered part of a single industrial grouping if all of

1 the pollutant emitting activities at such source or group of
2 sources on contiguous or adjacent properties belong to the same
3 Major Group (all have the same two-digit code) as described in the
4 Standard Industrial Classification Manual, 1987. Emissions
5 resulting directly from an internal combustion engine for
6 transportation purposes or from a non-road vehicle shall not be
7 considered in determining whether a stationary source is a major
8 source under this definition.

9 (a) A major source under Section 112 of the Act, Hazardous
10 Air Pollutants, which is defined as: for pollutants other than
11 radionuclides, any stationary source or group of stationary
12 sources located within a contiguous area and under common control
13 that emits or has the potential to emit, in the aggregate, ten
14 tons per year or more of any hazardous air pollutant or 25 tons
15 per year or more of any combination of such hazardous air
16 pollutants. Notwithstanding the preceding sentence, emissions
17 from any oil or gas exploration or production well, with its
18 associated equipment, and emissions from any pipeline compressor
19 or pump station shall not be aggregated with emissions from other
20 similar units, whether or not such units are in a contiguous area
21 or under common control, to determine whether such units or
22 stations are major sources.

23 (b) A major stationary source of air pollutants, as defined
24 in Section 302 of the Act, that directly emits or has the
25 potential to emit, 100 tons per year or more of any air pollutant
26 [~~subject to regulation,~~] including any major source of fugitive
27 emissions or fugitive dust of any such pollutant as determined by
28 rule by the Administrator. The fugitive emissions or fugitive
29 dust of a stationary source shall not be considered in determining
30 whether it is a major stationary source for the purposes of
31 Section 302(j) of the Act, unless the source belongs to any one of
32 the following categories of stationary source:

- 33 (i) Coal cleaning plants with thermal dryers;
- 34 (ii) Kraft pulp mills;
- 35 (iii) Portland cement plants;
- 36 (iv) Primary zinc smelters;
- 37 (v) Iron and steel mills;
- 38 (vi) Primary aluminum ore reduction plants;
- 39 (vii) Primary copper smelters;
- 40 (viii) Municipal incinerators capable of charging more than
41 250 tons of refuse per day;
- 42 (ix) Hydrofluoric, sulfuric, or nitric acid plants;
- 43 (x) Petroleum refineries;
- 44 (xi) Lime plants;
- 45 (xii) Phosphate rock processing plants;
- 46 (xiii) Coke oven batteries;
- 47 (xiv) Sulfur recovery plants;

1 (xv) Carbon black plants, furnace process;
2 (xvi) Primary lead smelters;
3 (xvii) Fuel conversion plants;
4 (xviii) Sintering plants;
5 (xix) Secondary metal production plants;
6 (xx) Chemical process plants;
7 (xxi) Fossil-fuel boilers, or combination thereof, totaling
8 more than 250 million British thermal units per hour heat input;
9 (xxii) Petroleum storage and transfer units with a total
10 storage capacity exceeding 300,000 barrels;
11 (xxiii) Taconite ore processing plants;
12 (xxiv) Glass fiber processing plants;
13 (xxv) Charcoal production plants;
14 (xxvi) Fossil-fuel-fired steam electric plants of more than
15 250 million British thermal units per hour heat input;
16 (xxvii) Any other stationary source category, which as of
17 August 7, 1980 is being regulated under Section 111 or Section 112
18 of the Act.

19 (c) A major stationary source as defined in part D of Title
20 I of the Act, Plan Requirements for Nonattainment Areas,
21 including:

22 (i) For ozone nonattainment areas, sources with the
23 potential to emit 100 tons per year or more of volatile organic
24 compounds or oxides of nitrogen in areas classified as "marginal"
25 or "moderate," 50 tons per year or more in areas classified as
26 "serious," 25 tons per year or more in areas classified as
27 "severe," and 10 tons per year or more in areas classified as
28 "extreme"; except that the references in this paragraph to 100,
29 50, 25, and 10 tons per year of nitrogen oxides shall not apply
30 with respect to any source for which the Administrator has made a
31 finding, under Section 182(f)(1) or (2) of the Act, that
32 requirements under Section 182(f) of the Act do not apply;

33 (ii) For ozone transport regions established pursuant to
34 Section 184 of the Act, sources with the potential to emit 50 tons
35 per year or more of volatile organic compounds;

36 (iii) For carbon monoxide nonattainment areas that are
37 classified as "serious" and in which stationary sources contribute
38 significantly to carbon monoxide levels as determined under rules
39 issued by the Administrator, sources with the potential to emit 50
40 tons per year or more of carbon monoxide;

41 (iv) For PM-10 particulate matter nonattainment areas
42 classified as "serious," sources with the potential to emit 70
43 tons per year or more of PM-10 particulate matter.

44 "Non-Road Vehicle" means a vehicle that is powered by an
45 internal combustion engine (including the fuel system), that is
46 not a self-propelled vehicle designed for transporting persons or
47 property on a street or highway or a vehicle used solely for

1 competition, and is not subject to standards promulgated under
2 Section 111 of the Act (New Source Performance Standards) or
3 Section 202 of the Act (Motor Vehicle Emission Standards).

4 "Operating permit" or "permit," unless the context suggests
5 otherwise, means any permit or group of permits covering a Part 70
6 source that is issued, renewed, amended, or revised pursuant to
7 these rules.

8 "Part 70 Source" means any source subject to the permitting
9 requirements of R307-415, as provided in R307-415-4.

10 "Permit modification" means a revision to an operating permit
11 that meets the requirements of R307-415-7f.

12 "Permit revision" means any permit modification or
13 administrative permit amendment.

14 "Permit shield" means the permit shield as described in R307-
15 415-6f.

16 "Proposed permit" means the version of a permit that the
17 director proposes to issue and forwards to EPA for review in
18 compliance with R307-415-8.

19 "Renewal" means the process by which a permit is reissued at
20 the end of its term.

21 "Responsible official" means one of the following:

22 (a) For a corporation: a president, secretary, treasurer, or
23 vice-president of the corporation in charge of a principal
24 business function, or any other person who performs similar policy
25 or decision-making functions for the corporation, or a duly
26 authorized representative of such person if the representative is
27 responsible for the overall operation of one or more
28 manufacturing, production, or operating facilities applying for or
29 subject to a permit and either:

30 (i) the operating facilities employ more than 250 persons or
31 have gross annual sales or expenditures exceeding \$25 million in
32 second quarter 1980 dollars; or

33 (ii) the delegation of authority to such representative is
34 approved in advance by the director;

35 (b) For a partnership or sole proprietorship: a general
36 partner or the proprietor, respectively;

37 (c) For a municipality, State, Federal, or other public
38 agency: either a principal executive officer or ranking elected
39 official. For the purposes of R307-415, a principal executive
40 officer of a Federal agency includes the chief executive officer
41 having responsibility for the overall operations of a principal
42 geographic unit of the agency;

43 (d) For Title IV affected sources:

44 (i) The designated representative in so far as actions,
45 standards, requirements, or prohibitions under Title IV of the
46 Act, Acid Deposition Control, or the regulations promulgated
47 thereunder are concerned;

1 (ii) The responsible official as defined above for any other
2 purposes under R307-415.

3 "Stationary source" means any building, structure, facility,
4 or installation that emits or may emit any regulated air pollutant
5 or any hazardous air pollutant.

6 [~~"Subject to regulation" means, for any air pollutant, that
7 the pollutant is subject to either a provision in the Clean Air
8 Act, or a nationally applicable regulation codified by the
9 Administrator in subchapter C of 40 CFR Chapter I, that requires
10 actual control of the quantity of emissions of that pollutant, and
11 that such a control requirement has taken effect and is operative
12 to control, limit or restrict the quantity of emissions of that
13 pollutant released from the regulated activity. Except that:~~

14 ~~— (a) "Greenhouse gases (GHGs)," the air pollutant defined in
15 40 CFR 86.1818-12(a) (Federal Register, Vol. 75, Page 25686) as
16 the aggregate group of six greenhouse gases: carbon dioxide,
17 nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and
18 sulfur hexafluoride, shall not be subject to regulation unless, as
19 of July 1, 2011, the GHG emissions are at a stationary source
20 emitting or having the potential to emit 100,000 tons per year
21 (tpy) CO2 equivalent emissions.~~

22 ~~— (b) The term "tpy CO2 equivalent emissions (CO2e)" shall
23 represent an amount of GHGs emitted, and shall be computed by
24 multiplying the mass amount of emissions (tpy), for each of the
25 six greenhouse gases in the pollutant GHGs, by the gas's
26 associated global warming potential published at Table A-1 to
27 subpart A of 40 CFR Part 98 Global Warming Potentials, that is
28 hereby incorporated by reference (Federal Register, Vol. 74, Pages
29 56395-96), and summing the resultant value for each to compute a
30 tpy CO2e.]~~

31 "Title IV Affected source" means a source that contains one
32 or more affected units as defined in Section 402 of the Act and in
33 40 CFR, Part 72.

34
35 **KEY: air pollution, greenhouse gases, operating permit, emission
36 fees**

37 **Date of Enactment or Last Substantive Amendment: [March 7,
38 2012]2015**

39 **Notice of Continuation: June 6, 2012**

40 **Authorizing, and Implemented or Interpreted Law: 19-2-109.1; 19-
41 2-104**