



State of Utah

GARY R. HERBERT  
*Governor*

SPENCER J. COX  
*Lieutenant Governor*

Department of  
Environmental Quality

Alan Matheson  
*Executive Director*

DIVISION OF AIR QUALITY  
Bryce C. Bird  
*Director*

DAQ-068-15

**MEMORANDUM**

**TO:** Air Quality Board

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

**FROM:** Ryan Stephens, Environmental Planning Consultant

**DATE:** November 19, 2015

**SUBJECT:** PROPOSE FOR PUBLIC COMMENT: Amend R307-101-2. Definitions.

---

R307-101-2 defines "PM10 Maintenance Area." The rule relies on an out of date proposal of a previous maintenance plan that was never approved by EPA. The rule needs to be updated to take into account the new maintenance plan that is being proposed for final adoption by the Board at the December 2015 board meeting. The main change is that "July 6, 2005" has been changed to "December 2, 2015."

Another minor change was made to the rule to remove a reference to the Clean Air Act as "amended in 1990." The rule has been changed to reference the federal Clean Air Act as "found in 42 U.S.C. Chapter 85." This change has been made to more accurately describe which federal laws the air quality rules reference. DAQ anticipates that there will be no fiscal impact resulting from these amendments.

Staff Recommendation: Staff recommends that the Board propose amendments to R307-101-2 for a 30 day public comment period.

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

2 **R307-101. General Requirements.**

3 **R307-101-1. Foreword.**

4

5 **R307-101-2. Definitions.**

6 Except where specified in individual rules, definitions in  
7 R307-101-2 are applicable to all rules adopted by the Air Quality  
8 Board.

9 "Actual Emissions" means the actual rate of emissions of a  
10 pollutant from an emissions unit determined as follows:

11 (1) In general, actual emissions as of a particular date shall  
12 equal the average rate, in tons per year, at which the unit actually  
13 emitted the pollutant during a two-year period which precedes the  
14 particular date and which is representative of normal source  
15 operations. The director shall allow the use of a different time  
16 period upon a determination that it is more representative of normal  
17 source operation. Actual emissions shall be calculated using the  
18 unit's actual operating hours, production rates, and types of  
19 materials processed, stored, or combusted during the selected time  
20 period.

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

24 (3) For any emission unit, other than an electric utility steam  
25 generating unit specified in (4), which has not begun normal operations  
26 on the particular date, actual emissions shall equal the potential to  
27 emit of the unit on that date.

28 (4) For an electric utility steam generating unit (other than  
29 a new unit or the replacement of an existing unit) actual emissions  
30 of the unit following the physical or operational change shall equal  
31 the representative actual annual emissions of the unit, provided the  
32 source owner or operator maintains and submits to the director, on an  
33 annual basis for a period of 5 years from the date the unit resumes  
34 regular operation, information demonstrating that the physical or  
35 operational change did not result in an emissions increase. A longer  
36 period, not to exceed 10 years, may be required by the director if the  
37 director determines such a period to be more representative of normal  
38 source post-change operations.

39 "Acute Hazardous Air Pollutant" means any noncarcinogenic  
40 hazardous air pollutant for which a threshold limit value - ceiling  
41 (TLV-C) has been adopted by the American Conference of Governmental  
42 Industrial Hygienists (ACGIH) in its "Threshold Limit Values for  
43 Chemical Substances and Physical Agents and Biological Exposure  
44 Indices, (2009)."

45 "Air Contaminant" means any particulate matter or any gas, vapor,  
46 suspended solid or any combination of them, excluding steam and water  
47 vapors (Section 19-2-102(1)).

1 "Air Contaminant Source" means any and all sources of emission  
2 of air contaminants whether privately or publicly owned or operated  
3 (Section 19-2-102(2)).

4 "Air Pollution" means the presence in the ambient air of one or  
5 more air contaminants in such quantities and duration and under  
6 conditions and circumstances, as is or tends to be injurious to human  
7 health or welfare, animal or plant life, or property, or would  
8 unreasonably interfere with the enjoyment of life or use of property  
9 as determined by the standards, rules and regulations adopted by the  
10 Air Quality Board (Section 19-2-104).

11 "Allowable Emissions" means the emission rate of a source  
12 calculated using the maximum rated capacity of the source (unless the  
13 source is subject to enforceable limits which restrict the operating  
14 rate, or hours of operation, or both) and the emission limitation  
15 established pursuant to R307-401-8.

16 "Ambient Air" means the surrounding or outside air (Section  
17 19-2-102(4)).

18 "Appropriate Authority" means the governing body of any city,  
19 town or county.

20 "Atmosphere" means the air that envelops or surrounds the earth  
21 and includes all space outside of buildings, stacks or exterior ducts.

22 "Authorized Local Authority" means a city, county, city-county  
23 or district health department; a city, county or combination fire  
24 department; or other local agency duly designated by appropriate  
25 authority, with approval of the state Department of Health; and other  
26 lawfully adopted ordinances, codes or regulations not in conflict  
27 therewith.

28 "Board" means Air Quality Board. See Section 19-2-102(8)(a).

29 "Breakdown" means any malfunction or procedural error, to include  
30 but not limited to any malfunction or procedural error during start-up  
31 and shutdown, which will result in the inoperability or sudden loss  
32 of performance of the control equipment or process equipment causing  
33 emissions in excess of those allowed by approval order or Title R307.

34 "BTU" means British Thermal Unit, the quantity of heat necessary  
35 to raise the temperature of one pound of water one degree Fahrenheit.

36 "Calibration Drift" means the change in the instrument meter  
37 readout over a stated period of time of normal continuous operation  
38 when the VOC concentration at the time of measurement is the same known  
39 upscale value.

40 "Carbon Adsorption System" means a device containing adsorbent  
41 material (e.g., activated carbon, aluminum, silica gel), an inlet and  
42 outlet for exhaust gases, and a system for the proper disposal or reuse  
43 of all VOC adsorbed.

44 "Carcinogenic Hazardous Air Pollutant" means any hazardous air  
45 pollutant that is classified as a known human carcinogen (A1) or  
46 suspected human carcinogen (A2) by the American Conference of  
47 Governmental Industrial Hygienists (ACGIH) in its "Threshold Limit

1 Values for Chemical Substances and Physical Agents and Biological  
2 Exposure Indices, (2009)."

3 "Chargeable Pollutant" means any regulated air pollutant except  
4 the following:

5 (1) Carbon monoxide;

6 (2) Any pollutant that is a regulated air pollutant solely  
7 because it is a Class I or II substance subject to a standard  
8 promulgated or established by Title VI of the Act, Stratospheric Ozone  
9 Protection;

10 (3) Any pollutant that is a regulated air pollutant solely  
11 because it is subject to a standard or regulation under Section 112(r)  
12 of the Act, Prevention of Accidental Releases.

13 "Chronic Hazardous Air Pollutant" means any noncarcinogenic  
14 hazardous air pollutant for which a threshold limit value - time  
15 weighted average (TLV-TWA) having no threshold limit value - ceiling  
16 (TLV-C) has been adopted by the American Conference of Governmental  
17 Industrial Hygienists (ACGIH) in its "Threshold Limit Values for  
18 Chemical Substances and Physical Agents and Biological Exposure  
19 Indices, (2009)."

20 "Clean Air Act" means federal Clean Air Act as [~~amended in~~  
21 ~~1990~~] found in 42 U.S.C. Chapter 85.

22 "Clean Coal Technology" means any technology, including  
23 technologies applied at the precombustion, combustion, or post  
24 combustion stage, at a new or existing facility which will achieve  
25 significant reductions in air emissions of sulfur dioxide or oxides  
26 of nitrogen associated with the utilization of coal in the generation  
27 of electricity, or process steam which was not in widespread use as  
28 of November 15, 1990.

29 "Clean Coal Technology Demonstration Project" means a project  
30 using funds appropriated under the heading "Department of Energy-Clean  
31 Coal Technology," up to a total amount of \$2,500,000,000 for commercial  
32 demonstration of clean coal technology, or similar projects funded  
33 through appropriations for the Environmental Protection Agency. The  
34 Federal contribution for a qualifying project shall be at least 20  
35 percent of the total cost of the demonstration project.

36 "Clearing Index" means an indicator of the predicted rate of  
37 clearance of ground level pollutants from a given area. This number  
38 is provided by the National Weather Service.

39 "Commence" as applied to construction of a major source or major  
40 modification means that the owner or operator has all necessary  
41 pre-construction approvals or permits and either has:

42 (1) Begun, or caused to begin, a continuous program of actual  
43 on-site construction of the source, to be completed within a reasonable  
44 time; or

45 (2) Entered into binding agreements or contractual obligations,  
46 which cannot be canceled or modified without substantial loss to the  
47 owner or operator, to undertake a program of actual construction of

1 the source to be completed within a reasonable time.

2 "Condensable PM<sub>2.5</sub>" means material that is vapor phase at stack  
3 conditions, but which condenses and/or reacts upon cooling and  
4 dilution in the ambient air to form solid or liquid particulate matter  
5 immediately after discharge from the stack.

6 "Compliance Schedule" means a schedule of events, by date, which  
7 will result in compliance with these regulations.

8 "Construction" means any physical change or change in the method  
9 of operation including fabrication, erection, installation,  
10 demolition, or modification of a source which would result in a change  
11 in actual emissions.

12 "Control Apparatus" means any device which prevents or controls  
13 the emission of any air contaminant directly or indirectly into the  
14 outdoor atmosphere.

15 "Department" means Utah State Department of Environmental  
16 Quality. See Section 19-1-103(1).

17 "Director" means the Director of the Division of Air Quality.  
18 See Section 19-1-103(1).

19 "Division" means the Division of Air Quality.

20 "Electric Utility Steam Generating Unit" means any steam electric  
21 generating unit that is constructed for the purpose of supplying more  
22 than one-third of its potential electric output capacity and more than  
23 25 MW electrical output to any utility power distribution system for  
24 sale. Any steam supplied to a steam distribution system for the  
25 purpose of providing steam to a steam-electric generator that would  
26 produce electrical energy for sale is also considered in determining  
27 the electrical energy output capacity of the affected facility.

28 "Emission" means the act of discharge into the atmosphere of an  
29 air contaminant or an effluent which contains or may contain an air  
30 contaminant; or the effluent so discharged into the atmosphere.

31 "Emissions Information" means, with reference to any source  
32 operation, equipment or control apparatus:

33 (1) Information necessary to determine the identity, amount,  
34 frequency, concentration, or other characteristics related to air  
35 quality of any air contaminant which has been emitted by the source  
36 operation, equipment, or control apparatus;

37 (2) Information necessary to determine the identity, amount,  
38 frequency, concentration, or other characteristics (to the extent  
39 related to air quality) of any air contaminant which, under an  
40 applicable standard or limitation, the source operation was authorized  
41 to emit (including, to the extent necessary for such purposes, a  
42 description of the manner or rate of operation of the source  
43 operation), or any combination of the foregoing; and

44 (3) A general description of the location and/or nature of the  
45 source operation to the extent necessary to identify the source  
46 operation and to distinguish it from other source operations  
47 (including, to the extent necessary for such purposes, a description

1 of the device, installation, or operation constituting the source  
2 operation).

3 "Emission Limitation" means a requirement established by the  
4 Board, the director or the Administrator, EPA, which limits the  
5 quantity, rate or concentration of emission of air pollutants on a  
6 continuous emission reduction including any requirement relating to  
7 the operation or maintenance of a source to assure continuous emission  
8 reduction (Section 302(k)).

9 "Emissions Unit" means any part of a stationary source which emits  
10 or would have the potential to emit any pollutant subject to regulation  
11 under the Clean Air Act.

12 "Enforceable" means all limitations and conditions which are  
13 enforceable by the Administrator, including those requirements  
14 developed pursuant to 40 CFR Parts 60 and 61, requirements within the  
15 State Implementation Plan and R307, any permit requirements  
16 established pursuant to 40 CFR 52.21 or R307-401.

17 "EPA" means Environmental Protection Agency.

18 "EPA Method 9" means 40 CFR Part 60, Appendix A, Method 9, "Visual  
19 Determination of Opacity of Emissions from Stationary Sources," and  
20 Alternate 1, "Determination of the opacity of emissions from  
21 stationary sources remotely by LIDAR."

22 "Executive Director" means the Executive Director of the Utah  
23 Department of Environmental Quality. See Section 19-1-103(2).

24 "Existing Installation" means an installation, construction of  
25 which began prior to the effective date of any regulation having  
26 application to it.

27 "Facility" means machinery, equipment, structures of any part or  
28 accessories thereof, installed or acquired for the primary purpose of  
29 controlling or disposing of air pollution. It does not include an air  
30 conditioner, fan or other similar device for the comfort of personnel.

31 "Filterable PM2.5" means particles with an aerodynamic diameter  
32 equal to or less than 2.5 micrometers that are directly emitted by a  
33 source as a solid or liquid at stack or release conditions and can be  
34 captured on the filter of a stack test train.

35 "Fireplace" means all devices both masonry or factory built units  
36 (free standing fireplaces) with a hearth, fire chamber or similarly  
37 prepared device connected to a chimney which provides the operator with  
38 little control of combustion air, leaving its fire chamber fully or  
39 at least partially open to the room. Fireplaces include those devices  
40 with circulating systems, heat exchangers, or draft reducing doors  
41 with a net thermal efficiency of no greater than twenty percent and  
42 are used for aesthetic purposes.

43 "Fugitive Dust" means particulate, composed of soil and/or  
44 industrial particulates such as ash, coal, minerals, etc., which  
45 becomes airborne because of wind or mechanical disturbance of  
46 surfaces. Natural sources of dust and fugitive emissions are not  
47 fugitive dust within the meaning of this definition.

1 "Fugitive Emissions" means emissions from an installation or  
2 facility which are neither passed through an air cleaning device nor  
3 vented through a stack or could not reasonably pass through a stack,  
4 chimney, vent, or other functionally equivalent opening.

5 "Garbage" means all putrescible animal and vegetable matter  
6 resulting from the handling, preparation, cooking and consumption of  
7 food, including wastes attendant thereto.

8 "Gasoline" means any petroleum distillate, used as a fuel for  
9 internal combustion engines, having a Reid vapor pressure of 4 pounds  
10 or greater.

11 "Hazardous Air Pollutant (HAP)" means any pollutant listed by the  
12 EPA as a hazardous air pollutant in conformance with Section 112(b)  
13 of the Clean Air Act. A list of these pollutants is available at the  
14 Division of Air Quality.

15 "Household Waste" means any solid or liquid material normally  
16 generated by the family in a residence in the course of ordinary  
17 day-to-day living, including but not limited to garbage, paper  
18 products, rags, leaves and garden trash.

19 "Incinerator" means a combustion apparatus designed for high  
20 temperature operation in which solid, semisolid, liquid, or gaseous  
21 combustible wastes are ignited and burned efficiently and from which  
22 the solid and gaseous residues contain little or no combustible  
23 material.

24 "Installation" means a discrete process with identifiable  
25 emissions which may be part of a larger industrial plant. Pollution  
26 equipment shall not be considered a separate installation or  
27 installations.

28 "LPG" means liquified petroleum gas such as propane or butane.

29 "Maintenance Area" means an area that is subject to the provisions  
30 of a maintenance plan that is included in the Utah state implementation  
31 plan, and that has been redesignated by EPA from nonattainment to  
32 attainment of any National Ambient Air Quality Standard.

33 (a) The following areas are considered maintenance areas for  
34 ozone:

- 35 (i) Salt Lake County, effective August 18, 1997; and
- 36 (ii) Davis County, effective August 18, 1997.

37 (b) The following areas are considered maintenance areas for  
38 carbon monoxide:

- 39 (i) Salt Lake City, effective March 22, 1999;
- 40 (ii) Ogden City, effective May 8, 2001; and
- 41 (iii) Provo City, effective January 3, 2006.

42 (c) The following areas are considered maintenance areas for  
43 PM10:

44 (i) Salt Lake County, effective on the date that EPA approves  
45 the maintenance plan that was adopted by the Board on [~~July 6,~~  
46 December 2, 2015]; and

- 47 (ii) Utah County, effective on the date that EPA approves the

1 maintenance plan that was adopted by the Board on [~~July 6,~~  
2 ~~2005~~]December 2, 2015; and

3 (iii) Ogden City, effective on the date that EPA approves the  
4 maintenance plan that was adopted by the Board on [~~July 6,~~  
5 ~~2005~~]December 2, 2015.

6 (d) The following area is considered a maintenance area for  
7 sulfur dioxide: all of Salt Lake County and the eastern portion of  
8 Tooele County above 5600 feet, effective on the date that EPA approves  
9 the maintenance plan that was adopted by the Board on January 5, 2005.

10 "Major Modification" means any physical change in or change in  
11 the method of operation of a major source that would result in a  
12 significant net emissions increase of any pollutant. A net emissions  
13 increase that is significant for volatile organic compounds shall be  
14 considered significant for ozone. Within Salt Lake and Davis Counties  
15 or any nonattainment area for ozone, a net emissions increase that is  
16 significant for nitrogen oxides shall be considered significant for  
17 ozone. Within areas of nonattainment for PM10, a significant net  
18 emission increase for any PM10 precursor is also a significant net  
19 emission increase for PM10. A physical change or change in the method  
20 of operation shall not include:

21 (1) routine maintenance, repair and replacement;

22 (2) use of an alternative fuel or raw material by reason of an  
23 order under section 2(a) and (b) of the Energy Supply and Environmental  
24 Coordination Act of 1974, or by reason of a natural gas curtailment  
25 plan pursuant to the Federal Power Act;

26 (3) use of an alternative fuel by reason of an order or rule under  
27 section 125 of the federal Clean Air Act;

28 (4) use of an alternative fuel at a steam generating unit to the  
29 extent that the fuel is generated from municipal solid waste;

30 (5) use of an alternative fuel or raw material by a source:

31 (a) which the source was capable of accommodating before January  
32 6, 1975, unless such change would be prohibited under any enforceable  
33 permit condition; or

34 (b) which the source is otherwise approved to use;

35 (6) an increase in the hours of operation or in the production  
36 rate unless such change would be prohibited under any enforceable  
37 permit condition;

38 (7) any change in ownership at a source

39 (8) the addition, replacement or use of a pollution control  
40 project at an existing electric utility steam generating unit, unless  
41 the director determines that such addition, replacement, or use  
42 renders the unit less environmentally beneficial, or except:

43 (a) when the director has reason to believe that the pollution  
44 control project would result in a significant net increase in  
45 representative actual annual emissions of any criteria pollutant over  
46 levels used for that source in the most recent air quality impact  
47 analysis in the area conducted for the purpose of Title I of the Clean

1 Air Act, if any, and

2 (b) the director determines that the increase will cause or  
3 contribute to a violation of any national ambient air quality standard  
4 or PSD increment, or visibility limitation.

5 (9) the installation, operation, cessation, or removal of a  
6 temporary clean coal technology demonstration project, provided that  
7 the project complies with:

8 (a) the Utah State Implementation Plan; and

9 (b) other requirements necessary to attain and maintain the  
10 national ambient air quality standards during the project and after  
11 it is terminated.

12 "Major Source" means, to the extent provided by the federal Clean  
13 Air Act as applicable to R307:

14 (1) any stationary source of air pollutants which emits, or has  
15 the potential to emit, one hundred tons per year or more of any  
16 pollutant subject to regulation under the Clean Air Act; or

17 (a) any source located in a nonattainment area for carbon  
18 monoxide which emits, or has the potential to emit, carbon monoxide  
19 in the amounts outlined in Section 187 of the federal Clean Air Act  
20 with respect to the severity of the nonattainment area as outlined in  
21 Section 187 of the federal Clean Air Act; or

22 (b) any source located in Salt Lake or Davis Counties or in a  
23 nonattainment area for ozone which emits, or has the potential to emit,  
24 VOC or nitrogen oxides in the amounts outlined in Section 182 of the  
25 federal Clean Air Act with respect to the severity of the nonattainment  
26 area as outlined in Section 182 of the federal Clean Air Act; or

27 (c) any source located in a nonattainment area for PM10 which  
28 emits, or has the potential to emit, PM10 or any PM10 precursor in the  
29 amounts outlined in Section 189 of the federal Clean Air Act with  
30 respect to the severity of the nonattainment area as outlined in  
31 Section 189 of the federal Clean Air Act.

32 (2) any physical change that would occur at a source not  
33 qualifying under subpart 1 as a major source, if the change would  
34 constitute a major source by itself;

35 (3) the fugitive emissions and fugitive dust of a stationary  
36 source shall not be included in determining for any of the purposes  
37 of these R307 rules whether it is a major stationary source, unless  
38 the source belongs to one of the following categories of stationary  
39 sources:

40 (a) Coal cleaning plants (with thermal dryers);

41 (b) Kraft pulp mills;

42 (c) Portland cement plants;

43 (d) Primary zinc smelters;

44 (e) Iron and steel mills;

45 (f) Primary aluminum or reduction plants;

46 (g) Primary copper smelters;

47 (h) Municipal incinerators capable of charging more than 250

1 tons of refuse per day;

2 (i) Hydrofluoric, sulfuric, or nitric acid plants;

3 (j) Petroleum refineries;

4 (k) Lime plants;

5 (l) Phosphate rock processing plants;

6 (m) Coke oven batteries;

7 (n) Sulfur recovery plants;

8 (o) Carbon black plants (furnace process);

9 (p) Primary lead smelters;

10 (q) Fuel conversion plants;

11 (r) Sintering plants;

12 (s) Secondary metal production plants;

13 (t) Chemical process plants;

14 (u) Fossil-fuel boilers (or combination thereof) totaling more  
15 than 250 million British Thermal Units per hour heat input;

16 (v) Petroleum storage and transfer units with a total storage  
17 capacity exceeding 300,000 barrels;

18 (w) Taconite ore processing plants;

19 (x) Glass fiber processing plants;

20 (y) Charcoal production plants;

21 (z) Fossil fuel-fired steam electric plants of more than 250  
22 million British Thermal Units per hour heat input;

23 (aa) Any other stationary source category which, as of August  
24 7, 1980, is being regulated under section 111 or 112 of the federal  
25 Clean Air Act.

26 "Modification" means any planned change in a source which results  
27 in a potential increase of emission.

28 "National Ambient Air Quality Standards (NAAQS)" means the  
29 allowable concentrations of air pollutants in the ambient air  
30 specified by the Federal Government (Title 40, Code of Federal  
31 Regulations, Part 50).

32 "Net Emissions Increase" means the amount by which the sum of the  
33 following exceeds zero:

34 (1) any increase in actual emissions from a particular physical  
35 change or change in method of operation at a source; and

36 (2) any other increases and decreases in actual emissions at the  
37 source that are contemporaneous with the particular change and are  
38 otherwise creditable. For purposes of determining a "net emissions  
39 increase":

40 (a) An increase or decrease in actual emissions is  
41 contemporaneous with the increase from the particular change only if  
42 it occurs between the date five years before construction on the  
43 particular change commences; and the date that the increase from the  
44 particular change occurs.

45 (b) An increase or decrease in actual emissions is creditable  
46 only if it has not been relied on in issuing a prior approval for the  
47 source which approval is in effect when the increase in actual

1 emissions for the particular change occurs.

2 (c) An increase or decrease in actual emission of sulfur  
3 dioxide, nitrogen oxides or particulate matter which occurs before an  
4 applicable minor source baseline date is creditable only if it is  
5 required to be considered in calculating the amount of maximum  
6 allowable increases remaining available. With respect to particulate  
7 matter, only PM10 emissions will be used to evaluate this increase or  
8 decrease.

9 (d) An increase in actual emissions is creditable only to the  
10 extent that the new level of actual emissions exceeds the old level.

11 (e) A decrease in actual emissions is creditable only to the  
12 extent that:

13 (i) The old level of actual emissions or the old level of  
14 allowable emissions, whichever is lower, exceeds the new level of  
15 actual emissions;

16 (ii) It is enforceable at and after the time that actual  
17 construction on the particular change begins; and

18 (iii) It has approximately the same qualitative significance  
19 for public health and welfare as that attributed to the increase from  
20 the particular change.

21 (iv) It has not been relied on in issuing any permit under  
22 R307-401 nor has it been relied on in demonstrating attainment or  
23 reasonable further progress.

24 (f) An increase that results from a physical change at a source  
25 occurs when the emissions unit on which construction occurred becomes  
26 operational and begins to emit a particular pollutant. Any  
27 replacement unit that requires shakedown becomes operational only  
28 after a reasonable shakedown period, not to exceed 180 days.

29 "New Installation" means an installation, construction of which  
30 began after the effective date of any regulation having application  
31 to it.

32 "Nonattainment Area" means an area designated by the  
33 Environmental Protection Agency as nonattainment under Section 107,  
34 Clean Air Act for any National Ambient Air Quality Standard. The  
35 designations for Utah are listed in 40 CFR 81.345.

36 "Offset" means an amount of emission reduction, by a source,  
37 greater than the emission limitation imposed on such source by these  
38 regulations and/or the State Implementation Plan.

39 "Opacity" means the capacity to obstruct the transmission of  
40 light, expressed as percent.

41 "Open Burning" means any burning of combustible materials  
42 resulting in emission of products of combustion into ambient air  
43 without passage through a chimney or stack.

44 "Owner or Operator" means any person who owns, leases, controls,  
45 operates or supervises a facility, an emission source, or air pollution  
46 control equipment.

47 "PSD" Area means an area designated as attainment or

1 unclassifiable under section 107(d)(1)(D) or (E) of the federal Clean  
2 Air Act.

3 "PM2.5" means particulate matter with an aerodynamic diameter  
4 less than or equal to a nominal 2.5 micrometers as measured by an EPA  
5 reference or equivalent method.

6 "PM2.5 Precursor" means any chemical compound or substance which,  
7 after it has been emitted into the atmosphere, undergoes chemical or  
8 physical changes that convert it into particulate matter, specifically  
9 PM2.5, and has been identified in the applicable implementation plan  
10 for PM2.5 as significant for the purpose of developing control  
11 measures. Specifically, PM2.5 precursors include SO<sub>2</sub>, NO<sub>x</sub>, and VOC.

12 "PM10" means particulate matter with an aerodynamic diameter less  
13 than or equal to a nominal 10 micrometers as measured by an EPA  
14 reference or equivalent method.

15 "PM10 Precursor" means any chemical compound or substance which,  
16 after it has been emitted into the atmosphere, undergoes chemical or  
17 physical changes that convert it into particulate matter, specifically  
18 PM10.

19 "Part 70 Source" means any source subject to the permitting  
20 requirements of R307-415.

21 "Person" means an individual, trust, firm, estate, company,  
22 corporation, partnership, association, state, state or federal agency  
23 or entity, municipality, commission, or political subdivision of a  
24 state. (Subsection 19-2-103(4)).

25 "Pollution Control Project" means any activity or project at an  
26 existing electric utility steam generating unit for purposes of  
27 reducing emissions from such unit. Such activities or projects are  
28 limited to:

29 (1) The installation of conventional or innovative pollution  
30 control technology, including but not limited to advanced flue gas  
31 desulfurization, sorbent injection for sulfur dioxide and nitrogen  
32 oxides controls and electrostatic precipitators;

33 (2) An activity or project to accommodate switching to a fuel  
34 which is less polluting than the fuel used prior to the activity or  
35 project, including, but not limited to natural gas or coal reburning,  
36 or the cofiring of natural gas and other fuels for the purpose of  
37 controlling emissions;

38 (3) A permanent clean coal technology demonstration project  
39 conducted under Title II, sec. 101(d) of the Further Continuing  
40 Appropriations Act of 1985 (sec. 5903(d) of title 42 of the United  
41 States Code), or subsequent appropriations, up to a total amount of  
42 \$2,500,000,000 for commercial demonstration of clean coal technology,  
43 or similar projects funded through appropriations for the  
44 Environmental Protection Agency; or

45 (4) A permanent clean coal technology demonstration project  
46 that constitutes a repowering project.

47 "Potential to Emit" means the maximum capacity of a source to emit

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

9 "Primary PM2.5" means the sum of filterable PM2.5 and condensable  
10 PM2.5.

11 "Process Level" means the operation of a source, specific to the  
12 kind or type of fuel, input material, or mode of operation.

13 "Process Rate" means the quantity per unit of time of any raw  
14 material or process intermediate consumed, or product generated,  
15 through the use of any equipment, source operation, or control  
16 apparatus. For a stationary internal combustion unit or any other  
17 fuel burning equipment, this term may be expressed as the quantity of  
18 fuel burned per unit of time.

19 "Reactivation of a Very Clean Coal-Fired Electric Utility Steam  
20 Generating Unit" means any physical change or change in the method of  
21 operation associated with the commencement of commercial operations  
22 by a coal-fired utility unit after a period of discontinued operation  
23 where the unit:

24 (1) Has not been in operation for the two-year period prior to  
25 the enactment of the Clean Air Act Amendments of 1990, and the emissions  
26 from such unit continue to be carried in the emission inventory at the  
27 time of enactment;

28 (2) Was equipped prior to shutdown with a continuous system of  
29 emissions control that achieves a removal efficiency for sulfur  
30 dioxide of no less than 85 percent and a removal efficiency for  
31 particulates of no less than 98 percent;

32 (3) Is equipped with low-NOx burners prior to the time of  
33 commencement of operations following reactivation; and

34 (4) Is otherwise in compliance with the requirements of the  
35 Clean Air Act.

36 "Reasonable Further Progress" means annual incremental  
37 reductions in emission of an air pollutant which are sufficient to  
38 provide for attainment of the NAAQS by the date identified in the State  
39 Implementation Plan.

40 "Refuse" means solid wastes, such as garbage and trash.

41 "Regulated air pollutant" means any of the following:

42 (a) Nitrogen oxides or any volatile organic compound;

43 (b) Any pollutant for which a national ambient air quality  
44 standard has been promulgated;

45 (c) Any pollutant that is subject to any standard promulgated  
46 under Section 111 of the Act, Standards of Performance for New  
47 Stationary Sources;

1 (d) Any Class I or II substance subject to a standard promulgated  
2 under or established by Title VI of the Act, Stratospheric Ozone  
3 Protection;

4 (e) Any pollutant subject to a standard promulgated under  
5 Section 112, Hazardous Air Pollutants, or other requirements  
6 established under Section 112 of the Act, including Sections 112(g),  
7 (j), and (r) of the Act, including any of the following:

8 (i) Any pollutant subject to requirements under Section 112(j)  
9 of the Act, Equivalent Emission Limitation by Permit. If the  
10 Administrator fails to promulgate a standard by the date established  
11 pursuant to Section 112(e) of the Act, any pollutant for which a subject  
12 source would be major shall be considered to be regulated on the date  
13 18 months after the applicable date established pursuant to Section  
14 112(e) of the Act;

15 (ii) Any pollutant for which the requirements of Section  
16 112(g)(2) of the Act (Construction, Reconstruction and Modification)  
17 have been met, but only with respect to the individual source subject  
18 to Section 112(g)(2) requirement.

19 "Repowering" means replacement of an existing coal-fired boiler  
20 with one of the following clean coal technologies: atmospheric or  
21 pressurized fluidized bed combustion, integrated gasification  
22 combined cycle, magnetohydrodynamics, direct and indirect coal-fired  
23 turbines, integrated gasification fuel cells, or as determined by the  
24 Administrator, in consultation with the Secretary of Energy, a  
25 derivative of one or more of these technologies, and any other  
26 technology capable of controlling multiple combustion emissions  
27 simultaneously with improved boiler or generation efficiency and with  
28 significantly greater waste reduction relative to the performance of  
29 technology in widespread commercial use as of November 15, 1990.

30 (1) Repowering shall also include any oil and/or gas-fired unit  
31 which has been awarded clean coal technology demonstration funding as  
32 of January 1, 1991, by the Department of Energy.

33 (2) The director shall give expedited consideration to permit  
34 applications for any source that satisfies the requirements of this  
35 definition and is granted an extension under section 409 of the Clean  
36 Air Act.

37 "Representative Actual Annual Emissions" means the average rate,  
38 in tons per year, at which the source is projected to emit a pollutant  
39 for the two-year period after a physical change or change in the method  
40 of operation of unit, (or a different consecutive two-year period  
41 within 10 years after that change, where the director determines that  
42 such period is more representative of source operations), considering  
43 the effect any such change will have on increasing or decreasing the  
44 hourly emissions rate and on projected capacity utilization. In  
45 projecting future emissions the director shall:

46 (1) Consider all relevant information, including but not  
47 limited to, historical operational data, the company's own

1 representations, filings with the State of Federal regulatory  
2 authorities, and compliance plans under title IV of the Clean Air Act;  
3 and

4 (2) Exclude, in calculating any increase in emissions that  
5 results from the particular physical change or change in the method  
6 of operation at an electric utility steam generating unit, that portion  
7 of the unit's emissions following the change that could have been  
8 accommodated during the representative baseline period and is  
9 attributable to an increase in projected capacity utilization at the  
10 unit that is unrelated to the particular change, including any  
11 increased utilization due to the rate of electricity demand growth for  
12 the utility system as a whole.

13 "Residence" means a dwelling in which people live, including all  
14 ancillary buildings.

15 "Residential Solid Fuel Burning" device means any residential  
16 burning device except a fireplace connected to a chimney that burns  
17 solid fuel and is capable of, and intended for use as a space heater,  
18 domestic water heater, or indoor cooking appliance, and has an  
19 air-to-fuel ratio less than 35-to-1 as determined by the test  
20 procedures prescribed in 40 CFR 60.534. It must also have a useable  
21 firebox volume of less than 6.10 cubic meters or 20 cubic feet, a  
22 minimum burn rate less than 5 kilograms per hour or 11 pounds per hour  
23 as determined by test procedures prescribed in 40 CFR 60.534, and weigh  
24 less than 800 kilograms or 362.9 pounds. Appliances that are  
25 described as prefabricated fireplaces and are designed to accommodate  
26 doors or other accessories that would create the air starved operating  
27 conditions of a residential solid fuel burning device shall be  
28 considered as such. Fireplaces are not included in this definition  
29 for solid fuel burning devices.

30 "Road" means any public or private road.

31 "Salvage Operation" means any business, trade or industry engaged  
32 in whole or in part in salvaging or reclaiming any product or material,  
33 including but not limited to metals, chemicals, shipping containers  
34 or drums.

35 "Secondary Emissions" means emissions which would occur as a  
36 result of the construction or operation of a major source or major  
37 modification, but do not come from the major source or major  
38 modification itself.

39 Secondary emissions must be specific, well defined,  
40 quantifiable, and impact the same general area as the source or  
41 modification which causes the secondary emissions. Secondary  
42 emissions include emissions from any off-site support facility which  
43 would not be constructed or increase its emissions except as a result  
44 of the construction or operation of the major source or major  
45 modification. Secondary emissions do not include any emissions which  
46 come directly from a mobile source such as emissions from the tailpipe  
47 of a motor vehicle, from a train, or from a vessel.

1 Fugitive emissions and fugitive dust from the source or  
2 modification are not considered secondary emissions.

3 "Secondary PM2.5" means particles that form or grow in mass  
4 through chemical reactions in the ambient air well after dilution and  
5 condensation have occurred. Secondary PM2.5 is usually formed at some  
6 distance downwind from the source.

7 "Significant" means:

8 (1) In reference to a net emissions increase or the potential  
9 of a source to emit any of the following pollutants, a rate of emissions  
10 that would equal or exceed any of the following rates:

11 Carbon monoxide: 100 ton per year (tpy);

12 Nitrogen oxides: 40 tpy;

13 Sulfur dioxide: 40 tpy;

14 PM10: 15 tpy;

15 PM2.5: 10 tpy;

16 Particulate matter: 25 tpy;

17 Ozone: 40 tpy of volatile organic compounds;

18 Lead: 0.6 tpy.

19 "Solid Fuel" means wood, coal, and other similar organic material  
20 or combination of these materials.

21 "Solvent" means organic materials which are liquid at standard  
22 conditions (Standard Temperature and Pressure) and which are used as  
23 dissolvers, viscosity reducers, or cleaning agents.

24 "Source" means any structure, building, facility, or  
25 installation which emits or may emit any air pollutant subject to  
26 regulation under the Clean Air Act and which is located on one or more  
27 continuous or adjacent properties and which is under the control of  
28 the same person or persons under common control. A building,  
29 structure, facility, or installation means all of the  
30 pollutant-emitting activities which belong to the same industrial  
31 grouping. Pollutant-emitting activities shall be considered as part  
32 of the same industrial grouping if they belong to the same "Major Group"  
33 (i.e. which have the same two-digit code) as described in the Standard  
34 Industrial Classification Manual, 1972, as amended by the 1977  
35 Supplement (US Government Printing Office stock numbers 4101-0065 and  
36 003-005-00176-0, respectively).

37 "Stack" means any point in a source designed to emit solids,  
38 liquids, or gases into the air, including a pipe or duct but not  
39 including flares.

40 "Standards of Performance for New Stationary Sources" means the  
41 Federally established requirements for performance and record keeping  
42 (Title 40 Code of Federal Regulations, Part 60).

43 "State" means Utah State.

44 "Temporary" means not more than 180 calendar days.

45 "Temporary Clean Coal Technology Demonstration Project" means a  
46 clean coal technology demonstration project that is operated for a  
47 period of 5 years or less, and which complies with the Utah State

1 Implementation Plan and other requirements necessary to attain and  
2 maintain the national ambient air quality standards during the project  
3 and after it is terminated.

4 "Threshold Limit Value - Ceiling (TLV-C)" means the airborne  
5 concentration of a substance which may not be exceeded, as adopted by  
6 the American Conference of Governmental Industrial Hygienists in its  
7 "Threshold Limit Values for Chemical Substances and Physical Agents  
8 and Biological Exposure Indices, (2009)."

9 "Threshold Limit Value - Time Weighted Average (TLV-TWA)" means  
10 the time-weighted airborne concentration of a substance adopted by the  
11 American Conference of Governmental Industrial Hygienists in its  
12 "Threshold Limit Values for Chemical Substances and Physical Agents  
13 and Biological Exposure Indices, (2009)."

14 "Total Suspended Particulate (TSP)" means minute separate  
15 particles of matter, collected by high volume sampler.

16 "Toxic Screening Level" means an ambient concentration of an air  
17 contaminant equal to a threshold limit value - ceiling (TLV- C) or  
18 threshold limit value -time weighted average (TLV-TWA) divided by a  
19 safety factor.

20 "Trash" means solids not considered to be highly flammable or  
21 explosive including, but not limited to clothing, rags, leather,  
22 plastic, rubber, floor coverings, excelsior, tree leaves, yard  
23 trimmings and other similar materials.

24 "Volatile Organic Compound (VOC)" means VOC as defined in 40 CFR  
25 51.100(s), effective as of the date referenced in R307-101-3, is hereby  
26 adopted and incorporated by reference.

27 "Waste" means all solid, liquid or gaseous material, including,  
28 but not limited to, garbage, trash, household refuse, construction or  
29 demolition debris, or other refuse including that resulting from the  
30 prosecution of any business, trade or industry.

31 "Zero Drift" means the change in the instrument meter readout over  
32 a stated period of time of normal continuous operation when the VOC  
33 concentration at the time of measurement is zero.

34

35 **KEY: air pollution, definitions**

36 **Date of Enactment or Last Substantive Amendment: [~~August 7, 2014~~2015**

37 **Notice of Continuation: May 8, 2014**

38 **Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)**

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 Division of Administrative Rules.

Rule Information

DAR file no: \_\_\_\_\_ Date filed: \_\_\_\_\_  
 State Admin Rule Filing Key: 156957  
 Utah Admin. Code ref. (R no.): R307-101-2

Agency Information

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

Contact person(s):

Name: Phone: Fax: E-mail: Remove:

Ryan Stephens	801-536-4419	801-536-0085	rstephens@utah.gov	
---------------	--------------	--------------	--------------------	--

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

Rule Title

2. Title of rule or section (catchline):  
 Definitions.

Notice Type

3. Type of notice: Amendment

Rule Purpose

4. Purpose of the rule or reason for the change:  
 The purpose is to update an out of date reference to a PM10 maintenance plan.

Response Information

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

No  Yes

#### Rule Summary

6. Summary of the rule or change:

The rule currently references a maintenance plan adopted by the Air Quality Board on July 6, 2005. This reference is being changed to December 2, 2015, which is the date of adoption for the current maintenance plan.

#### Aggregate Cost Information

7. Aggregate anticipated cost or savings to:

A) State budget:

Affected:  No  Yes

No, all of the substantive requirements are contained within the Utah State Implementation Plan (SIP), Section IX.A and IX.H, and other Air Quality Rules that are part of the SIP. This amendment merely changes a date that helps define the geographic region of the PM10 maintenance area.

B) Local government:

Affected:  No  Yes

No, all of the substantive requirements are contained within the Utah State Implementation Plan (SIP), Section IX.A and IX.H, and other Air Quality Rules that are part of the SIP. This amendment merely changes a date that helps define the geographic region of the PM10 maintenance area.

C) Small businesses:

Affected:  No  Yes

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

No, all of the substantive requirements are contained within the Utah State Implementation Plan (SIP), Section IX.A and IX.H, and other Air Quality Rules that are part of the SIP. This amendment merely changes a date that helps define the geographic region of the PM10 maintenance area.

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)

No, all of the substantive requirements are contained within the Utah State Implementation Plan (SIP), Section IX.A and IX.H, and other Air Quality Rules that are part of the SIP. This amendment merely changes a date that helps define the geographic region of the PM10 maintenance area.

#### Compliance Cost Information

8. Compliance costs for affected persons:

There will be no compliance costs for affected persons. All of the substantive requirements are contained within the Utah State Implementation Plan (SIP), Section IX.A and IX.H, and other Air Quality Rules that are part of the SIP. This amendment merely changes a date that helps define the geographic region of the PM10 maintenance area.

#### Department Head Comments

9. A) Comments by the department head on the fiscal impact the rule may have on businesses:  
This amendment will not have a fiscal impact on businesses. All of the substantive requirements are contained within the Utah State Implementation Plan (SIP), Section IX.A and IX.H, and other Air Quality Rules that are part of the SIP. This amendment merely changes a date that helps define the geographic region of the PM10 maintenance area.
- B) Name and title of department head commenting on the fiscal impacts:  
Executive Director, Alan Matheson

## Citation Information

10. This rule change is authorized or mandated by state law, and implements or interprets the following state and federal laws.  
State code or constitution citations (required) (e.g., Section 63G-3-402; Subsection 63G-3-601 (3); Article IV) :  
19-2-104

## Incorporated Materials

11. This rule adds, updates, or removes the following title of materials incorporated by references (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) : 02/01/2016
- B) A public hearing (optional) will be held:  
 On (mm/dd/yyyy): At (hh:mm AM/PM): At (place):

## Proposed Effective Date

13. This rule change may become effective on (mm/dd/yyyy): 02/08/2016

NOTE: The date above is the date on which this rule MAY become effective. It is NOT the effective date. After a minimum of seven days following the date designated in Box 12(A) above, the agency must submit a Notice of Effective Date to the Division 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, definitions

#### File Information

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

#### To the Agency

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

#### Agency Authorization

Agency head or designee,  
and title: Bryce Bird  
Director

Date  
(mm/dd/yyyy): 11/17/2015