



State of Utah

JON M. HUNTSMAN, JR.  
*Governor*

GARY HERBERT  
*Lieutenant Governor*

Department of  
Environmental Quality

William J. Sinclair  
*Acting Executive Director*

DIVISION OF AIR QUALITY  
Cheryl Heying  
*Director*

DAQ-002-09

**MEMORANDUM**

**TO:** Air Quality Board

**THROUGH:** Cheryl Heying, Executive Secretary

**FROM:** Kimberly Kreykes, Environmental Planning Consultant

**DATE:** January 13, 2009

**SUBJECT:** FIVE YEAR REVIEW: R307-150. Emission Inventories.

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DAQ has completed a five-year review for R307-150.

The State of Utah is required under the federal Consolidated Emissions Reporting Rule, 40 CFR 51.30(e), to submit inventories of emissions from a variety of sources to the federal Environmental Protection Agency on a schedule specified in the federal rule. Rule R307-150 specifies the kinds of sources that must submit inventory information to the State in order to fulfill the State's responsibilities. In addition, the inventory information is used to determine the fees paid by sources subject to 40 CFR Part 70 and Rule R307-415, the Operating Permit Program. The information is also necessary to determine where emission reductions can be achieved if needed for Utah to achieve health standards for air quality. Therefore, the rule should be continued.

Staff Recommendation: Staff recommends that the Board continue this rule by approving the attached forms to be filed with the Division of Administrative Rules.

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

2 **R307-150. Emission Inventories.**

3 **R307-150-1. Purpose and General Requirements.**

4 (1) The purpose of R305-150 is:

5 (a) to establish by rule the time frame, pollutants, and  
6 information that sources must include in inventory submittals; and

7 (b) to establish consistent reporting requirements for  
8 stationary sources in Utah to determine whether sulfur dioxide  
9 emissions remain below the sulfur dioxide milestones established  
10 in the State Implementation Plan for Regional Haze, section  
11 XX.E.1.a, incorporated by reference in R307-110-28.

12 (2) The requirements of R307-150 replace any annual  
13 inventory reporting requirements in approval orders or operating  
14 permits issued prior to December 4, 2003.

15 (3) Emission inventories shall be submitted on or before  
16 ninety days following the effective date of this rule and  
17 thereafter on or before April 15 of each year following the  
18 calendar year for which an inventory is required. The inventory  
19 shall be submitted in a format specified by the Division of Air  
20 Quality following consultation with each source.

21 (4) The executive secretary may require at any time a full  
22 or partial year inventory upon reasonable notice to affected  
23 sources when it is determined that the inventory is necessary to  
24 develop a state implementation plan, to assess whether there is a  
25 threat to public health or safety or the environment, or to  
26 determine whether the source is in compliance with R307.

27 (5) Recordkeeping Requirements.

28 (a) Each owner or operator of a stationary source subject to  
29 this rule shall maintain a copy of the emission inventory  
30 submitted to the Division of Air Quality and records indicating  
31 how the information submitted in the inventory was determined,  
32 including any calculations, data, measurements, and estimates  
33 used. The records under R307-150-4 shall be kept for ten years.  
34 Other records shall be kept for a period of at least five years  
35 from the due date of each inventory.

36 (b) The owner or operator of the stationary source shall  
37 make these records available for inspection by any representative  
38 of the Division of Air Quality during normal business hours.

39

40 **R307-150-2. Definitions.**

41 The following additional definitions apply to R307-150.

42 "Acute Contaminant" means any noncarcinogenic air contaminant  
43 for which a threshold limit value - ceiling (TLV-C) has been  
44 adopted by the American Conference of Governmental Industrial  
45 Hygienists in its "Threshold Limit Values for Chemical Substances  
46 and Physical Agents and Biological Exposure Indices," 2003  
47 edition.

48 "Carcinogenic Contaminant" means any air contaminant that is  
49 classified as a known human carcinogen (A1) or suspected human  
50 carcinogen (A2) by the American Conference of Governmental  
51 Industrial Hygienists in its "Threshold Limit Values for Chemical  
52 Substances and Physical Agents and Biological Exposure Indices,"

1 2003 edition.

2 "Chronic Contaminant" means any noncarcinogenic air  
3 contaminant for which a threshold limit value - time weighted  
4 average (TLV-TWA) having no threshold limit value - ceiling (TLV-  
5 C) has been adopted by the American Conference of Governmental  
6 Industrial Hygienists in its "Threshold Limit Values for Chemical  
7 Substances and Physical Agents and Biological Exposure Indices,"  
8 2003 edition.

9 "Dioxins" and "Furans" mean total tetra- through  
10 octachlorinated dibenzo-p-dioxins and dibenzofurans.

11 "Emissions unit" means emissions unit as defined in R307-415-  
12 3.

13 "Large Major Source" means a major source that emits or has  
14 the potential to emit 2500 tons or more per year of oxides of  
15 sulfur, oxides of nitrogen, or carbon monoxide, or that emits or  
16 has the potential to emit 250 tons or more per year of PM10,  
17 PM2.5, volatile organic compounds, or ammonia.

18 "Lead" means elemental lead and the portion of its compounds  
19 measured as elemental lead.

20 "Major Source" means major source as defined in R307-415-3.

21

### 22 **R307-150-3. Applicability.**

23 (1) R307-150-4 applies to all stationary sources with actual  
24 emissions of 100 tons or more per year of sulfur dioxide in  
25 calendar year 2000 or any subsequent year unless exempted in (a)  
26 below. Sources subject to R307-150-4 may be subject to other  
27 sections of R307-150.

28 (a) A stationary source that meets the requirements of R307-  
29 150-3(1) that has permanently ceased operation is exempt from the  
30 requirements of R307-150-4 for all years during which the source  
31 did not operate at any time during the year.

32 (b) Except as provided in (a) above, any source that meets  
33 the criteria of R307-150-3(1) and that emits less than 100 tons  
34 per year of sulfur dioxide in any subsequent year shall remain  
35 subject to the requirements of R307-150-4 until 2018 or until the  
36 first control period under the Western Backstop Sulfur Dioxide  
37 Trading Program as established in R307-250-12(1)(a), whichever is  
38 earlier.

39 (2) R307-150-5 applies to large major sources.

40 (3) R307-150-6 applies to:

41 (a) each major source that is not a large major source;

42 (b) each source with the potential to emit 5 tons or more  
43 per year of lead; and

44 (c) each source not included in (2) or (3)(a) or (3)(b)  
45 above that is located in Davis, Salt Lake, Utah, or Weber Counties  
46 and that has the potential to emit 25 tons or more per year of any  
47 combination of oxides of nitrogen, oxides of sulfur and PM10, or  
48 the potential to emit 10 tons or more per year of volatile organic  
49 compounds.

50 (4) R307-150-7 applies to Part 70 sources not included in  
51 (2) or (3) above.

52

**1 R307-150-4. Sulfur Dioxide Milestone Inventory Requirements.**

2 (1) Annual Sulfur Dioxide Emission Report.

3 (a) Sources identified in R307-150-3(1) shall submit an  
4 annual inventory of sulfur dioxide emissions beginning with  
5 calendar year 2003 for all emissions units including fugitive  
6 emissions.

7 (b) The inventory shall include the rate and period of  
8 emissions, excess or breakdown emissions, startup and shut down  
9 emissions, the specific emissions unit that is the source of the  
10 air pollution, type and efficiency of the air pollution control  
11 equipment, percent of sulfur content in fuel and how the percent  
12 is calculated, and other information necessary to quantify  
13 operation and emissions and to evaluate pollution control  
14 efficiency. The emissions of a pollutant shall be calculated  
15 using the source's actual operating hours, production rates, and  
16 types of materials processed, stored, or combusted during the  
17 inventoried time period.

18 (2) Each source subject to R307-150-4 that is also subject  
19 to 40 CFR Part 75 reporting requirements shall submit a summary  
20 report of annual sulfur dioxide emissions that were reported to  
21 the Environmental Protection Agency under 40 CFR Part 75 in lieu  
22 of the reporting requirements in (1) above.

23 (3) Changes in Emission Measurement Techniques. Each source  
24 subject to R307-150-4 that uses a different emission monitoring or  
25 calculation method than was used to report their sulfur dioxide  
26 emissions in 2006 under R307-150 or 40 CFR Part 75 shall adjust  
27 their reported emissions to be comparable to the emission  
28 monitoring or calculation method that was used in 2006. The  
29 calculations that are used to make this adjustment shall be  
30 included with the annual emission report.

31  
32 **R307-150-5. Sources Identified in R307-150-3(2), Large Major**  
33 **Source Inventory Requirements.**

34 (1) Each large major source shall submit an emission  
35 inventory annually beginning with calendar year 2002. The  
36 inventory shall include PM10, PM2.5, oxides of sulfur, oxides of  
37 nitrogen, carbon monoxide, volatile organic compounds, and ammonia  
38 for all emissions units including fugitive emissions.

39 (2) For every third year beginning with 2005, the inventory  
40 shall also include all other chargeable pollutants and hazardous  
41 air pollutants not exempted in R307-150-8.

42 (3) For each pollutant specified in (1) or (2) above, the  
43 inventory shall include the rate and period of emissions, excess  
44 or breakdown emissions, startup and shut down emissions, the  
45 specific emissions unit that is the source of the air pollution,  
46 composition of air contaminant, type and efficiency of the air  
47 pollution control equipment, and other information necessary to  
48 quantify operation and emissions and to evaluate pollution control  
49 efficiency. The emissions of a pollutant shall be calculated  
50 using the source's actual operating hours, production rates, and  
51 types of materials processed, stored, or combusted during the  
52 inventoried time period.

1  
2 **R307-150-6. Sources Identified in R307-150-3(3).**

3 (1) Each source identified in R307-150-3(3) shall submit an  
4 inventory every third year beginning with calendar year 2002 for  
5 all emissions units including fugitive emissions.

6 (a) The inventory shall include PM10, PM2.5, oxides of  
7 sulfur, oxides of nitrogen, carbon monoxide, volatile organic  
8 compounds, ammonia, other chargeable pollutants, and hazardous air  
9 pollutants not exempted in R307-150-8.

10 (b) For each pollutant, the inventory shall include the rate  
11 and period of emissions, excess or breakdown emissions, startup  
12 and shut down emissions, the specific emissions unit which is the  
13 source of the air pollution, composition of air contaminant, type  
14 and efficiency of the air pollution control equipment, and other  
15 information necessary to quantify operation and emissions and to  
16 evaluate pollution control efficiency. The emissions of a  
17 pollutant shall be calculated using the source's actual operating  
18 hours, production rates, and types of materials processed, stored,  
19 or combusted during the inventoried time period.

20 (2) Sources identified in R307-150-3(3) shall submit an  
21 inventory for each year after 2002 in which the total amount of  
22 PM10, oxides of sulfur, oxides of nitrogen, carbon monoxide, or  
23 volatile organic compounds increases or decreases by 40 tons or  
24 more per year from the most recently submitted inventory. For  
25 each pollutant, the inventory shall meet the requirements of R307-  
26 150-6(1)(a) and (b).  
27

28 **R307-150-7. Sources Identified in R307-150-3(4), Other Part 70**  
29 **Sources.**

30 (1) Sources identified in R307-150-3(4) shall submit the  
31 following emissions inventory every third year beginning with  
32 calendar year 2002 for all emission units including fugitive  
33 emissions.

34 (2) Sources identified in R307-150-3(4) shall submit an  
35 inventory for each year after 2002 in which the total amount of  
36 PM10, oxides of sulfur, oxides of nitrogen, carbon monoxide, or  
37 volatile organic compounds increases or decreases by 40 tons or  
38 more per year from the most recently submitted inventory.

39 (3) The emission inventory shall include individual  
40 pollutant totals of all chargeable pollutants not exempted in  
41 R307-150-8.  
42

43 **R307-150-8. Exempted Hazardous Air Pollutants.**

44 (1) The following air pollutants are exempt from this rule  
45 if they are emitted in an amount less than that listed in Table 1.  
46

47 TABLE 1

49 CONTAMINANT	Pounds/year
50 Arsenic	0.21
51 Benzene	33.90
52 Beryllium	0.04

1	Ethylene oxide	38.23
2	Formaldehyde	5.83

3  
4 (2) Hazardous air pollutants, except for dioxins or furans,  
5 are exempt from being reported if they are emitted in an amount  
6 less than the smaller of the following:

7 (a) 500 pounds per year; or

8 (b) for acute contaminants, the applicable TLV-C expressed  
9 in milligrams per cubic meter and multiplied by 15.81 to obtain  
10 the pounds-per-year threshold; or

11 (c) for chronic contaminants, the applicable TLV-TWA  
12 expressed in milligrams per cubic meter and multiplied by 21.22 to  
13 obtain the pounds-per-year threshold; or

14 (d) for carcinogenic contaminants, the applicable TLV-C or  
15 TLV-TWA expressed in milligrams per cubic meter and multiplied by  
16 7.07 to obtain the pounds-per-year threshold.

17  
18 **KEY: air pollution, reports, inventories**  
19 **Date of Enactment or Last Substantive Amendment: September 4,**  
20 **2008**  
21 **Notice of Continuation: February 9, 2004**  
22 **Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(c)**

## State of Utah

**FIVE-YEAR NOTICE OF REVIEW AND STATEMENT OF  
CONTINUATION**

DAR file no:

Date filed:

Utah Admin.

R307-150

Time filed:

Code ref. (R no.):

1. Agency:

Environmental Quality/Air Quality

Room no.:

Building:

Street address 1: 150 N 1950 W

Street address 2:

City,state,zip: SALT LAKE CITY, UT 84116-3085

Mailing address 1: PO BOX 144820

Mailing address 2:

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**Contact person(s):****Name:****Phone:****Fax:****E-mail:****Remove:**

Kimberly Kreykes

801-536-4042

801-536-4099

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(Interested persons may inspect this filing at the above address or at DAR between 8:00 a.m. and 5:00 p.m. on business days.)

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

Emission Inventories

**3. A concise explanation of the particular statutory provisions under which the rule is enacted and how these provisions authorize or require the rule:**

Subsection 19-2- 104(1)(c) allows the Air Quality Board to make rules "...requiring persons engaged in operations which result in air pollution to ...file periodic reports containing information relating to the rate, period of emission, and composition of the air contaminant..." Rule R307-150 implements that statute by specifying the sources that must submit information, the information that must be submitted, and the due date for submissions. Rule R307-150 meets the requirements of the federal Consolidated Emissions Reporting Rule, 40 CFR 51.30(e) (67 FR 39602).

**4. A summary of written comments received during and since the last five-year review of the rule from interested persons supporting or opposing the rule:**

R307-150 was amended once since the last five year review, A September 2008 DAR # 31558. No comments were received on this amendment. No comments have been received since the last five year review.

**5.****A reasoned justification for continuation of the rule, including reasons why the agency disagrees with comments in opposition to the rule, if any:**

The State of Utah is required under the federal Consolidated Emissions Reporting Rule, 40 CFR 51.30(e), to submit inventories of emissions from a variety of sources to the federal Environmental Protection Agency on a schedule specified in the federal rule. Rule R307-150 specifies the kinds of sources that must submit inventory information to the State in order to fulfill the State's responsibilities. In addition, the inventory information is required in order to determine the fees paid by sources subject to 40 CFR Part 70 and Rule R307-415, the Operating Permit Program, and for determining where

emission reductions can be achieved if needed for Utah to remain in attainment of the federal health standards for air quality. Therefore, the rule should be continued.	
<b>6. Indexing information - keywords (maximum of four, in lower case):</b>	reports, air pollution, inventories
<b>7. Attach an RTF document containing the text of this rule change (filename):</b>	There is currently a document associated with this filing. <input type="text" value="Rule Text"/>
<b>To the agency:</b> Information requested on this form is required by Section 63-46a-9. Incomplete forms will be returned to the agency for completion, possibly delaying the effective date.	

**AGENCY AUTHORIZATION**

<b>Agency head or designee, and title:</b>	<b>Date</b> (mm/dd/yyyy):
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