



State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQ-094-14

MEMORANDUM

TO: Air Quality Board

THROUGH: Bryce C. Bird, Executive Secretary

FROM: Bill Reiss, Environmental Engineer

DATE: November 21, 2014

SUBJECT: PROPOSE FOR PUBLIC COMMENT: New Rule R307-311. Utah County: Trading of Emission Budgets for Transportation Conformity.

New rule R307-311 would affect the way the metropolitan planning organization (MPO) for Utah County is able to demonstrate that the emissions associated with transportation plans, programs, and projects conform to emission budgets established in the PM₁₀ State Implementation Plan (SIP) for Utah County.

It would alleviate a problem demonstrating conformity to the NO_x budget brought on by EPA's release of a new motor vehicle emissions simulator (MOVES) model. The new MOVES model replaces the older MOBILE6 model which was used to develop the NO_x budget in the 2002 PM₁₀ SIP, and must be used by the MPO as it prepares its conformity demonstration. The new MOVES model predicts much more NO_x from tailpipes than the old MOBILE6 model.

The proposed rule would allow the MPO to apply a potential surplus from its budget for direct PM₁₀ to a commensurate shortfall in its budget for NO_x, at a ratio of 1 to 1.

It would not, however, allow such trading in the opposite direction (e.g. to apply a surplus of NO_x to a shortfall in direct PM₁₀).

The proposed rule would be essentially a duplication of R307-310 which allows the same type of trading when demonstrating transportation conformity to the PM₁₀ SIP for Salt Lake County.

It's important to note that the problem brought on by the release of the new model is the same problem that staff had attempted to resolve at the September 3, 2014, Board meeting with a proposal to revise the 2002 PM₁₀ SIP for Utah County. That revision had been prepared using mobile source emissions from MOVES,

and relied on EPA's "Policy Guidance on the Use of MOVES2010 and Subsequent Minor Revisions for State Implementation Plan Development, Transportation Conformity, and Other Purposes."

Comment was taken on that proposal and based on preliminary comments from EPA, as well as further discussions with Region 8, staff believes that the trading rule is a better solution to the problem at hand. A copy of the proposal is attached, as is documentation describing the technical basis for the proposed rule.

Staff Recommendation: Staff recommends the Board propose R307-311, Utah County: Trading of Emission Budgets for Transportation Conformity, for public comment.

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

2 **R307-311. Utah County: Trading of Emission Budgets for**
3 **Transportation Conformity.**

4 **R307-311-1. Purpose.**

5 This rule establishes the procedures that may be used to trade
6 a portion of the primary PM10 budget when demonstrating that a
7 transportation plan, transportation improvement program, or project
8 conforms with the motor vehicle emission budgets in the Utah County
9 portion of Section IX, Part A of the State Implementation Plan, "Fine
10 Particulate Matter (PM10)"

11
12 **R307-311-2. Definitions.**

13 The definitions contained in 40 CFR 93.101, effective as of the
14 date referenced in R307-101-3, are incorporated into this rule by
15 reference. The following additional definitions apply to this rule.

16 "Budget" means the motor vehicle emission projections used in
17 the attainment demonstration in the Utah County portion of Section
18 IX, Part A of the State Implementation Plan, "Fine Particulate Matter
19 (PM10)."

20 "NOx" means oxides of nitrogen.

21 "Primary PM10" means PM10 that is emitted directly by a source.
22 Primary PM10 does not include particulate matter that is formed when
23 gaseous emissions undergo chemical reactions in the ambient air.

24 "Transportation Conformity" means a demonstration that a
25 transportation plan, transportation improvement program, or project
26 conforms with the emissions budgets in a state implementation plan,
27 as outlined in 40 CFR, Chapter 1, Part 93, "Determining Conformity
28 of Federal Actions to State or Federal Implementation Plans."

29
30 **R307-311-3. Applicability.**

31 (1) This rule applies to agencies responsible for demonstrating
32 transportation conformity with the Utah County portion of Section
33 IX, Part A of the State Implementation Plan, "Fine Particulate Matter
34 (PM10)."

35 (2) This rule does not apply to emission budgets from Section
36 IX, Part C.6 of the State Implementation Plan, "Carbon Monoxide
37 Maintenance Plan."

38
39 **R307-311-4. Trading Between Emission Budgets.**

40 (1) The agencies responsible for demonstrating transportation
41 conformity are authorized to supplement the budget for NOx with a
42 portion of the budget for primary PM10 for the purpose of demonstrating
43 transportation conformity for NOx. The NOx budget shall be
44 supplemented using the following procedures.

45 (a) The metropolitan planning organization shall include the
46 following information in the transportation conformity demonstration:

47 (i) The budget for primary PM10 and NOx for each required year
48 of the conformity demonstration, before trading allowed by this rule
49 has been applied;

50 (ii) The portion of the primary PM10 budget that will be used
51 to supplement the NOx budget, specified in tons per day using a 1:1
52 ratio of primary PM10 to NOx, for each required year of the conformity

1 demonstration;

2 (iii) The remainder of the primary PM10 budget that will be
3 used in the conformity demonstration for primary PM10, specified in
4 tons per day for each required year of the conformity demonstration;
5 and

6 (iv) The budget for primary PM10 and NOx for each required year
7 of the conformity demonstration after the trading allowed by this
8 rule has been applied.

9 (b) Transportation conformity for NOx shall be demonstrated
10 using the NOx budget supplemented by a portion of the primary PM10
11 budget as described in (a)(ii). Transportation conformity for
12 primary PM10 shall be demonstrated using the remainder of the primary
13 PM10 budget described in (a)(iii).

14 (c) The primary PM10 budget shall not be supplemented by using
15 a portion of the NOx budget.

16
17
18 **KEY: air pollution, transportation conformity, PM10**
19 **Authorizing, and Implemented or Interpreted Law: 19-2-104**