



State of Utah

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Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

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DIVISION OF AIR QUALITY
Bryce C. Bird
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Michael Smith
Karma M. Thomson
Kathy Van Dame
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Executive Secretary

DAQ-058-13

**UTAH AIR QUALITY BOARD MEETING
FINAL AGENDA**

**Wednesday, August 7, 2013
195 North 1950 West, Room 1015**

**Board Brown Bag Lunch – 11:30 a.m.
Four Corners Conference Rooms (4th Floor)**

Rulemaking procedure changes and a PM_{2.5} State Implementation Plan update, with emphasis on modeling and reasonable available control technology.

**Board Meeting – 1:30 p.m.
Conference Room 1015 (1st Floor)**

- I. Call-to-Order
- II. Date of the Next Air Quality Board Meeting: September 4, 2013
- III. Approval of the Minutes for July 3, 2013, Board Meeting.
- IV. Final Adoption: R307-210-2. Oil and Gas Sector: New Source Performance Standards; and R307-214-3. Oil and Gas Sector: National Emission Standards for Hazardous Air Pollutants. Presented by Mark Berger.
- V. Final Adoption: R307-101-3. General Requirements. Version of Code of Federal Regulations Incorporated by Reference. Presented by Mark Berger.
- VI. Five-Year Reviews: R307-107. General Requirements: Breakdowns; and R307-123. General Requirements: Clean Fuels and Vehicle Technology Grant and Loan Program. Presented by Mark Berger.
- VII. Propose for Public Comment: Amend State Implementation Plan, Control Measures for Area and Point Sources, Fine Particulate Matter, PM_{2.5} SIP for the Logan, UT-ID Nonattainment Area, Section IX, Part A.23. Presented by Bill Reiss.
- VIII. Propose for Public Comment: Amend State Implementation Plan Section X, Vehicle Inspection and Maintenance Program, Part F, Cache County. Presented by Mat Carlile.

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- IX. Propose for Public Comment: Amend R307-110-10. Section IX, Control Measures for Area and Point Sources, Part A, Fine Particulate Matter; and R307-110-36. Section X, Vehicle Inspection and Maintenance Program, Part F, Cache County. Presented by Mark Berger.

- X. Informational Items.
 - A. PM_{2.5} State Implementation Plan Update and Discussion. Presented by Bill Reiss.
 - B. Air Toxics. Presented by Robert Ford.
 - C. Compliance. Presented by Jay Morris and Harold Burge.
 - D. Monitoring. Presented by Bo Call.
 - E. Other Items to be Brought Before the Board.

In compliance with the American with Disabilities Act, individuals with special needs (including auxiliary communicative aids and services) should contact Brooke Baker, Office of Human Resources at (801) 536-4412 (TDD 536-4414).



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**UTAH AIR QUALITY BOARD
BROWN BAG LUNCH SESSION
August 7, 2013 – 11:30 a.m.
195 North 1950 West, Four Corners Conference Rooms
Salt Lake City, Utah 84116**

DRAFT MINUTES

Board members present: Kathy Van Dame, Craig Petersen, Steve Sands, Kerry Kelly, Robert Paine, Michael Smith, Karma Thomson, and Tammie Lucero

Mark Berger, Environmental Planning Consultant at DAQ, explained that DAQ is developing tools to improve public notification. One such tool is a table titled "Potential Rules Being Researched and Developed" which will be posted on DAQ's web page where rules and programs that DAQ is researching and developing for potential approval by the Board will be posted online for public access. Another tool is the creation of a ListServ where interested parties can sign up and receive electronic mail after a Board meeting giving them a brief summary of everything the Board acted on and then provide a link to the table listed above which provides the information to be published in the Division of Administrative Rules Bulletin. Once these additions to the web page are made staff will inform the public of these changes through newspaper notice and social media Twitter.

Bill Reiss, Environmental Engineer at DAQ, explained that staff is preparing the PM_{2.5} state implementation plans (SIPs) for each of the nonattainment areas to be presented for proposal at the September Board meeting. If approved, the SIPs will go out for a 30-day public comment period with the goal of a October 1 start date. This will allow staff time to address comments and ultimately bring the SIPs to a December Board meeting for final adoption. We are still not modeling attainment and staff is looking for additional emission reductions including reasonable available control technology (RACT) of large stationary sources. In addition, there is the Subpart 4 issue which is a Court remand for EPA to revisit the actual implementation of the PM_{2.5} standards. With the Court remand in mind, DAQ is preparing what is called Subpart 1 SIPs with the understanding that the situation will need to be revisited in the context of Subpart 4 later on.

Lance Avey, Senior Modeler at DAQ, focused on explaining the new five year baseline design value window. He has been working with EPA to construct a new baseline design value for the 2008 to 2012 time frame to which he then explained in detail the four steps used for the model attainment test. For the 2008 to 2012 baseline design value, DAQ must use a 2010 emissions inventory. For future modeling the only thing that would change from the model attainment test is the emissions inventory. In addition, population growth projections, population data, and employment data are received from the Governor's Office of Management Budget. The vehicle miles traveled projections are received from the Metropolitan Planning Organizations. Currently, DAQ is using recent monitoring data which allows them to reestablish

the monitored design values for both of the nonattainment areas. Using this more recent monitored data DAQ is able to lower the assessment such that the emission reductions currently in the SIPs will get us close to the 35 microgram PM_{2.5} standard.

Marty Gray, Major New Source Review Section Manager at DAQ, explained the RACT process used by DAQ. Sources and emissions units in the nonattainment areas were identified and baseline emissions were established. Then emission units too small for RACT and technology infeasible controls were eliminated. Mr. Gray then went through the process of how controls were ranked by the amount of reduction of pollutants of interest, cost per ton, as well as other factors. The RACT development process identified existing major sources in the nonattainment areas and DAQ requested these sources to submit a RACT analysis. The DAQ contracted with an independent engineering firm to research and evaluate the submissions by some of the sources. It was also noted that DAQ has been working with EPA throughout this process and EPA has also reviewed the contractor's analysis. DAQ is currently close to completing the RACT analysis. The DAQ and contractor reports will be completed by October 1 as part of the technical support document. The remainder of Mr. Gray presentation reviewed individual information on several major sources reviewed for RACT analysis.



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UTAH AIR QUALITY BOARD MEETING

August 7, 2013 – 1:30 p.m.
195 North 1950 West, Room 1015
Salt Lake City, Utah 84116

DRAFT MINUTES

I. Call-to-Order

Steve Sands called the meeting to order at 1:33 p.m.

Board members present: Kathy Van Dame, Craig Petersen, Steve Sands, Kerry Kelly, Robert Paine, Michael Smith, Karma Thomson, and Tammie Lucero

Excused: Amanda Smith

Executive Secretary: Bryce Bird

II. Date of the Next Air Quality Board Meeting: September 11, 2013

Division staff requested the September Board meeting be moved to the second week in September to allow extra time to prepare a complete draft State Implementation Plan (SIP) for proposal to the Board. The Board agreed and the next meeting will be September 11, 2013, at 9:00 a.m.

III. Approval of the Minutes for July 3, 2013, Board Meeting.

- Kathy Van Dame moved to approve the minutes as submitted to the Board. Tammie Lucero seconded. The Board approved unanimously.

IV. Final Adoption: R307-210-2. Oil and Gas Sector: New Source Performance Standards; and R307-214-3. Oil and Gas Sector: National Emission Standards for Hazardous Air Pollutants. Presented by Mark Berger.

Mark Berger, Environmental Planning Consultant at DAQ, stated that on May 1, 2013, the Board proposed to incorporate by reference new source performance standards and national emission standards for hazardous air pollutants for the oil and gas sector that had been adopted by EPA on August 12, 2012. A public comment period was held from June 1 to July 1, 2013. No comments were received on the proposal and no hearing was requested. Staff recommends the Board adopt R307-210-2, Oil and Gas Sector: New Source Performance Standards, and R307-214-3, Oil and Gas Sector: National Emission Standards for Hazardous Air Pollutants, as proposed.

In response to questions, staff responded that these rules are already in effect at a federal level and the final adoption of the incorporation by reference would then make the rules enforceable at the state level. These rules have no impact on sources that are subject to these rules because the rules have been in place since August 2012 at the federal level. This will make any potential compliance actions more straightforward and enforceable by state inspectors rather than referring the action to the federal government. In addition, there would be no impact to sources on the determination of offset credits because the federal rule has been in place since August 2012.

Public comment from Uintah County Commissioner Mike McKee was introduced. Commissioner McKee had concerns for those living in areas where the economy is affected by the oil and gas industry. He commented that if these rules are adopted it would be difficult for companies to get credit for emission reductions, which may be counterproductive to the overall goal of reducing emissions. He requests that the Board postpone a vote on this item for at least a month to have more discussion with staff so the Board, industry, and the public fully understand the impacts.

In further discussion staff stated this was significant rulemaking on the federal level and adopting them on the state level is more procedural and that there would be no problem with delaying a vote at this time. It was recommended that before the Board make these rules enforceable on the state level, it would be helpful to have more information on what the impacts will be to the industry through a summary for the Board to review.

- Tammie Lucero motioned that the Board table this item pending additional summary information for Board review
. Craig Petersen seconded. The motion carried to approve with a vote of seven in favor (K. Van Dame, S. Sands, K. Kelly, K. Thomson, T. Lucero, R. Paine, and C. Petersen) and one opposed (M. Smith).

V. Final Adoption: R307-101-3. General Requirements. Version of Code of Federal Regulations Incorporated by Reference. Presented by Mark Berger.

Mark Berger, Environmental Planning Consultant at DAQ, stated on May 1, 2013, the Board proposed R307-101-3, General Requirements, Version of Code of Federal Regulations Incorporated by Reference, for public comment. A public comment period was held from June 1 to July 1, 2013, and no comments were received and no hearing was requested. This amendment incorporates by reference the most recent version of the Code of Federal Regulations (CFR) into the Air Quality Rules. This allows rules that reference the CFR version as incorporated in R307-101-3 to update the incorporation date with only one rule amendment. Staff recommends the Board adopt R307-101-3 as proposed.

- Craig Petersen moved that the Board adopt R307-101-3. Robert Paine seconded. The Board unanimously approved.

VI. Five-Year Reviews: R307-107. General Requirements: Breakdowns; and R307-123. General Requirements: Clean Fuels and Vehicle Technology Grant and Loan Program. Presented by Mark Berger.

Mark Berger, Environmental Planning Consultant at DAQ, stated that Utah Code Title 63G-3-305 requires that each agency review each of its rules every five years to justify that it is required and that there is statute that gives authority to the Board to have that rule. DAQ completed the five year review for rules R307-107 and R307-123. This five year review process is not a time to

revise or amend a rule but only to verify that a rule is still necessary and allowed under state and federal statute. Staff recommends the Board continue these rules by approving the five-year notice of review and statement of continuation forms.

In response to questions from the Board staff responded there have been no issues with the R307-107 since it was finalized last year. Modifying a rule does not necessarily reset the five year review clock. In the past staff has done a modification and five year review of a rule at the same time but that is not always the case. Finally, at the request of the Board, staff will add lines to the compliance activities memorandum to include the total number of breakdown reports received and breakdowns resulting in compliance actions.

- Kathy Van Dame moved that the Board approve the five-year review of R307-107 and R307-123. Tammie Lucero seconded. The Board approved unanimously.

VII. Propose for Public Comment: Amend State Implementation Plan, Control Measures for Area and Point Sources, Fine Particulate Matter, PM_{2.5} SIP for the Logan, UT-ID Nonattainment Area, Section IX, Part A.23. Presented by Bill Reiss.

Bill Reiss, Environmental Engineer at DAQ, stated that the state implementation plan (SIP) for Cache Valley was adopted December 2012 with a placeholder for a motor vehicle emission budget for direct PM_{2.5}. Budgets in that SIP were established for both nitrogen oxides (NO_x) and volatile organic compounds (VOCs), each having been identified as a plan precursor to PM_{2.5} and therefore warranting control. However, additional time was needed to determine as per the conformity rule whether it would be necessary to include a budget for direct PM_{2.5}. Direct PM_{2.5} is actually a combination of tailpipe PM_{2.5} plus brake-wear plus tire-wear. It doesn't include the re-entrained road dust that kicks up from the tires. Work has now been completed on this and the result is that these emissions cannot be considered insignificant. Therefore a budget is necessary and staff is recommending the SIP be amended to include a budget of 0.33 tons per day for direct PM_{2.5} in 2014 and years thereafter. Staff is also proposing to include a trading mechanism for years beyond 2014 which is the last year of our air quality SIP conformity findings that identify more direct PM_{2.5} than the 0.33 tons per year stated. This is similar to a trading mechanism that was adopted into the Utah Air Conservation Rules for PM₁₀ years ago and it provides the Cache Metropolitan Planning Organization (MPO) the flexibility to proceed with its planning for the future. The trading mechanism in this proposal is the result of extensive work between DAQ, the EPA, and the Cache MPO. All parties are comfortable with releasing this now for public comment. The approach we have is similar to what has been approved by the EPA in California's PM_{2.5} SIP for the South Coast Air Quality Management District. As it outlines the details, the underage with respect to the budgets of NO_x and VOC would need to be sufficient to compensate for the overage in direct PM_{2.5} exchange rates that are established by the air quality model. This mechanism basically assumes that any of these trades would be neutral with respect to the air quality and the concentrations of PM_{2.5}. These trading ratios are identified in the proposed SIP as 14.65 to 1 for NO_x and 29.98 to 1 for VOC. Staff recommends the Board approve the proposed amendment to the SIP Section IX.A.23 for public comment.

In discussion with the Board, staff responded that the ratios for NO_x and VOC are determined by the air quality model and in this case are specific to the Cache Valley/Logan nonattainment area. Also, the ratios for NO_x and VOC were determined through the air quality model with regard to the chemistry occurring in the atmosphere. The budgets are the numbers DAQ used in the inventory in predicting attainment of the standard in Cache Valley for 2014. The numbers were made by the Cache MPO for that area while considering travel demand, patterns, and using the motor vehicle emissions simulator (MOVES) model to assign what those emissions would be.

- Craig Petersen moved to propose for public comment the amended State Implementation Plan, Control Measures for Area and Point Sources, Fine Particulate Matter, PM_{2.5} SIP for the Logan, UT-ID Nonattainment Area, Section IX, Part A.23. Kerry Kelly seconded. The Board approved unanimously.

VIII. Propose for Public Comment: Amend State Implementation Plan Section X, Vehicle Inspection and Maintenance Program, Part F, Cache County. Presented by Mat Carlile.

Mat Carlile, Environmental Planning Consultant at DAQ, stated that Cache County is required under Section X, Part F to implement an inspection and maintenance (I/M) program. This program will exempt vehicles less than six years old. The light duty vehicles, 1996 or newer, will undergo a bi-annual onboard diagnostic (OBD) inspection. Vehicles 1995 and older will be subject to an annual two-speed idle test. Staff recommends the Board propose the amendments to Section X, Vehicle Inspection and Maintenance Program, Part F, Cache County for public comment.

In discussion with the Board, it was stated that Cache County has already approved ordinance to implement an I/M program in Cache County. This item before the Board is to approve whether to include Cache's I/M program into the PM_{2.5} SIP and not to approve the program requirements. Also, the minimum amount a vehicle owner must spend to qualify for a waiver, if a vehicle fails an emissions inspection, varies by county.

- Robert Paine moved that the Board propose for public comment the amended State Implementation Plan Section X, Vehicle Inspection and Maintenance Program, Part F, Cache County. Karma Thomson seconded. The Board approved unanimously.

IX. Propose for Public Comment: Amend R307-110-10. Section IX, Control Measures for Area and Point Sources, Part A, Fine Particulate Matter; and R307-110-36. Section X, Vehicle Inspection and Maintenance Program, Part F, Cache County. Presented by Mark Berger.

Mark Berger, Environmental Planning Consultant at DAQ, stated the Board proposed for public comment amendments to SIP Section X, Part F and Section IX, Part A.23. When sections of the SIP are amended by the Board, the rule that incorporates those sections of the SIP must be amended to incorporate the updated version of the SIP into the rules. Staff recommends that the Board propose for public comment R307-110-10 and R307-110-36 to incorporate the most recent versions of SIP Section X, Part F and SIP Section IX, Part A into the Air Quality Rules.

In response to questions from the Board, staff responded that these rules, upon approval, would be enforceable on the state level once they are incorporated into the rules, but they are not federally enforceable until EPA approves the SIP.

- Craig Petersen moved that the Board propose for public comment the amendments to R307-110-10 Section IX and R307-110-36 Section X. Robert Paine seconded. The Board approved unanimously.

X. Informational Items.

A. PM_{2.5} State Implementation Plan Update and Discussion. Presented by Bill Reiss.

Bill Reiss, Environmental Engineer at DAQ, updated that DAQ intends to bring draft SIPs for public review at the September meeting. Staff found a path forward regarding the 5

microgram attainment gap which involved a reassessment of the monitored design value for each of the two nonattainment areas using more current data for 2011 and 2012. Also, Subpart 4 is a Court remand to EPA to revisit the actual implementation of the PM_{2.5} standards which holds us, as writers of the SIP, to a different standard as the plans are put together. What is being prepared for September is what is called a Subpart 1 SIP with the understanding that situation will need to be revisited in the context of Subpart 4 later on.

Administratively, the September meeting was moved back a week so that staff could prepare the documents for a public comment period begin date of October 1. This will allow staff to proceed in December with the SIP for final adoption and to give EPA a Subpart 1 SIP no more than one year later than the original statutory due date. In preparation, staff will have to run through final modeling results. The model results will take into consideration the new design values and some new inventories that coincide with the middle of the five year span that determines those design values. Included in the final modeling numbers will be the reasonable available control technology (RACT) analysis for large industrial sources. Finally, the results will be prepared into a SIP narrative describing the numbers and the model results that are included.

- B. Air Toxics. Presented by Robert Ford.**
- C. Compliance. Presented by Jay Morris and Harold Burge.**
- D. Monitoring. Presented by Bo Call.**

Bo Call updated the Board on the monitoring graphs noting there were spikes of particulate matter on July 4 due to firework activities. It was noted that in the past EPA generally agrees with exceptional events due to firework activities. There were exceedances in ozone at several monitors in July. These exceedances will affect the three-year averaging period because the year with the oldest data gets rolled off and the data for the new year is averaged in.

- E. Other Items to be Brought Before the Board.**

Mr. Bird updated that Stericycle was given an extension to their timeline for challenging Utah's notice of violation. Their responsibility for compliance is still in place and DAQ has also started settlement discussions with Stericycle.

Meeting adjourned at 2:48 p.m.



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DAQ-061-13

MEMORANDUM

TO: Air Quality Board

THROUGH: Bryce C. Bird, Executive Secretary

FROM: Colleen Delaney, Environmental Scientist

DATE: July 29, 2013

SUBJECT: FINAL ADOPTION: R307-210-2. Oil and Gas Sector: New Source Performance Standards; and R307-214-3. Oil and Gas Sector: National Emission Standards for Hazardous Air Pollutants.

On May 1, 2013, the Board proposed to incorporate by reference New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants for the oil and gas sector that had been adopted by EPA on August 12, 2012. No comments were received on the proposal and no hearings were requested.

Staff Recommendation: Staff recommends the Board adopt R307-210-2, Oil and Gas Sector: New Source Performance Standards; and R307-214-3, Oil and Gas Sector: National Emission Standards for Hazardous Pollutants, as proposed.

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

2 **R307-210. Stationary Source.**

3 **R307-210-2. Oil and Gas Sector: New Source Performance**
4 **Standards.**

5 The "Oil and Gas Sector: New Source Performance Standards"
6 in 40 CFR 60.17, 40 CFR Part 60 Subpart KKK, 40 CFR Part 60
7 Subpart LLL, and 40 CFR Part 60 Subpart OOOO promulgated by the
8 Environmental Protection Agency on August 16, 2012 in 77 FR
9 49490 are hereby incorporated by reference.

10

11 **KEY: air pollution, stationary sources, new source review**

12 **Date of Enactment or Last Substantive Amendment: 2013**

13 **Notice of Continuation: April 6, 2011**

14 **Authorizing, and Implemented or Interpreted Law: 19-2-104(3)(q);**

15 **19-2-108**

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

2 **R307-214. National Emission Standards for Hazardous Air**
3 **Pollutants.**

4 **R307-214-3. Oil and Gas Sector: National Emission Standards**
5 **for Hazardous Air Pollutants.**

6 Revisions to the "Oil and Gas Sector: National Emission
7 Standards for Hazardous Air Pollutants" in 40 CFR 63.14, 40 CFR
8 Part 63 Subpart HH, and 40 CFR Part 63 Subpart HHH promulgated
9 by the Environmental Protection Agency on August 16, 2012 in 77
10 FR 49490 are hereby incorporated by reference.

11

12 **KEY: air pollution, hazardous air pollutant, MACT**

13 **Date of Enactment or Last Substantive Amendment: 2013**

14 **Notice of Continuation: November 8, 2012**

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



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DAQ-059-13

MEMORANDUM

TO: Air Quality Board

THROUGH: Bryce C. Bird, Executive Secretary

FROM: Mark Berger, Environmental Planning Consultant

DATE: July 17, 2013

SUBJECT: FINAL ADOPTION: R307-101-3. General Requirements: Version of Code of Federal Regulations Incorporated by Reference.

On May 1, 2013, the Board proposed R307-101-3 for public comment. No comments were received and no hearing was requested.

R307-101-3 incorporates by reference the version of the Code of Federal Regulations (CFR) used in many of the rules adopted by the Air Quality Board. This allows rules that reference the CFR version as incorporated in R307-101-3 to update the incorporation date with only one rule amendment. The version of the CFR for environmental regulations has been updated from July 1, 2011, to July 1, 2012; therefore, it is necessary to amend R307-101-3.

Attached is a list of changes to 40 CFR from July 1, 2011, to June 30, 2012, that affect rules that reference R307-101-3.

Staff Recommendation: Staff recommends the Board adopt R307-101-3 as proposed.

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

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

3 **R307-101-3. Version of Code of Federal Regulations Incorporated by**
4 **Reference.**

5 Except as specifically identified in an individual rule, the
6 version of the Code of Federal Regulations (CFR) incorporated
7 throughout R307 is dated July 1, 2012.

8

9 **KEY: air pollution, definitions**

10 **Date of Enactment or Last Substantive Amendment: November 8, 2012**

11 **Notice of Continuation: July 2, 2009**

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

Rule	CFR	Summary of Changes
R307-101-2 voc	40 CFR 51.100(s)(1)	<p>Vol. 77, No. 121, Pg. 37610-37614 [Docket ID No. EPA-HQ-OAR-2010-0605; FRL-9679-2]</p> <p>This action revised the EPA's definition of volatile organic compounds (VOCs) under the Clean Air Act (CAA). This revision added trans-1,3,3,3-tetrafluoropropene (also known as HFO-1234ze) to the list of compounds excluded from the definition of VOC on the basis that this compound makes a negligible contribution to tropospheric ozone formation. As a result, if you are subject to certain federal regulations limiting emissions of VOCs, your emissions of HFO-1234ze may not be regulated for some purposes.</p>
R307-115	40 CFR Part 93, Subpart B	<p>Vol. 77, No. 124, Pg. 38199 [Docket ID No. FR DOC # 2012-15869]</p> <p>In Title 40 of the Code of Federal Regulations, parts 87 to 95, revised as of July 1, 2011, on page 579, in Sec. 93.118, paragraph (e)(2) was corrected to read as follows:</p> <p>Sec. 93.118 Criteria and procedures: Motor vehicle emissions budget.</p> <p>* * * * *</p> <p>(e) * * *</p> <p>* * * * *</p> <p>(2) If EPA has not declared an implementation plan submission's motor vehicle emissions budget(s) adequate for transportation conformity purposes, the budget(s) shall not be used to satisfy the requirements of this section. Consistency with the previously established motor vehicle emissions budget(s) must be demonstrated. If there are no previously approved implementation plans or implementation plan submissions with adequate motor vehicle emissions budgets, the interim emissions tests required by Sec. 93.119 must be satisfied.</p>
R307-221-2	Definitions 40 CFR Part 60.751	No Change
R307-221-3	40 CFR 60.752 through 60.759, including Appendix A	No Change
R307-221-4	Section 40 CFR Part 60.18	No Change
R307-222-2	40 CFR 60.31e	No Change
R307-222-2	40 CFR 60.51c	No Change
R307-222-3	40 CFR 60.52c(b), 40 CFR 60.53c, 40 CFR 60.55c, 40 CFR 60.58c(b) excluding (b)(2)(ii) and (b)(7), and 40 CFR 60.58c(c) through (f)	No Change

Rule	CFR	Summary of Changes
R307-222-4	Table 1 in 40 CFR Part 60, Subpart Ce, 40 CFR 60.57c, and 40 CFR 60.56c excluding 56c(b)(12) and 56c(c)(3)	No Change
R307-222-5(2)	Table 2 in 40 CFR Part 60, Subpart Ce (40CFR60.30e-39e)	No Change
R307-222-5(3)	40 CFR 60.36e(a)(1) and (a)(2)	No Change
R307-222-5(4)	Testing requirements of 40 CFR 60.37e(b)(1) through (b)(5)	No Change
R307-222-5(5)	40 CFR 60.37e(d)(1) through (d)(3)	No Change
R307-222-5(6)	40 CFR 60.38e(b)(1) and (b)(2)	No Change
R307-223-1(2)	40 CFR 60.1555(a) through (k)	No Change
R307-223-2(1)	40 CFR 60.1940	No Change
R307-223-2(2)	Equations found in 40 CFR 60.1935	No Change
R307-223-3(1)	40 CFR 60.1540 and 60.1585 through 60.1905, and with the requirements and schedules set forth in Tables 2 through 8 that are found following 40 CFR 60.1940 for operator training and certification	No Change
R307-224-2	40 CFR Part 60, subpart HHHH, Sections 60.4101 through 60.4124; (b) Sections 60.4142 paragraph (c)(2) through paragraph (c)(4); (c) Sections 60.4150 through 60.4176.	No Change

Rule	CFR	Summary of Changes
R307-310-2	Definitions contained in 40 CFR 93.101	<p>Vol. 77, No. 50, Pg. 14979-14988 [Docket ID No. EPA-HQ-OAR-2009-0128; FRL-9637-3]</p> <p>EPA amended the transportation conformity rule to finalize provisions that were proposed on August 13, 2010. These amendments restructured several sections of the transportation conformity rule so that they applied to any new or revised National Ambient Air Quality Standards. EPA also finalized several clarifications to improve implementation of the rule.</p> <p>The Clean Air Act requires federally supported transportation plans, transportation improvement programs, and projects to be consistent with (conform to) the purpose of the state air quality implementation plan. EPA consulted with the U.S. Department of Transportation and they concur in the development of this final rule.</p> <p>This final rule removed the definitions for “1-hour ozone NAAQS”, “8-hour ozone NAAQS”, “24-hour PM10 NAAQS”, “1997 PM2.5 NAAQS”, “2006 PM2.5 NAAQS”, and “Annual PM10 NAAQS” from 40 CFR 93.101. These definitions are no longer necessary because the updated regulatory text for sections 93.109 and 93.119 \8\ applies to any and all NAAQS of those pollutants for which conformity applies.</p>
R307-417-1	40 CFR Part 72	<p>Vol. 76, No. 156, Pg 50129-50133, Friday, August 12, 2011 [EPA-HQ-OAR-2009-0837; FRL-9450-7]</p> <p>EPA took direct final action on corrections to the Protocol Gas Verification Program and Minimum Competency Requirements for Air Emission Testing final rule, which was published in the Federal Register of March 28, 2011 (76 FR 17288). The final rule also made a number of other changes to the regulations. After the final rule was published, it was brought to EPA’s attention that there were some incorrect and incomplete statements in the preamble, some potentially confusing statements in a paragraph of the rule text, and the title of Appendix D to Part 75 was inadvertently changed and is incorrect.</p> <p>Vol. 76, No. 152, Pg 48207-48483 [Docket Id NO. EPA-HQ-OAR-2009-0491; FRL-9436-8; FRL-9436-8]</p> <p>In this action, EPA limited the interstate transport of emissions of nitrogen oxides (NOX) and sulfur dioxide (SO2) that contribute to harmful levels of fine particle matter (PM2.5) and ozone in downwind states. EPA identified emissions within 27 states in the eastern United States that significantly affect the ability of downwind states to attain and maintain compliance with the 1997 and 2006 fine particulate matter national ambient air quality standards (NAAQS) and the 1997 ozone NAAQS. Also, EPA limited these emissions through Federal Implementation Plans (FIPs) that regulate electric generating units (EGUs) in the 27 states.</p> <p>-The authority citation for part 72 was revised to read as follows: Authority: 42 U.S.C. 7401, 7403, 7410, 7411, 7426, 7601, et seq.</p> <p>-Section 72.2 was amended by removing the definition for “interested person.”</p>

Rule	CFR	Summary of Changes
R307-417-2	40 CFR Part 75	<p>Vol. 77, No. 11, Pg 2456-2466/Wednesday, January 18, 2012 [Docket ID No. EPA-HQ-OPPT-2010-0518; FRL-8880-4]</p> <p>EPA promulgated this final rule to incorporate the most recent versions of ASTM International standards into EPA regulations that provide flexibility to use alternatives to mercury-containing industrial thermometers. This final rule allows the use of such alternatives in certain field and laboratory applications previously impermissible as part of compliance with EPA regulations. EPA believes the older embedded ASTM standards unnecessarily impeded the use of effective, comparable, and available alternatives to mercury-containing industrial thermometers. Due to mercury's high toxicity, EPA sought to reduce potential mercury exposures to humans and the environment by reducing the overall use of mercury-containing products, including mercury-containing industrial thermometers.</p> <p>Vol. 76, No. 156, Pg 50129/Friday, August 12, 2011 [FR Doc No: EPA-HQ-OAR-2009-0837; FRL-9450-7]</p> <p>EPA took direct final action on corrections to the Protocol Gas Verification Program and Minimum Competency Requirements for Air Emission Testing final rule, which was published in the Federal Register of March 28, 2011 (76 FR 17288). The final rule also made a number of other changes to the regulations. After the final rule was published, it was brought to EPA's attention that there are some incorrect and incomplete statements in the preamble, some potentially confusing statements in a paragraph of the rule text, and the title of Appendix D to Part 75 was inadvertently changed and is incorrect.</p>
R307-417-3	40 CFR Part 76	None.
R307-801-4	40 CFR 763 Subpart E, and appendices	<p>Vol. 76, No. 155, Pg 49669-49674, Thursday, August 11, 2011 [FR Doc No: 2011-20035]</p> <p>The EPA amended regulations to reflect a change in address for EPA's Region I office. This action was editorial in nature and was intended to provide accuracy and clarity to the agency's regulations.</p> <p>PART 763--[AMENDED]</p> <p>Appendix C was amended by revising the address for Region I under II.C.3. to read as follows:</p> <p>Appendix C to Subpart E of Part 763--Asbestos Model Accreditation Plan * * * * * II. * * * C. * * * 3. * * *</p> <p>EPA, Region I, (OES05-1) Asbestos Coordinator, 5 Post Office Square--Suite 100, Boston, MA 02109-3912, (617) 918-1016.</p>

Rule	CFR	Summary of Changes
		<p>*****</p> <p>46. Appendix D was amended by revising the address for Region I to read as follows:</p> <p>Appendix D to Subpart E of Part 763--Transport and Disposal of Asbestos Waste *****</p> <p>Region I Asbestos NESHAPs Contact, Office of Environmental Stewardship, USEPA, Region I, 5 Post Office Square--Suite 100, Boston, MA 02109-3912, (617) 918-1551. *****</p>



State of Utah

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQ-060-13

MEMORANDUM

TO: Air Quality Board

THROUGH: Bryce C. Bird, Executive Secretary

FROM: Mark Berger, Environmental Planning Consultant

DATE: July 17, 2013

SUBJECT: Five-Year Reviews: R307-107. General Requirements: Breakdowns; and R307-123. General Requirements: Clean Fuels and Vehicle Technology Grant and Loan Program.

Utah Code Title 63G-3-305 requires each agency to review and justify each of its rules within five years of a rule's original effective date or within five years of the filing of the last five-year review. This review process is not a time to revise or amend the rules, but only to verify that the rule is still necessary and allowed under state and federal statute. As part of this process, we are required to identify any comments which may have been received regarding changes to the rules since the last five-year review. This process is not the time to revisit those comments or to respond to them.

DAQ has completed five-year reviews for the following rules:

R307-107. General Requirements: Breakdowns.

R307-123. General Requirements: Clean Fuels and Vehicle Technology Grant and Loan Program.

The results of these reviews are found in the attached Five-Year Notice of Review and Statement of Continuation forms.

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

R307. Environmental Quality, Air Quality.**R307-107. General Requirements: Breakdowns.****R307-107-1. Applicability and Timing.**

(1) The owner or operator of a source shall report breakdowns to the director within 24 hours of the incident via telephone, electronic mail, fax, or other similar method.

(2) A detailed written description of the circumstance of the incident as described in R307-107-2, including a corrective program directed at preventing future such incidents, shall be submitted within 14 days of the onset of the incident.

(3) For those breakdowns involving only emissions that are monitored in accordance with R307-170, the reporting requirements of R307-170 shall satisfy the reporting deadlines of R307-107-1(1) and (2). In all other respects, the requirements in R307-107-1(2) and R307-107-2 shall be considered to apply in addition to the requirements of R307-170.

R307-107-2. Reporting.

(1) The breakdown incident report shall include the cause and nature of the event, estimated quantity of emissions (total and excess), time of emissions and any relevant evidence, including, but not limited to, evidence that:

(a) There was an equipment malfunction beyond the reasonable control of the owner or operator;

(b) The excess emissions could not have been avoided by better operation, maintenance or improved design of the malfunctioning component;

(c) To the maximum extent practicable, the source maintained and operated the air pollution control equipment and process equipment in a manner consistent with good practice for minimizing emissions, including minimizing any bypass emissions;

(d) Any necessary repairs were made as quickly as practicable, using off-shift labor and overtime as needed and as possible;

(e) All practicable steps were taken to minimize the potential impact of the excess emissions on ambient air quality; and

(f) The excess emissions are not part of a recurring pattern that may have been caused by inadequate operation or maintenance, or inadequate design of the malfunctioning component.

(2) The burden of proof is on the owner or operator of the source to provide sufficient information to demonstrate the elements listed in R307-107-2(1).

R307-107-3. Enforcement Discretion.

The director will evaluate, on a case-by-case basis, the information submitted in R307-107-1 and 2 to determine whether to pursue enforcement action.

KEY: air pollution, unavoidable breakdown, excess emissions

Date of Enactment or Last Substantive Amendment: July 31, 2012

Notice of Continuation: September 4, 2008

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

FIVE-YEAR NOTICE OF REVIEW AND STATEMENT OF CONTINUATION

Rule Information

DAR file no: _____ Date filed: _____
 State Admin Rule Filing Key: 154327
 Utah Admin. Code ref. (R no.): R307-107

Agency Information

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

Contact person(s):

Name:	Phone:	Fax:	E-mail:	Remove:
Mark Berger	801-536-4000	801-536-0085	mberger@utah.gov	

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

Rule Title

2. Title of rule or section (catchline):
 General Requirements: Breakdowns.

Rule Provisions

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)(a) allows the Air Quality Board to make rules "...regarding the control, abatement, and prevention of air pollution from all sources..." and Subsection 19-2-104(1)(c)(iii) allows the Board to write rules that require persons engaged in operation that result in air pollution to provide access to records relating to emissions that cause or contribute to air pollution. Thus, the Board may make rules such as Rule R307-107 that reduce the incidence of breakdowns that contribute to air pollution, and reduce the emissions that occur during breakdowns.

Content Summary

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:
 R307-107 was amended one time since the last five-year review. In 2012, the rule was repealed and reenacted. During the public comment period, DAQ received multiple comments. Twelve comments were received from the general public that supported the proposed rule. Six community organizations submitted comments, all in favor of the proposed rule, but several submitted suggested changes to the proposed rule, such as amending definitions and adding language. DAQ received five comments from industry and trade associations, the majority of which did not favor the proposed rulemaking. These comments made suggestions such as removing the rule from the SIP, not modeling the rule after Wyoming's rule, and keeping the two-hour threshold reporting requirement.

Justification Information

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

Typically, startups and shutdowns in industrial operations cause more emissions of air pollutants than are emitted during normal operations. Breakdowns in processing equipment can cause excess emissions. The rule is needed to ensure that excess emissions are promptly reported so that the Division of Air Quality can take action to protect public health and require that the operator do everything possible to reduce excess emissions. In addition this rule is part of Utah's State Implementation Plan, and cannot be deleted without EPA approval.

Indexing Information

6. 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, unavoidable breakdown, excess emissions

File Information

7. 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 Section 63G-3-305. Incomplete forms will be returned to the agency for completion, possibly delaying the effective date.

Agency Authorization

Agency head or designee, and title: Bryce Bird
Director

Date (mm/dd/yyyy): 07/09/2013

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

2 **R307-123. General Requirements: Clean Fuels and Vehicle Technology**
3 **Grant and Loan Program.**

4 **R307-123-1. Authorization and Purpose.**

5 This rule is authorized by Section 19-1-405, which establishes
6 criteria and definitions used to determine eligibility for use of
7 the Clean Fuels and Vehicle Technology Fund created in Section
8 19-1-403. R307-123 establishes procedures to provide proof of
9 purchase to the Board for an OEM vehicle, or the conversion or retrofit
10 of a vehicle for which a grant or loan made with the monies available
11 in the Fund is allowed under Subsection 19-1-403(2)(a). Eligible
12 technologies are required to meet the criteria and follow the
13 procedures established in R305-4.
14

15 **R307-123-2. Definitions.**

16 Definitions. The following additional definitions apply to
17 R307-123.

18 "Certified by the director" means that:

19 (1) A motor vehicle on which conversion equipment has been
20 installed meets the criteria in Subsection 19-1-405(1)(a) and
21 demonstrates a reduction in emissions as defined in Subsection
22 19-1-405(2); or

23 (2) A motor vehicle on which a retrofit has been installed meets
24 the following criteria:

25 (a) the motor vehicle's emissions of regulated pollutants, when
26 operating with the retrofit equipment, is less than the emissions
27 were before the installation of the retrofit equipment; and

28 (b) a reduction in emissions under Subsection R307-123-2(2)(a) is
29 demonstrated by:

30 (i) certification of the retrofit by the federal EPA or by a
31 state whose certification standards are recognized by the Board; or

32 (ii) any other test or standard recognized by the Board.

33 "Clean fuel" means clean fuel as defined in Subsection
34 19-1-402(1).

35 "Clean fuel vehicle" means clean fuel vehicle as defined in
36 Subsection 19-1-402(2).

37 "Conversion equipment" means a package which may include fuel,
38 ignition, emissions control, and engine components that are modified,
39 removed, or added to a motor vehicle or special mobile equipment to
40 make that vehicle or equipment eligible.

41 "Manufacturer's Statement of Origin" means a certificate showing
42 the original transfer of a new motor vehicle from the manufacturer
43 to the original purchaser.

44 "Original equipment manufacturer (OEM) vehicle" means OEM
45 vehicle as defined in Subsection 19-1-402(8).

46 "Retrofit" means retrofit as defined in Subsection 19-1-402(11).

47 "Retrofit equipment" means a diesel oxidation catalyst, a diesel
48 particulate filter, or a closed crankcase filtration system, that
49 has been approved for use in engine retrofit programs by the federal
50 EPA or by a state whose testing protocols are recognized by the Board.
51

R307-123-3. Demonstration of Eligibility for OEM Vehicles.

To demonstrate that a vehicle is eligible, proof of purchase shall be made by submitting the following documentation to the director:

(1)(a) A copy of the Manufacturer's Statement of Origin or equivalent manufacturer's documentation showing that the vehicle is an OEM vehicle; or

(b) a signed statement by an Automotive Service Excellence (ASE) certified technician that includes the vehicle identification number (VIN) and states that the vehicle is an OEM vehicle;

(2) An original or copy of the purchase order, customer invoice, or receipt including the VIN; and

(3) A copy of the current Utah vehicle registration.

R307-123-4. Demonstration of Eligibility for Vehicles Converted to Clean Fuels.

To demonstrate that a conversion of a motor vehicle fueled by clean fuel is eligible, proof of purchase shall be made by submitting the following documentation to the director:

(1) the VIN;

(2) the fuel type before conversion;

(3) the fuel type after conversion;

(4)(a) If the vehicle is registered within a county with an inspection and maintenance (I/M) program, a copy of the vehicle inspection report from an approved station showing that the converted clean fuel vehicle meets all county emissions requirements for all installed fuel systems; or

(b) in all other areas of the State a signed statement by an ASE certified technician that includes the VIN and states that the conversion is functional;

(5) each of the following:

(a) the conversion equipment manufacturer,

(b) the conversion equipment model number,

(c) the date of the conversion, and

(d) the name, address, and phone number of the person that converted the vehicle;

(6) proof that the conversion is certified by the director;

(7) an original or copy of the purchase order, customer invoice, or receipt; and

(8) a copy of the current Utah vehicle registration, which shows that the vehicle is registered in the applicant's name.

R307-123-5. Demonstration of Eligibility for Retrofitted Vehicles.

To demonstrate that a retrofit of a motor vehicle is eligible, proof of purchase shall be made by submitting the following documentation to the director:

(1) the VIN;

(2) each of the following:

(a) the retrofit equipment manufacturer,

(b) the retrofit equipment model number,

(c) the date of the retrofit, and

1 (d) the name, address, and phone number of the person that
2 retrofitted the vehicle;

3 (5) proof that the retrofit is certified by the director;

4 (6) an original or copy of the purchase order, customer invoice,
5 or receipt; and

6 (7) a copy of the current Utah vehicle registration.

7
8 **KEY: air pollution, alternative fuels, grants and loans, motor**
9 **vehicles**

10 **Date of Enactment or Last Substantive Amendment: November 8, 2012**

11 **Authorizing, and Implemented or Interpreted Law: 19-2-104; 19-1-401;**
12 **59-7-605; 59-10-1009**

FIVE-YEAR NOTICE OF REVIEW AND STATEMENT OF CONTINUATION

Rule Information

DAR file no: _____ Date filed: _____
 State Admin Rule Filing Key: 154329
 Utah Admin. Code ref. (R no.): R307-123

Agency Information

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

Contact person(s):

Name:	Phone:	Fax:	E-mail:	Remove:
Mark Berger	801-536-4000	801-536-0085	mberger@utah.gov	

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

Rule Title

2. Title of rule or section (catchline):
 General Requirements: Clean Fuels and Vehicle Technology Grant and Loan Program.

Rule Provisions

3. A concise explanation of the particular statutory provisions under which the rule is enacted and how these provisions authorize or require the rule:
 The Clean Fuels and Vehicle Technology Program Act, Sections 19-1-401 through 19-1-405, creates the Clean Fuels and Vehicle Technology Fund in Section 19-1-403. Section 19-1-405 authorizes the Air Quality Board to make rules to establish state-wide eligibility requirements for technologies qualified to be awarded grant and loan monies from the Fund.

Content Summary

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:
 There have been no amendments to this rule since it was adopted in 2008. When the rule was first adopted, DAQ received comments recommending that the Board should extend the grant and loan program as well as the alternative fuel tax credits to include vehicles that have been granted testing exemptions from EPA and to allow the seller of a vehicle to capture the tax credit in the event the buyer of the vehicle is a non-taxpaying entity.

Justification Information

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 Air Quality Board created Rule R307-123 to specify the requirements of the program as outlined in 19-1-401 through 19-1-405. The rule defines certification criteria and proof of purchase requirements for eligible technology. R307-123 allows the DAQ to administer this program.

Indexing Information

6. 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, grants and loans, alternative fuels, motor vehicles

File Information

7. 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 Section 63G-3-305. Incomplete forms will be returned to the agency for completion, possibly delaying the effective date.

Agency Authorization

Agency head or designee, and title: Bryce Bird
Director

Date (mm/dd/yyyy): 07/09/2013



State of Utah

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQ-063-13

MEMORANDUM

TO: Air Quality Board

THROUGH: Bryce C. Bird, Executive Secretary

FROM: Bill Reiss, Environmental Engineer

DATE: July 29, 2013

SUBJECT: PROPOSE FOR PUBLIC COMMENT: Amend State Implementation Plan, Control Measures for Area and Point Sources, Fine Particulate Matter, PM_{2.5} SIP for the Logan, UT-ID Nonattainment Area, Section IX, Part A.23.

The PM_{2.5} State Implementation Plan (SIP) approved by the Board on December 5, 2012, included, in its transportation conformity section, an element that was identified as yet to be determined.

The requirement to include a mobile source emissions budget for direct PM_{2.5} is identified in 40 CFR 93.102 as somewhat discretionary. Direct PM_{2.5} includes brake-wear, tire-wear, and tailpipe emissions, but not re-entrained road dust. At the time the SIP was approved, neither EPA nor UDAQ was ready to conclude whether a budget for direct PM_{2.5} would be necessary.

The amendment proposed to Chapter 7 of SIP Section IX, Part A.23 resolves this issue by:

- Establishing a motor vehicle emission budget (MVEB) for on-road direct PM_{2.5} emissions; and
- Establishing a trading mechanism to allow future increases in on-road direct PM_{2.5} emissions to be offset by future decreases in plan precursor emissions from on-road mobile sources at appropriate ratios established by the air quality model.

Mobile source emissions budgets were already established by the SIP for NO_x and VOC, each identified as a plan precursor to PM_{2.5}.

Changes to Chapter 7 of SIP Section IX, Part A.23 are shown in the attachment to this memorandum.

Staff Recommendation: Staff recommends the Board propose the attached revisions to Chapter 7 of SIP Section IX, Part A.23 for public comment.

1 **Chapter 7 – TRANSPORTATION CONFORMITY**

2

3 **7.1 Introduction**

4 The federal Clean Air Act (CAA) requires that transportation plans and programs within the Logan, UT-ID
5 PM_{2.5} nonattainment area conform to the air quality plans in the region prior to being approved by the
6 Cache Metropolitan Planning Organization (CMPO). Demonstration of transportation conformity is a
7 condition to receive federal funding for transportation activities that are consistent with air quality goals
8 established in the Utah State Implementation Plan (SIP). The CAA regulates air pollutant emissions from
9 mobile sources by establishing motor vehicle emissions budgets in the SIP. Transportation conformity
10 requirements are intended to ensure that transportation activities do not interfere with air quality
11 progress. Conformity applies to on-road mobile source emissions from regional transportation plans
12 (RTPs), transportation improvement programs (TIPs), and projects funded or approved by the Federal
13 Highway Administration (FHWA) or the Federal Transit Administration (FTA) in areas that do not meet or
14 previously have not met the National Ambient Air Quality Standards (NAAQS) for ozone, carbon
15 monoxide, particulate matter less than ~~ten~~10 micrometers in diameter (PM₁₀[₄]), particulate matter 2.5
16 micrometers in diameter or less (PM_{2.5}), or nitrogen dioxide.

17 The Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFTEA-LU) and
18 section 176(c)(2)(A) of the CAA require that all regionally significant highway and transit projects in air
19 quality nonattainment areas be derived from a “conforming” transportation plan. Section 176(c) of the
20 CAA requires that transportation plans, programs, and projects conform to applicable air quality plans
21 before being approved by an MPO. Conformity to an implementation plan means that proposed
22 activities must not (1) cause or contribute to any new violation of any standard in any area, (2) increase
23 the frequency or severity of any existing violation of any standard in any area, or (3) delay timely
24 attainment of any standard or any required interim emission reductions or other milestones in any area.

25 The plans and programs produced by the transportation planning process of the CMPO are required to
26 conform to the on-road mobile source emissions budgets established in the SIP. Approval of conformity
27 is determined by the FHWA and FTA.

28

29 **7.2 Consultation**

30 The Interagency Consultation Team (ICT) is an air quality workgroup in Utah that makes technical and
31 policy recommendations regarding transportation conformity issues related to the SIP development and
32 transportation planning process. Section XII of the SIP established the ICT workgroup and defines the
33 roles and responsibilities of the participating agencies. Members of the ICT workgroup collaborated on
34 a regular basis during the development of the PM_{2.5} SIP. They also meet on a regular basis regarding

1 transportation conformity and air quality issues. The ICT workgroup is comprised of management and
2 technical staff members from the affected agencies associated directly with transportation conformity.

3 **ICT Workgroup Agencies**

- 4 • Utah Division of Air Quality (UDAQ)
- 5 • Metropolitan Planning Organizations MPOs
 - 6 ▪ CMPO
 - 7 ▪ Wasatch Front Regional Council
 - 8 ▪ Mountainland Association of Governments
- 9 • Utah Department of Transportation (UDOT)
- 10 • Utah Local Public Transit Agencies
- 11 • Federal Highway Administration (FHWA)
- 12 • Federal Transit Administration (FTA)
- 13 • U.S. Environmental Protection Agency (EPA)

14

15 **7.3 Regional Emission Analysis**

16 The regional emissions analysis is the primary component of transportation conformity and is
17 administered by the lead transportation agency located in the EPA designated air quality nonattainment
18 area. On December 2009, EPA designated the only multistate nonattainment area in the State of Utah
19 by declaring portions of Cache County, Utah and Franklin County, Idaho (Cache Valley) as a PM_{2.5}
20 nonattainment area. The responsible transportation planning organization for the Utah portion of the
21 multistate nonattainment area is covered by the CMPO while the Idaho portion is covered by the Idaho
22 Department of Transportation.

23 The motor vehicle emissions budget serves as a regulatory limit for on-road mobile source emissions.
24 Motor vehicle emissions limits are defined in 40 CFR 93.101 as "that portion of the total allowable
25 emissions defined in the submitted or approved control strategy implementation plan revision or
26 maintenance plan for a certain date for the purpose of meeting reasonable further progress milestones
27 or demonstrating attainment or maintenance of the NAAQS, for any criteria pollutant or its precursors,
28 allocated to highway and transit vehicle use and emissions." As a condition to receive federal
29 transportation funding, transportation plans, programs, and projects are required to meet those
30 emission budgets through strategies that increase the efficiency of the transportation system and
31 reduce motor vehicle use.

1 The conformity test consists of either an interim emissions test or a motor vehicle emissions budgets
2 test. The interim conformity test requirements apply until either EPA has declared the motor vehicle
3 emissions budgets adequate for transportation conformity purposes or until EPA approves the PM_{2.5} SIP.

4 **7.4 Interim PM_{2.5} Conformity Test**

5 The EPA interim conformity test for PM_{2.5} emissions requires that future nitrogen oxides (NO_x) and direct
6 PM_{2.5} emissions from RTPs, TIPs, and projects funded or approved by the FHWA or the FTA not exceed
7 2008 levels. Direct particulate emissions consist of particles emitted from vehicle exhaust (elemental
8 carbon, organic carbon, and SO₄) and brake and tire wear. Interim emissions budget tests performed by
9 the CMPO must include the whole multistate PM_{2.5} nonattainment area of Cache Valley, including
10 emissions estimates from Franklin County, Idaho. In the Transportation Conformity PM_{2.5} Components
11 section below, Cache County, Utah and Franklin County, Idaho have requested separate motor vehicle
12 emissions budgets for their respective areas; therefore, the budget listed only applies to the Cache
13 MPO. The Interim conformity test requirements apply until EPA has declared the motor vehicle
14 emissions budgets adequate for transportation conformity purposes or until it approves the PM_{2.5} SIP.

15

16 **7.5 Transportation PM_{2.5} Budget Test Requirements**

17 The CMPO collaborated with the ICT workgroup on interim conformity and SIP related issues prior to
18 receiving the official EPA designation status of nonattainment for PM_{2.5}. During the SIP development
19 process the CMPO coordinated with the ICT workgroup and developed PM_{2.5} SIP motor vehicle emissions
20 budgets using the latest planning assumptions and tools for traffic analysis and the EPA approved Motor
21 Vehicle Emission Simulator (MOVES) emissions model. Local MOVES modeling data inputs were
22 cooperatively developed by CMPO and the ICT workgroup using EPA recommended methods where
23 applicable.

24

25 **7.6 Transportation Conformity PM_{2.5} Components**

26 The transportation conformity requirements found in 40 CFR 93.102 require that the PM_{2.5} SIP include
27 motor vehicle emissions budgets for direct PM_{2.5}; motor vehicle emissions from tailpipe, brake and tire
28 wear; and emissions of nitrogen oxide (NO_x), a gaseous PM_{2.5} precursor. Because UDAQ has identified
29 volatile organic compounds (VOCs) as a PM_{2.5} precursor that significantly impact PM_{2.5} concentrations,
30 the SIP will need a VOC motor vehicle emissions budget for transportation conformity purposes. The
31 EPA conformity rule presumes that PM_{2.5} re-entrained road dust does not need to be included in the
32 interim conformity test or have an established motor vehicle emissions budget unless either the [§]state
33 or EPA decides that re-entrained road dust emissions are a significant contributor to the PM_{2.5}
34 nonattainment problem. The UDAQ conducted a re-entrained road dust study that concluded that PM_{2.5}
35 re-entrained road dust emissions are negligible in the Utah portion of the Cache Valley PM_{2.5}
36 nonattainment area. EPA Region 8 reviewed the study and concurred with the UDAQ's findings. A

1 similar analysis was undertaken to address direct PM_{2.5} emissions, but in this case the conclusion was
2 otherwise. Therefore, a motor vehicle emissions budget for direct PM_{2.5} is established in this SIP.

3 [Currently the UDAQ is working with the Interagency Consultation Team (ICT) to develop a finding
4 regarding the appropriateness of a budget for direct PM_{2.5} in the transportation conformity budget
5 section of the SIP. The ICT consist of the following planning entities: Cache MPO, Mountainland
6 Association of Governments, Wasatch Front Regional Council, UDOT, FHWA, and EPA.

7 The State of Utah has concluded that only NO_x and VOC emissions from on-road motor vehicles warrant
8 consideration for potential emission reduction controls to peak PM_{2.5} levels in the nonattainment areas.]

9

10 7.7 Transportation Conformity PM_{2.5} Budgets

11 In this SIP, the [S]tate is establishing transportation conformity motor vehicle emission budgets (MVEB)
12 for NO_x, [and] VOC, and PM_{2.5} (elemental carbon, organic carbon, SO₄, brake and tire wear) for 2014 [for
13 2014] in the nonattainment portions of Cache County, Utah. The Transportation Conformity PM_{2.5}
14 [B]udgets emissions estimates for the [M]obile [S]ources are calculated from the EPA approved
15 Motor Vehicle Emission Simulator Model (EPA MOVES 2010a).

16

	Direct PM _{2.5}	NO _x (tpd)	VOC (tpd)
2014	TBD	4.82	3.45

17

18 Cache MPO Transportation Conformity Budgets

	Direct PM _{2.5} (tpd)	NO _x (tpd)	VOC (tpd)
2014	0.33	4.82	3.45

19 Table 7.1, Emissions Budgets for Transportation Conformity Purposes (EPA MOVES 2010a). Note: VOC emissions do not
20 include refueling spillage and displacement vapor loss. Budgets are rounded to the nearest hundredth ton.

21

22 Per section 93.124 of the conformity regulations, for transportation conformity analyses using these
23 budgets in analysis years beyond 2014, a trading mechanism is established to allow future increases in
24 on-road direct PM_{2.5} emissions to be offset by future decreases in plan precursor emissions from on-
25 road mobile sources at appropriate ratios established by the air quality model. Future increases in on-
26 road direct PM_{2.5} emissions may be offset with future decreases in NO_x emissions from on-road mobile
27 sources at a NO_x:PM_{2.5} ratio of 14.65:1 and/or future decreases in VOC emissions from on-road mobile
28 sources at a VOC:PM_{2.5} ratio of 20.98:1. This trading mechanism will only be used if needed for
29 conformity analyses for years after 2014. To ensure that the trading mechanism does not impact the
30 ability to meet the NO_x or VOC budgets, the NO_x emission reductions available to supplement the direct
31 PM_{2.5} budget shall only be those remaining after the 2014 NO_x budget has been met, and the VOC
32 emissions reductions available to supplement the direct PM_{2.5} budget shall only be those remaining after

- 1 the 2014 VOC budget has been met. Clear documentation of the calculations used in the trading should
- 2 be included in the conformity analysis.



State of Utah

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQ-062-13

MEMORANDUM

TO: Air Quality Board

THROUGH: Bryce C. Bird, Executive Secretary

FROM: Mat Carlile, Environmental Planning Consultant

DATE: July 29, 2013

SUBJECT: PROPOSE FOR PUBLIC COMMENT: Amend State Implementation Plan Section X, Vehicle Inspection and Maintenance Program, Part F, Cache County.

Utah Code Annotated 41-6a-1642 gives authority to each county to implement and manage an inspection and maintenance (I/M) program to attain and maintain any national ambient air quality standard (NAAQS). The PM_{2.5} State Implementation Plan (SIP) identifies an I/M program as a necessary control strategy to attain the PM_{2.5} NAAQS in Cache County. Cache County is required under Section X, Part F to implement an I/M program. Cache County has been developing an I/M program in order to fulfill this requirement and plans to implement it as soon as possible.

Cache County is designing and implementing a decentralized test-and-repair program. This program will exempt vehicles less than six years old as of January 1 on any given year from an emissions inspection. The program requires 1996 and newer light duty vehicles having a gross vehicle weight of 8500 pounds or less to go through a biennial on-board diagnostics (OBD) inspection and requires vehicles 1995 and older to go through a biennial two-speed idle test.

Staff Recommendation: Staff recommends the Board propose the amendments to the Section X, Vehicle Inspection and Maintenance Program, Part F, Cache County for public comment.

Note: Public comments should be on whether to include the I/M program into the SIP, not on the program requirements.

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UTAH STATE IMPLEMENTATION PLAN

SECTION X

**VEHICLE INSPECTION AND
MAINTENANCE PROGRAM**

Part F

Cache County

Adopted by the Utah Air Quality Board
[~~December 5, 2012~~] TBD

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SECTION X Part F
Cache County Emission Inspection/ Maintenance Program
APPENDICES

1. Cache County Emission Inspection/ Maintenance Program Ordinance 2013-04
2. Bear River Health Department Regulation 2013-1

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**UTAH STATE IMPLEMENTATION PLAN
SECTION X, PART F
VEHICLE INSPECTION AND MAINTENANCE (I/M) PROGRAM**

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1. Applicability

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Cache County I/M program requirements: Cache County was designated nonattainment for the PM_{2.5} National Ambient Air Quality Standard (NAAQS) on December 14, 2009 (74 FR 58688, November 13, 2009). Accordingly, Cache County must implement control strategies to attain the PM_{2.5} NAAQS. A motor vehicle emission inspection and maintenance (I/M) program has been identified by the PM_{2.5} State Implementation Plan (SIP) as a necessary control strategy to attain the PM_{2.5} NAAQS as expeditiously as practicable. Therefore, pursuant to Utah Code Annotated 41-6a-1642, Cache County must implement an I/M program that complies with the minimum requirements of 40 CFR Part 51 Subpart S. Cache County will implement its I/M program county-wide. Parts A and F of Section X demonstrate compliance with 40 CFR Part 51 Subpart S for Cache County.

18
19

2. Description of Cache I/M Programs

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Below is a summary of Cache County's I/M program. Section X, Part F Appendices 1 and 2 contain the essential documents for Cache County's I/M program.

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Network Type: Cache County's I/M program will comprise of a decentralized test-and-repair network.

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Test Convenience: Cache County will make every effort to ensure that its citizens will have stations conveniently located throughout Cache County. Specific operating hours are not specified by the county; however, its Regulation requires that stations be open and available to perform inspections during a major portion of normal business hours of 8:00 a.m. to 5:00 pm Mondays through Fridays.

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Subject fleet: All model year 1969 and newer vehicles registered or principally-operated in Cache County are subject to the I/M program except for exempt vehicles.

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Station/inspector Audits: Cache County's I/M program will regularly audit all permitted I/M inspectors and stations to ensure compliance with county I/M ordinances, regulations, and policies. Particular attention will be given to identifying and correcting any fraud or incompetence with respect to vehicle emissions inspections. Compliance with recordkeeping, document security, analyzer maintenance, and program security requirements will be scrutinized. The Cache County I/M program will have an active covert compliance program to minimize potential fraudulent testing.

1 Waivers: Cache County's I/M program allows for the issuance of waivers under limited
2 circumstances. The procedure for issuing waivers is specified in Cache County's I/M
3 regulation provided in Section 9.6 of Appendix 2 of this part of the SIP and meets the
4 minimum waiver issuance criteria specified in 40 CFR Subparts 51.360.

5
6 Test frequency: Vehicles less than six years old as of January 1 on any given year will be
7 exempt from an emissions inspection. All model year 1969 and newer vehicles are
8 subject to a biennial test.

9
10 Test Equipment: Specifications for the I/M test procedures, standards and analyzers are
11 described in Cache County's I/M regulation provided in Appendix 2. Specifications for
12 the test procedure and equipment were developed according to good engineering practices
13 to ensure test accuracy. Analyzer calibration specifications and emissions test procedures
14 meet the minimum standards established in Appendix A of the EPA's I/M Guidance
15 Program Requirements, 40 CFR Part 51 Subpart S.

16
17 Test Procedures:

- 18
19 • The following vehicles are subject to an on-board diagnostic (OBD) II inspection:
20
21 ○ 1996 and newer light duty vehicles¹ and
22 ○ 2008 and newer medium duty vehicles²
23
24 • The following vehicles are subject to a two-speed idle test that is compatible with
25 Section VI (Preconditioned Two Speed Idle Test) in Appendix B of the EPA I/M
26 Guidance Program Requirements, 40 CFR 51, Subpart S:
27
28 ○ 1995 and older vehicles,
29 ○ 1996 to 2007 medium and heavy duty vehicles³ and
30 ○ 2008 and newer heavy duty vehicles.

31
32 Test procedures are outlined in Appendix 2 of this part of the SIP
33
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1 Light duty vehicles have a Gross Vehicle Weight of 8500 lbs or less.

2 Medium duty vehicles have a Gross Vehicle Weight greater than 8500 lbs but less than 14,000 lbs

3 Heavy Duty vehicles have a Gross Vehicle Weight greater 14,000 lbs

3. I/M SIP implementation

The I/M program ordinance, regulations, policies, procedures, and activities specified in this I/M SIP revision shall be implemented by ~~[December 14, 2013]~~ January 1, 2014 and shall continue until a maintenance plan without an I/M program is approved by EPA in accordance with Section 175 of the Clean Air Act. ~~[Ninety days after the effective date of this Part of the SIP, Cache County shall provide the Utah Division of Air Quality with enforceable milestones that will be incorporated into this Part of the SIP.]~~

APPENDIX 1

Cache County
Emission Inspection/ Maintenance Program
Ordinance 2013-04

Planning

CACHE COUNTY ATTORNEY

James M. Swink
Cache County Attorney

Donald G. Linton
Chief Deputy

Tony C. Baird
Chief Prosecutor



UTAH DEPARTMENT OF
ENVIRONMENTAL QUALITY

JUN 14 2013

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June 12, 2013

Bryce Bird
Utah Division of Air Quality
PO Box 144820
Salt Lake City, UT 84114-4820

RE: Cache County Motor Vehicle Inspection/Maintenance Ordinance

Dear Mr. Bird,

The Cache County Motor Vehicle Inspection/Maintenance Ordinance (hereinafter "Ordinance") is being submitted to the Air Quality Board to be adopted as part of the Utah State Air Quality Plan. This Ordinance was adopted by the Cache County Council on March 12, 2013, with an effective date of March 27, 2013. (See Ordinance attached hereto for reference).

The Cache County Attorney's Office assisted the Bear River Health Department and the Cache County Council in the creation of the Ordinance. In doing so, the Cache County Attorney's Office referred to, *inter alia*, Utah Code Ann. § 41-6a-1642, as amended, and the Ordinance was adopted, in part, in accordance with this statute.

Pursuant to the provisions of Utah Code Ann. § 41-6a-1642, it is the opinion of the Cache County Attorney's Office that the Ordinance is applicable to the entire County – including incorporated as well as non-incorporated areas, and that the Ordinance is in full compliance with Utah Code Ann. § 41-6a-1642. If you have any further questions or concerns, please do not hesitate to call our office at the telephone number indicated above.

Sincerely,

Donald G. Linton
Chief Deputy Cache County Attorney

attachment
cc: Amanda Smith
Lloyd Berentzen

ORDINANCE 2013-04

IMPLEMENTATION OF A VEHICLE EMISSIONS AND MAINTENANCE PROGRAM IN CACHE COUNTY

1.0 PURPOSE

The purpose of this ordinance to reduce air pollution levels in Cache County by requiring emission inspections of on-road motor vehicles and by requiring emission related repairs and/or adjustments for those vehicles that fail to meet the prescribed standards so as to:

- 1.1 Protect and promote the public health, safety, and welfare;
- 1.2 Improve air quality;
- 1.3 Comply with the federal regulations contained in 40 CFR part 51 subpart S;
- 1.4 Comply with the law enacted by the Legislature of the State of Utah, Section 41-6a-1642 Utah Code Annotated, 1953, as amended.

2.0 POWERS AND DUTIES

- 2.1 The Cache County Council (hereafter, "Council") has authority to implement a vehicle emission inspection and maintenance program under Section 41-6a-1642, Utah Code Annotated, 1953, as amended.
- 2.2 The Council is presently required by the EPA and the State of Utah to implement a vehicle emission inspection and maintenance program.
- 2.3 The Council hereby delegates its authority as an administrative body under Section 41-6a-1642, Utah Code Annotated, 1953, as amended, to the Bear River District Board of Health (hereafter "Board"), to address all issues pertaining to the adoption and administration of the vehicle emission inspection and maintenance program.
- 2.4 The Council authorizes and directs the Board to adopt and promulgate rules and regulations to ensure compliance with EPA and State Implementation Plan requirements with respect to an emission inspection and maintenance program.

3.0 GENERAL PROVISIONS

- 3.1 The Board, in conjunction with its staff, will administer and enforce this ordinance.
- 3.2 The Board shall adopt vehicle emission and inspection rules and regulations which meet EPA and State Implementation Plan requirements.
- 3.3 The Council shall approve the initial Rules and Regulations established by the Board and all changes in Rules and Regulations.

4.0 GUIDELINES TO BE FOLLOWED BY THE BEAR RIVER BOARD OF HEALTH IN IMPLEMENTATING A VEHICLE EMISSION INSPECTION AND MAINTENANCE PROGRAM IN CACHE COUNTY

4.1 Vehicles registered in Cache County that are not exempt from the program (see 41-6a-1642(3), Utah Code Annotated) will be inspected on the following schedule:

4.1.1 Gasoline and natural gas powered vehicles model year 1969 and newer: No emissions inspection will be required for gasoline and natural gas powered vehicles that are six model years and newer as of January 1 of any given year. An emissions inspection will be required every other year for vehicles that are seven model years and older as of January 1 of any given year. Emissions testing on odd-numbered years for vehicles with odd-numbered model years and on even-numbered years for vehicles with even-numbered model years. No emissions inspection for vehicles model year 1968 and older.

4.1.2 Diesel powered vehicles model year 1998 and newer: No emissions inspection will be required for diesel powered vehicles that are six model years and newer as of January 1 of any given year. An emissions inspection will be required every other year for vehicles that are seven model years and older as of January 1 of any given year. Emissions testing on odd-numbered years for vehicles with odd-numbered model years and on even-numbered years for vehicles with even-numbered model years.

Diesel powered vehicles 2007 and newer will be tested using OBD technology. Diesel powered vehicles 1998-2006 will have a visual inspection to verify that proper emissions control devices are in place. Diesel powered vehicles 1997 and older are subject to the Bear River Health Department Smoking Vehicle Program.

4.2 A maximum fee for inspection shall be set by the Board and approved by the Council. Part of this fee will be retained by the entity which performs the test and part may be remitted to the Board as reimbursement for administering the program. The intent of the Council is that this fee be as low as possible, while still maintaining the financial viability of the program.

4.3 If a vehicle fails an emissions inspection, a waiver may be granted that will allow the vehicle to be registered that year. In order to qualify for a waiver, the vehicle owner/operator must spend a minimum of \$200.00 on emissions related repairs and meet any other requirements established by the Board. A waiver will be issued once during the lifetime of the vehicle. Any changes to the minimum required repair expenditure to qualify for the waiver shall be approved by the Council.

4.4 Emission inspections in Cache County will be conducted by private firms. The Board shall establish criteria to be used to identify how many and which firms are allowed to conduct inspections and the training that is required for certification.

4.5 To fund the administration of the emissions inspection and maintenance program and other air quality improvement programs, the Council authorizes an Air Pollution Control fee to be assessed upon every motorized vehicle registered in Cache County at the time of registration as provide by Section 41-1a-1223, Utah Code Annotated, 1953, amended.

4.5.1 The fee is set at \$3.00 for each vehicle registration within the County under section 41-1a-215, Utah Code Annotated, 1953, as amended and at \$2.25 for each vehicle registration within the county for a six month registration period under Section 41-1a-215.5, Utah Code, 1953 as amended.

4.5.2 Motor vehicle that are exempt from the registration fee, and commercial vehicles with an apportioned registration shall be exempt from this fee as per Section 41-1a-1223, Utah Code Annotated, 1953 as amended.

4.5.3 The fee shall be assessed beginning January 1, 2014.

5.0 REVIEW OF NEED FOR PROGRAM

The Council shall review the vehicle emissions and maintenance program at least every five years to evaluate the continuing need for the program.

6.0 EFFECTIVE DATE

This ordinance takes effect on March 27, 2013. Following its passage, but prior to the effective date, a copy of the Ordinance shall be deposited with the County Clerk and a short summary of the ordinance shall be published in a newspaper of general circulation within the County as required by law.

PASSED BY THE COUNTY COUNCIL OF CACHE COUNTY, UTAH THIS MARCH 12, 2013.

	In Favor	Against	Abstained	Absent
Potter		X		
Buttars		X		
White	X			
Petersen	X			
Robison	X			
Yeates		X		
Zilles	X			
Total	4	3		



CACHE COUNTY

By: Val K. Potter
Val K. Potter, Chairman

ATTEST:

Jill N. Zollinger
Jill N. Zollinger, County Clerk

APPENDIX 2

Bear River Health Department Regulation 2013-1

BEAR RIVER HEALTH DEPARTMENT

REGULATION NO. 2013-1

**A REGULATION OF THE BEAR RIVER HEALTH DEPARTMENT FOR A VEHICLE
EMISSIONS INSPECTION AND MAINTENANCE PROGRAM**

Adopted by the Bear River Board of Health

May 9, 2013

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1.0 DEFINITIONS

For the purpose of this Regulation, the following terms, phrases, and words shall have the following meanings, unless otherwise defined:

Air Intake Systems: Systems that allow for the induction of ambient air, including preheated air into the engine combustion chamber for the purpose of mixing with a fuel for combustion;

AIR System: (Air Injection Reaction) A system for providing supplementary air into a vehicle's exhaust system to promote further oxidation of HC and CO gases and to assist catalytic reaction;

Analyzer: See Exhaust Emissions Gas Analyzer;

Board: See Board of Health;

Board of Health: The Bear River Board of Health;

Cache County Council: The elected Cache County Council representatives;

Calibration: The process of establishing or verifying the accuracy of an Exhaust Emissions Gas Analyzer to perform a consistent evaluation of engine exhaust by using different calibration gases having precisely known concentrations;

Calibration Gases: Gases of accurately known concentration that are used as references for establishing or verifying the calibration curve and accuracy of an Exhaust Emissions Gas Analyzer and are approved by the Department for use.

Catalytic Converter: A post-combustion device that oxidizes HC and CO gases and/or reduces oxides of nitrogen gases;

Certificate of Compliance: A document used in the I/M Program to certify that a vehicle meets all applicable requirements of the program;

Certificate of Waiver: A document used to verify that a vehicle has met the repair or adjustment requirements of the I/M Program Rules and Regulations even though specific emission standards have not been met;

Certification: Assurance by an authorized source, whether it be a laboratory, the manufacturer, the State, or the Department, that a specific product or statement is in fact true and meets all required requirements;

Certified Emissions Inspector: A person who has successfully completed all certification requirements and has been issued a current, valid Certified Emissions Inspector Certification by the Department;

Certified Testing Equipment: An official test instrument that has been approved by the Department to test motor vehicles for compliance with this Regulation; this includes the Analyzer as well as the OBD testing portion of the machine;

CO: Carbon monoxide;

Compliance: Verification that certain submission data and hardware submitted by a manufacturer for accreditation consideration, meets all required accreditation requirements;

Council: See Cache County Council;

County: Cache County, Utah;

Custom Vehicle: A motor vehicle that meets the requirements of Section 41-6a-1507, Utah Code Annotated, 1953 as amended;

Cutpoints: The maximum allowable concentration of carbon monoxide (CO) and hydrocarbons (HC) for a given weight class and model year of a motor vehicle, as provided by this Regulation, using an approved infrared Exhaust Emissions Gas Analyzer;

Department: The Bear River Health Department;

Director: The Director of the Bear River Health Department or his authorized representative;

DLC: Data Link Connector used in OBD applications is a 16 pin connector used by scan tools and other emission diagnostic equipment to communicate with the vehicle's computer for the purpose of collecting emissions related data;

DTC: Diagnostic Trouble Code is a standardized 5 digit code that is used to identify a specific fault that has occurred or is occurring in a vehicle;

EGR System: The Exhaust Gas Recirculation System – An emissions control system that recycles or recirculates a portion of the exhaust gases back to the engine combustion chambers;

Emissions Control Systems: Parts, assemblies or systems originally installed by the manufacturer in or on a vehicle for the sole or primary purpose of reducing emissions;

Exhaust Emissions Gas Analyzer: An instrument that is capable of measuring the concentrations of certain air contaminants in the exhaust gas emanating from a

motor vehicle which is approved by the Department for this use in accordance with this Regulation as an official test instrument;

Evaporative Control System: An emissions control system that prevents the escape of fuel vapors from the fuel tank or air cleaner and stores them in a charcoal canister to be burned in the combustion chamber;

Gas Calibration Check: A procedure using known concentrations of HC and CO calibration gases to verify the accuracy of an Analyzer in measuring HC and CO;

HC: Hydrocarbons;

Idle: A condition where the vehicle engine is warm and running at the rate specified by the manufacturer's curb idle, where the engine is not propelling the vehicle, and where the throttle is in the closed or idle stop position. This condition must be achieved without placing a load on the vehicle to decrease the RPM to the specified rate;

I/M Program: See Vehicle Emissions Inspection and Maintenance Program;

I/M Program Station: A stationary Vehicle Emissions Inspection and Maintenance Station that qualifies and has a valid permit, issued by the Department, to operate as an emissions inspection and maintenance station in the I/M Program;

Inspection: An official vehicle emissions test performed for the purpose of issuing a Certificate of Compliance or Certificate of Waiver;

Inspector: A Certified Emissions Inspector;

MIL: Malfunction Indicator Light is an indicator located on the instrument panel that notifies the operator of an emissions fault;

Motor Vehicle: A self-propelled motorized vehicle with an internal combustion powered engine which is licensed for operation on public roads and/or streets. Motor Vehicles exempted from the inspection requirements of this Regulation are listed in Section 6.4 of this Regulation;

Non-certified Inspector: Any person who has not been certified by the Department to perform official emissions tests;

OBD: On Board Diagnostic refers to a vehicle's monitoring and diagnostic capabilities of its emissions systems;

PCV System: Positive Crankcase Ventilation System – an emissions control system which returns crankcase vapors and blowby gases to the combustion chamber to be burned;

Primary Residence: Is the place where an individual intends to permanently reside, maintains a permanent residence more than six (6) months during a calendar year, or where an individual lives more than six (6) months during a calendar year;

Publicly-owned Vehicles: A motor vehicle owned by a government entity, including but not limited to the federal government or any agency thereof, the State of Utah or any agency or political subdivision thereof;

Readiness: Readiness is used to identify the state of a vehicle's emissions monitors as they are tested. Readiness does not indicate whether the monitors passed or failed the test, it only indicates whether or not the test has been run for any particular monitor;

Station: An I/M Program Station;

Technical Bulletin: A document, issued to Certified Emissions Inspectors and/or I/M Program Stations by the Department to update, clarify or establish policies and/or procedures for their implementation in the I/M Program;

Training Program: A formal program administered, conducted, or approved by the Department for the education of emission inspectors in basic emission control technology, inspection procedures, diagnosis and repair of emissions related problems, I/M Program policies, procedures, and this Regulation;

Two-Speed Idle: A condition where the vehicle engine is warm and running at a high speed rate of 2200-2800 RPMs and then a low rate of 350-1200 RPMs;

Vehicle Emissions Inspection and Maintenance Program: The program established by the Department pursuant to Section 41-6a-1642 Utah Code Annotated, 1953, as amended, and Cache County Ordinance 2013-04;

Vintage Vehicle: A motor vehicle that meets the requirements of Section 41-21-1 Utah Code Annotated, 1953 as amended;

2.0 PURPOSE

It is the purpose of this Regulation to reduce air pollution levels in Cache County by requiring inspections of in-use motor vehicles and by requiring emission related repairs and/or adjustments for those vehicles that fail to meet the prescribed standards so as to:

- 2.1 Protect and promote the public health, safety, and welfare;
- 2.2 Improve air quality;
- 2.3 Meet or exceed the minimum design and performance requirements for I/M Programs as defined in 40 CFR Part 51, Subpart S.
- 2.4 Comply with the law enacted by the Legislature of the State of Utah, Sections 41-6a-1642 Utah Code Annotated, 1953, as amended.
- 2.5 Comply with Cache County Ordinance 2013-04.

3.0 AUTHORITY AND JURISDICTION OF THE DEPARTMENT

3.1 Under Section 2.3 of Cache County Ordinance 2013-04, the Cache County Council delegates its authority as an administrative body under Section 41-6a-1642, Utah Code Annotated, 1953, as amended, to the Bear River Board of Health (hereafter Board), to address all issues pertaining to the adoption and administration of the Vehicle Emissions Inspection and Maintenance Program (hereafter I/M Program).

3.2 Under Section 2.4 of Cache County Ordinance 2013-04, the Council directs the Board to adopt and promulgate rules to ensure compliance with State Implementation Plan requirements with respect to an I/M Program.

3.3 The Board is authorized to make standards and regulations pursuant to Section 26A-1-121(1) of the Utah Code Annotated, 1953, as amended.

3.4 The Board is authorized to establish and collect fees pursuant to Section 26A-1-114(1)(h)(i) of the Utah Code Annotated, 1953, as amended.

3.5 All aspects of the I/M Program within Cache County enumerated in Section 2.0 of this Regulation shall be subject to the direction and control of the Bear River Health Department (hereafter Department).

4.0 POWERS AND DUTIES

4.1 The Department shall be responsible for the enforcement and administration of this Regulation and any other powers vested in it by law and shall:

- 4.1.1 Make policies and procedures necessary to ensure that the provisions of this Regulation are met and that the purposes of this Regulation are accomplished;
 - 4.1.2 Require the submission of information, reports, plans, and specifications from I/M Program Stations as necessary to implement the provisions, requirements, and standards of this Regulation;
 - 4.1.3 Issue permits, certifications, and charge fees as necessary to implement the provisions, requirements, and standards of this Regulation; and
 - 4.1.4 Perform audits of any I/M Program Station, issue orders and/or notices, hold hearings, and levy administrative penalties, as necessary to effect the purposes of this Regulation.
- 4.2 The Department may suspend, revoke, or deny a permit, subject to the Penalty Schedule in Appendix C, of an I/M Program Station and/or require the surrender of the permit of such I/M Program Station upon showing that:
- 4.2.1 A vehicle was inspected and issued a Certificate of Compliance by the station personnel that did not, at the time of inspection, comply with all applicable policies, procedures, Technical Bulletins, and this Regulation;
 - 4.2.2 A vehicle was inspected and rejected by the I/M Program Station when, in fact, the vehicle was determined by the Department to be in such condition that it did comply with the requirements of this Regulation;
 - 4.2.3 The I/M Program Station is not open and available to perform inspections during a major portion of the normal business hours of 8:00 AM to 5:00 PM Mondays through Fridays (except I/M Program Stations which only test their own vehicles);
 - 4.2.4 The I/M Program Station has violated any provisions of this Regulation, or any Rule, Regulation, or Department policy properly promulgated for the operation of an I/M Program Station;
 - 4.2.5 The I/M Program Station was not equipped as required by Section 7.0 of this Regulation;
 - 4.2.6 The I/M Program Station is not operating from a location specified on the permit;
 - 4.2.7 An official inspection was done by a non-certified inspector or a non-certified inspector has gained access to the official testing portion of the test equipment or a non-certified inspector signed a Certificate of Compliance;

4.2.8 The computerized test equipment has been tampered with or altered in any way contrary to the certification and maintenance requirements of the test equipment;

4.2.9 The I/M Program Station denies access to a representative of the Department to conduct an audit or other necessary business during regular business hours;

4.2.10 An engine change verification form was completed and signed when, in fact, the engine block number was not verified by a Certified Emissions Inspector or other authorized personnel approved by the Department;

4.2.11 The I/M fee signage procedures are not followed as specified in Section 6.6; or

4.2.12 The I/M fee has been determined by the Department to be discriminatory in that different fees are assessed dependent upon vehicle ownership, vehicle make or model, owner residence, etc.

4.3 The Department may suspend, revoke, or deny the certificate of a Certified Emissions Inspector, subject to the Penalty Schedule in Appendix C, and require the surrender of this certificate upon showing that:

4.3.1 The Certified Emissions Inspector caused a Certificate of Compliance to be issued without an approved inspection being made;

4.3.2 The Certified Emissions Inspector denied the issuance of a Certificate of Compliance to a vehicle that, at the time of inspection, complied with the law for issuance of said certificate;

4.3.3 The Certified Emissions Inspector issued a Certificate of Compliance to a vehicle that, at the time of issuance, was in such a condition that it did not comply with this Regulation;

4.3.4 Inspections were performed by the Certified Emissions Inspector, but not in accordance with applicable policies, procedures, Technical Bulletins, and this Regulation;

4.3.5 The Certified Emissions Inspector allowed a non-certified inspector to perform an official I/M test or gain access to the official testing portion of the test equipment;

4.3.6 The Certified Emissions Inspector signed an inspection form or certificate stating that he had performed the emissions test when, in fact, he did not; or

4.3.7 The Certified Emissions Inspector completed and signed an engine change verification form when in fact the engine block number was not verified.

4.4 The Department shall respond, according to the policies and procedures of the Department, to public complaints regarding the fairness and integrity of the inspections they receive and shall provide a method that inspection results may be challenged if there is a reason to believe them to be inaccurate.

5.0 SCOPE

It shall be unlawful for any person to fail to comply with any policy, procedure, Technical Bulletin, or regulation promulgated by the Department, unless expressly waived by this Regulation.

6.0 GENERAL PROVISIONS

Subject to the exceptions in Section 6.4 and pursuant to the schedule in Section 6.1, individuals with their primary residence in Cache County must register their motor vehicles in Cache County and motor vehicles (of model years 1969 and newer) that are or will be registered in Cache County, or operated from a facility within Cache County shall be subject to an emission inspection performed by an I/M Program Station or other entity approved by the Director. Owners of vehicles that meet the requirements of Section 6.2 or 6.3 shall comply with the inspection requirements regardless of the county of registration.

6.1 Beginning January 1, 2014 motor vehicles are subject to a biennial emissions inspection. Emissions inspections will be required in odd-numbered years for a vehicle with an odd-numbered model year. Emissions inspections will be required in even-numbered years for a vehicle with an even-numbered model year

6.1.1 A Certificate of Compliance, Certificate of Waiver, or evidence that the motor vehicle is exempt from the I/M Program requirements (as defined in Section 6.4) shall be presented to the Cache County Assessor or the Utah State Tax Commission as conditions precedent to registration or renewal of registration of a motor vehicle in odd-numbered years for a vehicle with an odd-numbered model year.

6.1.2 A Certificate of Compliance, Certificate of Waiver, or evidence that the motor vehicle is exempt from the I/M Program requirements (as defined in Section 6.4) shall be presented to the Cache County Assessor or the Utah State Tax Commission as conditions precedent to registration or renewal of registration of a motor vehicle in even-numbered years for a vehicle with an even-numbered model year.

6.1.3 The Air Pollution Control Fee shall be paid annually, as per Section 4.5 of Cache County Ordinance 2013-04, (see also Section 6.7 of this Regulation) as conditions precedent to registration or renewal of registration of a motor vehicle.

6.1.4 A Certificate of Compliance shall be valid for a period of time in accordance with 41-1a-205 Utah Code Annotated, 1953, as amended.

6.2 Publicly-Owned Vehicles. Owners of publicly-owned vehicles shall comply with the inspection program requirements. Federally-owned vehicles and vehicles of employees operated on a federal installation that do not require registration in the State of Utah shall comply with the emissions testing requirements.

6.3 Vehicles of employees and/or students parked at a college or university that do not require registration in Cache County shall comply with the emissions testing requirements as authorized by 41-6a-1642(5)(a) Utah Code Annotated, 1953, as amended.

6.3.1 College or university parking areas that are metered or for which payment is required per use are not subject to the requirements in Section 6.3.

6.4 Vehicle Exemption. The following vehicles are exempt from these emissions testing requirements:

6.4.1 Any vehicle of model year 1968 or older;

6.4.2 All agricultural implements of husbandry and any motor vehicle that qualifies for an exemption as provided by 41-6a-1642(3) and 41-6a-1642(4) Utah Code Annotated, 1953, as amended;

6.4.3 Any vehicle used for maintenance or construction and not designed or licensed to operate on the highway;

6.4.4 Any motorcycle or motor driven cycle (including vehicles which operate with an engine normally used in a motorcycle);

6.4.5 Any vehicle that operates exclusively on electricity;

6.4.6 Any motor vehicle which qualifies for legislative exemptions;

6.4.7 Tactical military vehicles;

6.4.8 Any vintage vehicle as provided by 41-6a-1642(3) Utah Code Annotated, 1953, as amended;

6.4.9 Any custom vehicle as provided by 41-6a-1642(3) Utah Code Annotated, 1953, as amended;

6.4.10 Any vehicle that is less than six years old on January 1 based on the age of the vehicle as determined by the model year identified by the manufacturer;

6.4.11 Any diesel powered vehicle 1997 and older. These vehicles will be subject to a smoking vehicle program established by the Board; and

6.4.12 Any diesel powered vehicle with a GVW greater than 14,000 lbs. These vehicles will be subject to a smoking vehicle program established by the Board.

6.5 It shall be the responsibility of the Certified Emissions Inspector if a vehicle exempted from this Regulation by Section 6.4 of this Regulation is brought to the Certified Emissions Inspector for an official emission test to inform the owner/operator of the vehicle that the vehicle is not required to have an official emission inspection for vehicle registration purposes.

6.6 Official Signs.

6.6.1 All I/M Program Stations, except those stations authorized to inspect only their own motor vehicles as a fleet inspection station, shall display in a conspicuous location on the premises an official sign provided and approved by the Department;

6.6.2 The emission cutpoints, as referenced in Appendix B shall be posted in a conspicuous place on the station's premises;

6.6.3 The readiness requirements for an OBD test as referenced in Appendix D shall be posted in a conspicuous place on the station's premises;

6.6.4 The station shall post on a clear and legible sign and in a conspicuous place at the station, the fees charged by that station for the performance of the emissions inspection;

6.6.5 The free re-inspection policy as referenced in Section 9.6 shall be posted in a conspicuous place on the station's premises;

6.6.6 The signs required by Sections 6.6.1 through 6.6.5 shall be located so as to be easily in the public view.

6.7 Fees.

6.7.1 The fees assessed upon I/M Program Stations and Certified Emissions Inspectors shall be determined according to a fee schedule adopted by the Board. The fee schedule is referenced in Appendix A to this Regulation and may be amended by the Board as necessary.

6.7.2 An Air Pollution Control Fee is hereby assessed upon every motor vehicle registered in Cache County as per Section 4.5 of Cache County Ordinance 2013-04. The fee will be assessed annually at the time of registration of the vehicle.

6.7.2.1 This fee assessment is included upon all motorized vehicles including those that are exempted from the inspection requirements of this Regulation by Section 6.4 unless a separate fee is assessed on other motor vehicles by other Board of Health Regulations.

6.7.2.2 A motor vehicle that is exempt from the registration fee, and a commercial vehicle with an apportioned registration shall be exempt from this fee as per Section 41-1a-1223, Utah Code Annotated, 1953, as amended and Section 4.5.2 of Cache County Ordinance 2013-04.

6.7.3 I/M Program Stations may charge a fee for the required service. The fee may not exceed, for each vehicle inspected, the amount set by the Board and referenced in Appendix A of this Regulation.

6.7.3.1 The inspection fee pays for a complete inspection leading to a Certificate of Compliance or a failure. If a vehicle fails the inspection, the owner/operator is entitled to one free re-inspection if he returns to the I/M Program Station that performed the original inspection within fifteen (15) calendar days from the date of the initial inspection. The I/M Program Station shall extend the fifteen day free re-inspection to accommodate the vehicle owner/operator if the I/M Program Station is unable to schedule the retest of the vehicle within the fifteen day time period. The inspection fee shall be the same whether the vehicle passes or fails the emission test.

6.7.3.2 At the request of the Department, an I/M Program Station shall extend the free retest time for vehicle owners/operators who are unable to complete repairs because of the unavailability of parts to make the necessary repairs.

6.7.4 If a vehicle fails the inspection and is within the time and mileage requirements of the federal emissions warranty contained in section 207 of the Federal Clean Air Act, the Certified Emissions Inspector shall inform the owner/operator that he may qualify for warranty coverage of emission related repairs as provided by the vehicle manufacturer and mandated by the Federal Environmental Protection Agency (see 40 CFR Part 85, Subpart V).

7.0 PERMIT REQUIREMENTS OF THE VEHICLE EMISSIONS I/M PROGRAM STATION

7.1 Permit Required.

7.1.1 No person shall in any way represent any place as an official I/M Program Station unless the station is operated under a valid permit issued by the Department.

7.1.2 The Department is authorized to issue or deny permits for I/M Program Stations.

7.1.3 No permit for any official I/M Program Station may be assigned, transferred, or used by any person other than the original owner identified on the permit application for that specific I/M Program Station.

7.1.4 The permit shall be posted in a conspicuous place within public view on the premises.

7.1.5 Application for an I/M Program Station permit shall be made to the Department upon a form provided by the Department. No permit shall be issued unless the Department finds that the facilities, tools, and equipment of the applicant comply with the requirements of this Regulation and that competent personnel, certified under the provisions of Section 8.0, are employed and will be available to make inspections, and the operation thereof will be properly conducted in accordance with this Regulation.

7.1.5.1 An I/M Program Station shall notify the Department and cease any emission testing if the station does not have a Certified Emissions Inspector employed;

7.1.5.2 An I/M Program Station shall notify the Department upon termination and/or resignation of any Certified Emissions Inspector employed by the station;

7.1.5.3 An I/M Program Station shall comply with all the terms stated in the permit application and all the requirements of this Regulation;

7.1.5.4 As a condition for permitting test and repair I/M Program Stations, the station will keep and maintain all necessary tools and resources needed to effectively repair vehicles that fail an emissions test;

- 7.1.5.5 As a condition for permitting test only I/M Program Stations, the station will notify the vehicle owner/operator that the facility is a test only facility and will not provide repairs, prior to any official emissions test;
- 7.1.5.6 An I/M Program Station shall have a building with a suitable exhaust extraction system; and
- 7.1.5.7 An I/M Program Station shall provide a dedicated internet connection for the Certified Testing Equipment.

7.2 Permit Duration and Renewal

7.2.1 The permit for I/M Program Stations shall be issued annually and shall expire on the last day of the month, one year from the month of issue. The permit shall be renewable sixty days prior to the date of expiration.

7.2.2 It is the responsibility of the owner/operator of the I/M Program Station to pursue the permit renewal through appropriate channels.

7.3 I/M Program Station to hold Department Harmless

7.3.1 In making application for a permit or for its renewal, such action shall constitute a declaration by the applicant that the Department shall be held harmless from liability incurred due to action or inaction of I/M Program Station's owners or their employees.

7.4 An I/M Program Station shall be kept in good repair and in a safe condition for inspection purposes free of obstructions and hazards.

8.0 TRAINING AND CERTIFICATION OF INSPECTORS

8.1 Certified Emissions Inspector Certification Required.

8.1.1 No person shall perform any part of the inspection for the issuance of a Certificate of Compliance unless the person possesses a valid Certified Emissions Inspector Certification issued by the Department.

8.1.2 Applications for a Certified Emissions Inspector Certification shall be made upon an application form prescribed by the Department. No certification shall be issued unless:

- 8.1.2.1 The applicant has shown adequate competence by successfully completing the written and practical portions

of the Certified Emissions Inspector Certification requirements as specified in this Regulation; and

8.1.2.2 The applicant has paid the required permit fees as set by the Board and referenced in Appendix A of this Regulation.

8.1.3 An applicant shall comply with all of the terms stated in the application and with all the requirements of this Regulation.

8.1.4 An applicant shall complete a Department approved training course and shall demonstrate knowledge and skill in the performance of emission testing and use of the test equipment. Such knowledge and skill shall be shown by passing at minimum:

8.1.4.1 Operation and purposes of emission control systems;

8.1.4.2 Inspection procedures as outlined in this Regulation and prompted by the test equipment;

8.1.4.3 Operation of the Certified Testing Equipment including the performance of gas calibration and leak check;

8.1.4.4 The provisions of Section 207(b) warranty provisions of the Federal Clean Air Act, and other federal warranties;

8.1.4.5 The provisions of this Regulation and other applicable Department policies and procedures; and

8.1.4.6 A performance qualification test including but not limited to the following:

(a) Visual inspection and knowledge of the required emission control equipment;

(b) Demonstration of skill in proper use, care, maintenance, calibration, and leak testing of the Certified Testing Equipment;

(c) Demonstration of ability to conduct the inspection; and

(d) Demonstration of ability to accurately enter data in the test equipment.

8.1.5 A signed hands-on performance check sheet shall be necessary for successful completion of the performance qualification test. The hands-on

performance check sheet shall be signed by an instructor or other equally qualified person approved by the Department.

8.1.6 The Department shall issue a Certified Emissions Inspector Certificate to an applicant upon successful completion of the requirements of this section.

8.1.7 The Certified Emissions Inspector Certificates are and remain the property of the Department, only their use and the license they represent is tendered.

8.1.8 Certified Emissions Inspector Certifications shall not be transferred from one person to another person.

8.2 Recertification Requirements for Certified Emissions Inspectors

8.2.1 The Department may renew certifications for an existing Certified Emissions Inspector after a properly completed renewal form is submitted, reviewed, and approved, the recertification requirements have been completed, the fees are paid and the Certified Emissions Inspector has complied with this Regulation.

8.2.2 Certified Emissions Inspectors shall be required to recertify annually. Failure to recertify shall result in suspension or revocation of the Certification as described in this Regulation.

8.2.3 Certified Emissions Inspectors shall complete a Department approved refresher course every 2 years. Applicants for recertification shall complete a Department approved refresher course no more than sixty days prior to the date of expiration. Applicants shall demonstrate knowledge and skill in the performance of emission testing and use of the test equipment.

8.3 Certification Expiration

8.3.1 The Certified Emissions Inspector Certification shall be issued annually and shall expire on the last day of the month one year from the month of issue. The certification shall be renewable sixty days prior to the date of expiration.

8.3.2 It is the responsibility of the Certified Emissions Inspector to pursue the renewal of the Certification.

8.4 Certified Emissions Inspector Certification Suspension and Revocation

8.4.1 Certified Emissions Inspector Certifications may be suspended or revoked by the Department for violations of this Regulation.

8.4.2 Suspension or revocation of Certified Emissions Inspector Certifications shall follow the provisions of Appendix C of this Regulation.

9.0 INSPECTION PROCEDURE

9.1 The official emissions inspection shall be solely performed by a Certified Emissions Inspector at an I/M Program Station and Department approved inspection procedures are to be followed.

9.2 The Certified Emissions Inspector shall verify the vehicle license plate and vehicle identification numbers by comparing the information on the vehicle's registration with those on the vehicle and shall accurately record them on the inspection test equipment.

9.2.1 The Certified Emissions Inspector shall verify the owner's name and address and enter this information into the test equipment. The Certified Emissions Inspector shall determine and enter the county in which the vehicle is registered.

9.2.2 The Certified Emissions Inspector shall enter completely and accurately all the information required as part of the data entry procedure for the official vehicle emissions test on the approved test equipment.

9.3 A complete official test must be performed any time an inspection is requested. Do not perform any part of the inspection without initiating an official test on the test equipment.

9.4 The Certified Emissions Inspector shall perform the official vehicle emissions test using the proper testing procedure:

9.4.1 All gasoline, and natural gas powered light-duty (8,500 lbs or less) OBDII compliant vehicles, model year 1996 and newer shall be tested as specified in Appendix D, OBDII Test Procedures.

9.4.2 All gasoline and natural gas powered vehicles model year 1995 and older shall be tested as specified in Appendix D, Two-Speed Idle Test Procedures.

9.4.3 All gasoline and natural gas powered vehicles model year 1996 to 2007 with a GVW greater than 8,500 lbs shall be tested as specified in Appendix D, Two-Speed Idle Test Procedures.

9.4.4 All gasoline and natural gas powered vehicles model year 2008 and newer with a GVW greater than 8,500 lbs and GVW less than 14,000 lbs shall be tested as specified in Appendix D, OBDII Test Procedures.

9.4.5 All gasoline and natural gas powered vehicles model year 2008 and newer with a GVW greater than 14,000 lbs shall be tested as specified in Appendix D, Two-Speed Idle Test Procedures.

9.4.6 All diesel powered vehicles model year 1998 and newer shall be tested as specified in Appendix D, Diesel Test Procedures.

9.5 Retesting Procedures

9.5.1 If the vehicle fails the initial emissions inspection, the owner/operator shall have fifteen calendar days in which to have repairs or adjustments made and return the vehicle to the I/M Program Station that performed the initial inspection for one (1) free re-inspection. In order to be in compliance, the vehicle that failed the initial test shall meet the following conditions:

9.5.1.1 The vehicle is re-tested; and

9.5.1.2 The vehicle emissions levels are the same or less than the applicable cutpoint standards.

9.6 Certificate of Waiver

9.6.1 A Certificate of Waiver may be issued for 1969 to 1989 model year vehicles if all of the following requirements are met:

9.6.1.1 Air pollution control devices identified in the emission decal are in place and operable on the vehicle. If the decal is missing, at a minimum, the catalytic converter, PCV System, and AIR system are in place and operable on the vehicle. If the devices have been removed or rendered inoperable, they shall be replaced or repaired before a Certificate of Waiver is granted; and

9.6.1.2 The vehicle continues to exceed applicable cutpoint standards after \$200.00 of acceptable emissions related repairs have been performed. Proof of repair costs shall be provided for the vehicle to the Department in the form of an itemized bill, invoice, work order, manifest, or statement in which emissions related parts are specifically identified. If repairs are made by someone with ASE L1, ASE A8, or another certification approved by the Department, the cost of labor may be included in the \$200.00

9.6.2 A Certificate of Waiver may be issued for 1990 through 1995 model year vehicles if all of the following requirements are met:

9.6.2.1 Air pollution control devices identified in the emission decal are in place and operable on the vehicle. If the decal is missing, at a minimum, the AIR System, catalytic converter, EGR System, Evaporative Control System, PCV System, and gas tank cap are in place and operable on the vehicle. If the devices have been removed or rendered inoperable, they shall be replaced or repaired before a Certificate of Waiver is granted; and

9.6.2.2 The vehicle continues to exceed applicable cutpoint standards after \$200.00 of acceptable emissions related repairs have been performed. Proof of repair costs shall be provided for the vehicle to the Department in the form of an itemized bill, invoice, work order, manifest, or statement in which emissions related parts are specifically identified. If repairs are made by someone with ASE L1, ASE A8, or another certification approved by the Department, the cost of labor may be included in the \$200.00

9.6.3 A Certificate of Waiver may be issued for 1996 and newer model year vehicles if all of the following requirements are met:

9.6.3.1 Air pollution control devices identified in the emission decal are in place and operable on the vehicle. If the devices have been removed or rendered inoperable, they shall be replaced or repaired before a Certificate of Waiver is granted; and

9.6.3.2 At least \$200.00 has been spent on acceptable emissions related repair costs for that specific vehicle, and if proof of repair costs for that specific vehicle have been provided to the Department in the form of an itemized bill, invoice, work order, manifest, or statement in which emissions related parts are specifically identified. If repairs are made by someone with ASE L1, ASE A8, or another certification approved by the Department, the cost of labor may be included in the \$200.00

9.6.3.3 The vehicle is not within the time and mileage requirements of the federal emissions warranties. Any vehicle that is within time and mileage requirements of the federal emissions warranties shall not be eligible for an emissions repair waiver, but shall be repaired to pass the testing requirements.

9.6.4 As used in Sections 9.6.1, 9.6.2, and 9.6.3, acceptable emissions related repairs:

- 9.6.4.1 Refers to those expenditures and costs associated with the adjustment, maintenance, and repair of the motor vehicle which are directly related to reduction of exhaust emissions necessary to comply with the applicable emissions standards, and procedures, and/or repairs to the evaporation vapor recovery system;
- 9.6.4.2 Does not include adjustments, maintenance, or repairs performed prior to the official emissions test;
- 9.6.4.3 Does not include the fee paid for the test;
- 9.6.4.4 Does not include costs associated with the repairs or replacements of air pollution control equipment on the vehicle if the need for such adjustment, maintenance, replacement, or repair is due to disconnection of, tampering with, or abuse of the emissions control systems;
- 9.6.4.5 Does not include repairs performed to the vehicle's exhaust system to correct problems with excessive exhaust dilution;
- 9.6.4.6 Refers to repairs, maintenance, and diagnostic evaluations done in accordance with manufacturer's specifications, to the extent that the purpose is to reduce emissions.

9.6.5 Information regarding all performed repairs shall be entered into the appropriate data base of the test equipment prior to the vehicle being retested.

9.6.6 Certificates of Waiver shall only be issued by the Department unless the Department determines other acceptable methods of issuing the waivers. A waiver shall only be issued after determining that the vehicle complies with the requirements of this Section for waiver issuance.

9.6.7 Prior to referring the owner/operator to the Department for determining waiver eligibility, the I/M Program Station and the Certified Emissions Inspector shall verify that the repair and eligibility requirements of this Section have been met.

9.6.8 A Certificate of Waiver shall only be issued once to any vehicle that qualifies, throughout the lifetime of the vehicle.

10.0 ENGINE SWITCHING

10.1 Engine switching shall be allowed only in accordance with EPA policy.

10.2 Vehicles not meeting the requirements of Section 10.0 shall be deemed as tampered and are not eligible for a Certificate of Waiver, unless they are restored to the original engine and emission control configuration.

11.0 SPECIFICATIONS FOR CERTIFIED TESTING EQUIPMENT AND CALIBRATION GASES

11.1 Approval of Certified Testing Equipment

11.1.1 Certified Testing Equipment shall meet the specifications as detailed in Appendix E.

11.1.2 It shall be illegal for any person to modify the hardware or software of approved emissions test equipment without written application and formal approval by the Department.

11.1.3 It shall be illegal for any person to gain access to any Department controlled portions of an approved test equipment without approval by the Department.

11.2 Calibration Gases

11.2.1 General: The approved vendor shall, on request, supply at a reasonable cost to the I/M Program Station, calibration gases approved by the Department. The approved vendor shall have approved, full calibration gas containers installed and operational at the time of delivery. The Department shall establish necessary procedures for approving calibration gases.

11.2.2 Calibration Gas Blends: The calibration gases supplied to any I/M Program Station shall conform to the specifications of the Department as specified in Appendix E. All calibration gases shall meet all Federal requirements for the emissions warranty coverage. Only gas blends supplied by Department approved blenders shall be used to calibrate official Analyzers.

11.3 Warranty and Maintenance Requirements

11.3.1 It shall be the responsibility of the I/M Program Station to obtain warranty coverage for testing equipment supplied by the approved vendor. Coverage requirements will be determined by the Department.

11.3.2 The testing equipment shall be maintained in accordance with the manufacturer's recommended maintenance schedule and records of this maintenance service shall be maintained for examination by the Department.

11.4 Gas Calibration and Leak Check:

Gas calibrations and leak checks shall be performed in accordance with the schedule referenced in Appendix E.

12.0 QUALITY ASSURANCE

12.1 A quarterly inspection and audit shall be made by a representative of the Department to verify compliance with this Regulation for each I/M Program Station.

12.1.2 During the time of the inspection and audit by the Department, the Department representative shall have exclusive access to the test equipment.

12.1.3 Required tools and equipment as noted in Section 7.1.5, shall be kept at the I/M Program Station at all times and shall be available for inspection by the Department at any time the inspection station is open for business.

12.2 An annual covert inspection and audit shall be made by a representative of the Department to verify compliance with this Regulation for each I/M Program Station.

12.3 The Department may increase the frequency of inspections and audits for I/M Program Stations and/or Certified Emissions Inspectors if the Department receives information of a violation of this Regulation.

12.4 The Department shall regularly monitor I/M Program Stations and/or Certified Emissions Inspectors through inspection records and/or technology integrated into the Certified Test Equipment.

13.0 CUTPOINT STANDARDS FOR MOTOR VEHICLES EXHAUST GASES

In order to obtain a valid emissions Certificate of Compliance, exhaust emissions from a motor vehicle subject to an biennial exhaust gas emission inspection shall not exceed the

maximum concentrations for carbon monoxide (CO) and hydrocarbons (HC) as specified in Appendix B.

14.0 DISCIPLINARY PENALTIES AND RIGHT TO APPEAL

14.1 When the Department, or its representative(s), receives information of a violation of any regulation contained herein which may result in a permit denial, revocation, or suspension, the Department shall notify the affected entity, in writing, informing the entity of the violation and penalties to be enforced. The affected entity may request a hearing within ten calendar days of the Department giving notice of the potential permit denial, revocation, or suspension. Only a written request for a hearing shall be honored by the Department. No appeal may be made on a formal warning.

14.1.1 In considering the appropriate administrative action to be taken as indicated in Appendix C, the Director shall consider the following:

- 14.1.1.1 whether the violation was unintentional or careless;
- 14.1.1.2 the frequency of the violation or violations;
- 14.1.1.3 the audit and covert audit history of the I/M Program Station and the Certified Emissions Inspector;
- 14.1.1.4 whether the fault lies with the I/M Program Station or the Certified Emissions Inspector.

14.1.2 After consideration of the factors in Section 14.1.1 the Director may take appropriate administrative action as indicated in Appendix C against either the I/M Program Station, the Certified Emissions Inspector, or both.

14.2 Appeals Hearing Procedure:

14.2.1 An appeals hearing shall be held at the request of the affected entity in order to determine the accuracy of information obtained by the Department and whether there are mitigating factors which would justify a reduction of the imposed penalties.

14.2.2 The requesting party may bring to the hearing any witnesses and any evidence believed to be pertinent to the disciplinary action.

14.2.3 The appeal shall be heard by the Vehicle Inspection and Maintenance Appeal Board, hereafter I/M Board, consisting of at least three persons, who are not employees of Bear River Health Department, appointed by the Board. The I/M Board shall have the discretion to determine which witnesses shall be heard and what evidence is relevant.

14.2.4 Violations determined to be intentional or flagrant shall result in the maximum enforcement of the penalty schedule pursuant to Appendix C.

14.2.5 In considering whether to reduce a penalty indicated by Appendix C, the I/M Board and the Department shall consider the following:

- 14.2.5.1 whether the violation was unintentional or careless;
- 14.2.5.2 the frequency of the violation or violations;
- 14.2.5.3 the audit and covert audit history of the I/M Program Station and the Certified Emissions Inspector;
- 14.2.5.4 whether the fault lies with the I/M Program Station, the Certified Emissions Inspector, or both.

14.3 Written notice of the final determination of the I/M Board, including the I/M Board's finding under Section 14.2.5, shall be made within ten calendar days after the conclusion of the appeals hearing.

15.0 PENALTY

15.1 Any person who is found guilty of violating any of the provisions of this Regulation, either by failing to do those acts required herein or by doing a prohibited act, shall be guilty of a class B misdemeanor pursuant to Section 26A-1-123, Utah Code Annotated, 1953, as amended. If a person is found guilty of a subsequent similar violation within two years, he shall be guilty of a class A misdemeanor pursuant to Section 26A-1-123, Utah Code Annotated, 1953, as amended.

15.2 Each day such violation is committed or permitted to continue shall constitute a separate violation.

15.3 The county attorney may initiate legal action, civil or criminal, requested by the Department to abate any condition that exists in violation of this Regulation.

15.4 In addition to other penalties imposed by a court of competent jurisdictions, any person(s) found guilty of violating any of this Regulation shall be liable for all expenses incurred by the Department.

15.5 A Penalty Schedule for permit warning, suspension, or revocation is adopted as Appendix A and may be amended by the Board as the Board deems necessary to accomplish the purposes of this Regulation.

16.0 SEVERABILITY

If any provision, clause, sentence, or paragraph of this Regulation or the application thereof to any person or circumstances shall be held to be invalid, such invalidity shall not affect the other provisions or applications of this Regulation. The valid part of any clause, sentence, or paragraph of this Regulation shall be given independence from the invalid provisions or application and to this end the provisions of this Regulation are hereby declared to be severable.

17.0 EFFECTIVE DATE

This Regulation shall become effective on May 9, 2013 as adopted by the Bear River Board of Health.

M. Kym Heaton

Appendix A

Fee Schedule

Permitting of an official I/M Program Station	\$250.00
Annual Renewal of I/M Program Station	\$50.00
Expired I/M Program Station Renewal	\$75.00
I/M Program Station Re-location	\$75.00
Permitting of a Certified Emissions Inspector	\$25.00
Renewal of Certified Emissions Inspector	\$15.00
Expired Certified Emissions Inspector Renewal	\$25.00
Official Station Sign	Cost
APC Fee for 12 month registration	\$3.00
APC Fee for 6 month registration	\$2.25
Emissions Inspection Fee – OBD Test	\$15.00
Emissions Inspection Fee – TSI and Tampering	\$20.00

APPENDIX B

BEAR RIVER HEALTH DEPARTMENT EMISSION STANDARDS CUTPOINTS

MOTOR VEHICLE EMISSIONS INSPECTION/MAINTENANCE PROGRAM

The following schedule gives the maximum allowable concentrations for carbon monoxide (CO) and hydrocarbons (HC) for both cars and trucks as determined by an approved infrared gas analyzer using the prescribed procedures. The effective date for these cutpoints is January 1, 2014.

ALL PASSENGER VEHICLES 1978 AND OLDER LIGHT DUTY TRUCKS 6,000 POUNDS GVWR OR LESS 1979 TRUCKS AND NEWER 8,500 POUNDS GVWR OR LESS MAXIMUM CONCENTRATION STANDARDS

<u>MODEL YEAR</u>	<u>PERCENT CARBON MONOXIDE</u>	<u>PARTS/MILLION HYDROCARBONS</u>
1968-1969	6.0	800
1970-1974	5.0	700
1975-1976	4.0	600
1977-1979	3.0	500
1980	2.0	300
1981-1995	1.2	220
1996 and newer	N/A – OBD II	N/A – OBD II

HEAVY DUTY TRUCKS AND VANS 1978 AND OLDER 6,001 AND OVER GVWR 1979 AND NEWER OVER 8,500 GVWR MAXIMUM CONCENTRATION STANDARDS

1968-1969	7.0	1500
1970-1978	5.0	1200
1979-1980	4.0	1000
1981 and newer	3.5	800

The minimum dilution factor must also be reached as part of the testing requirement. The dilution factor determination is contained in the analyzer specifications provided by the approved vendor.

NOTE: These should be considered as “cutpoints” for maximum allowable emissions levels. Vehicles must never be reset to these emission levels when readjustments are made, but rather shall be adjusted using manufacturer’s specifications. By using manufacturer’s specifications, the emissions levels should be well below the “cutpoints.”

APPENDIX C – PENALTY SCHEDULE

Violation (resets after 2 years of no similar violations unless revoked)	1st Occurrence	2nd Occurrence	3rd Occurrence	4th Occurrence
Failure to inspect or substituting a vehicle other than the vehicle on the test record <i>(intentional pass)</i>	Tech: 180 day suspension and mandatory retraining	Tech: Revocation of permit for up to 5 years		
	Station: 180 day suspension	Station: 270 day suspension	Station: Revocation of inspection station permit for up to 5 years	
Passing a failing vehicle or recording pass for tampering on a tampered vehicle <i>(gross negligence)</i>	Tech: 30 day suspension and mandatory retraining	Tech: 60 day suspension and mandatory retraining	Tech: Revocation of permit for up to 5 years	
	Station: 15 day suspension	Station: 30 day suspension	Station: 60 day suspension	Station: Revocation of permit for up to 5 years
Falsifying an inspection record or emissions certificate or Failing a passing vehicle <i>(intentional)</i>	Tech: 180 day suspension and mandatory retraining	Tech: Revocation of permit for up to 5 years		
	Station: 180 day suspension	Station: 270 day suspension	Station: Revocation of inspection station permit for up to 5 years	
Non-certified person performing test <i>(gross negligence table)</i>	Tech: 60 day suspension	Tech: 180 day suspension	Tech: Revocation of permit for up to 5 years	
	Station: 60 day suspension	Station: 180 day suspension	Station: Revocation of inspection station permit for up to 5 years	
Inaccurate or incomplete data entry <i>(incompetence)</i>	Tech: Formal warning and mandatory retraining	Tech: 30 day suspension and mandatory retraining	Tech: 90 day suspension and mandatory retraining	Tech: Revocation of permit for up to 5 years
	Station: Formal warning	Station: 15 day suspension	Station: 45 day suspension	Station: Revocation of inspection station permit for up to 5 years
Failure to follow proper test procedures <i>(incompetence)</i>	Tech: Formal warning and mandatory retraining	Tech: 30 day suspension and mandatory retraining	Tech: 90 day suspension and mandatory retraining	Tech: Revocation of permit for up to 5 years
	Station: Formal warning	Station: 15 day suspension	Station: 45 day suspension	Station: Revocation of inspection station permit for up to 5 years

Appendix D – Test Procedures

OBDII Test Procedures

On-Board Diagnostics (OBD) is the monitoring and fault detection/notification process of the Powertrain Control Module (PCM) related to the vehicle's emission control system and powertrain operation on 1996 and newer model year vehicles. When an emissions control malfunction is detected, a dashboard light illuminates, displaying one of the following: "Check Engine," "Service Engine Soon," or the international engine symbol. If the OBD system detects a problem that may cause vehicle emission to exceed applicable federal standards, the Malfunction Indicator Light (MIL) is illuminated and the appropriate diagnostic trouble code (DTC) and engine operating conditions will be stored in PCM memory.

- 1.0 Locate the Diagnostic Link Connector (DLC) on the vehicle being tested. Connect the vehicle to the test equipment.
 - 1.1 If the DLC is missing, has been tampered with, or is otherwise inoperable, the vehicle fails the test and shall be repaired.
 - 1.2 If the DLC is inaccessible, the problem must be remedied before the test can continue.
- 2.0 Turn the ignition switch to the off position for at least 30 seconds.
- 3.0 Visually examine the instrument panel to determine if the malfunction indicator light (MIL) illuminates, at least briefly, when the ignition key is turned to the "key on, engine off" (KOEO) position. Enter your visual inspection result into the test equipment.
 - 3.1 If the MIL does not illuminate, the vehicle fails the test and must be repaired.
- 4.0 Turn the ignition switch to the off position for at least 30 seconds.
- 5.0 Start the engine so the vehicle is in the "key on, engine running" (KOER) condition and follow the test equipment screen prompts until the test is complete.
- 6.0 For 1996-2000 model year vehicles two (2) not ready flags are allowed for a passing test. For 2001 and newer vehicles one (1) not ready flag is allowed. If the not ready status exceeds these numbers the vehicle must be driven additional miles until readiness monitors are set "ready" or repairs have been made allowing readiness flags to set ready.
- 7.0 If the MIL is commanded on while the engine is running, regardless of Diagnostic Trouble Codes (DTC's), the vehicle will fail the test and will require repairs.

- 8.0 Certain vehicles have been determined by the EPA to be OBDII deficient. The test equipment software will maintain a list of these vehicles and perform a modified OBDII test.
- 9.0 A Certificate of Compliance will be issued if the vehicle meets the requirements established in this section.

Two-Speed Idle (TSI) Test Procedures

During a two-speed idle test, the Analyzer measures the tailpipe exhaust emissions of a vehicle while the vehicle idles at both high and low speed. The Analyzer tests vehicles for carbon dioxide in addition to hydrocarbons and carbon monoxide. The two-speed idle test comprises two phases: (1) high speed test (2200-2800 RPMs) for the first phase of the emissions test; then, (2) tested at idle (350-1100 RPMs).

- 1.0 The Certified Emissions Inspector shall not inspect or test any motor vehicle with a mechanical condition which may cause injury to inspection personnel or damage to the inspection station or test equipment or which may affect the validity of the test, until such condition is corrected. Such conditions include, but are not limited to: coolant, oil, or fuel leaks; low oil or low fluid levels; and high visible emissions.
- 2.0 Prepare the Analyzer for testing as specified by the manufacturer.
- 3.0 Each vehicle shall be checked to determine that it is at normal operating temperature by feeling the top radiator hose or by checking the temperature gauge. Each vehicle shall be at normal operating temperature before performing the emissions inspection.
- 4.0 The inspection shall be performed with the transmission in “park” or “neutral” and with all accessories off and the emergency brake applied.
- 5.0 The Analyzer probe shall be inserted into the exhaust pipe at least twelve inches or as recommended by the Analyzer manufacturer, whichever is greater.
- 6.0 If a baffle or screen prevents probe insertion of at least twelve inches, a suitable probe adapter or snug fitting, non-reactive hose which effectively lengthens the exhaust pipe shall be used.
- 7.0 For all vehicles equipped with a multiple exhaust system that does not originate from a common point, both sides shall be tested simultaneously with an approved adapter.
- 8.0 When inspecting a vehicle under windy conditions, the tailpipe shall be shielded from the wind with a suitable cover.
- 9.0 With the tachometer properly attached, the vehicle shall be tested by following the screen prompts, answering questions, and entering required data. Vehicles failing because of excessive exhaust dilution shall repair the dilution problem prior to continuing the emission test. The dilution standard shall be contained in the Analyzer specifications provided by the approved vendor.

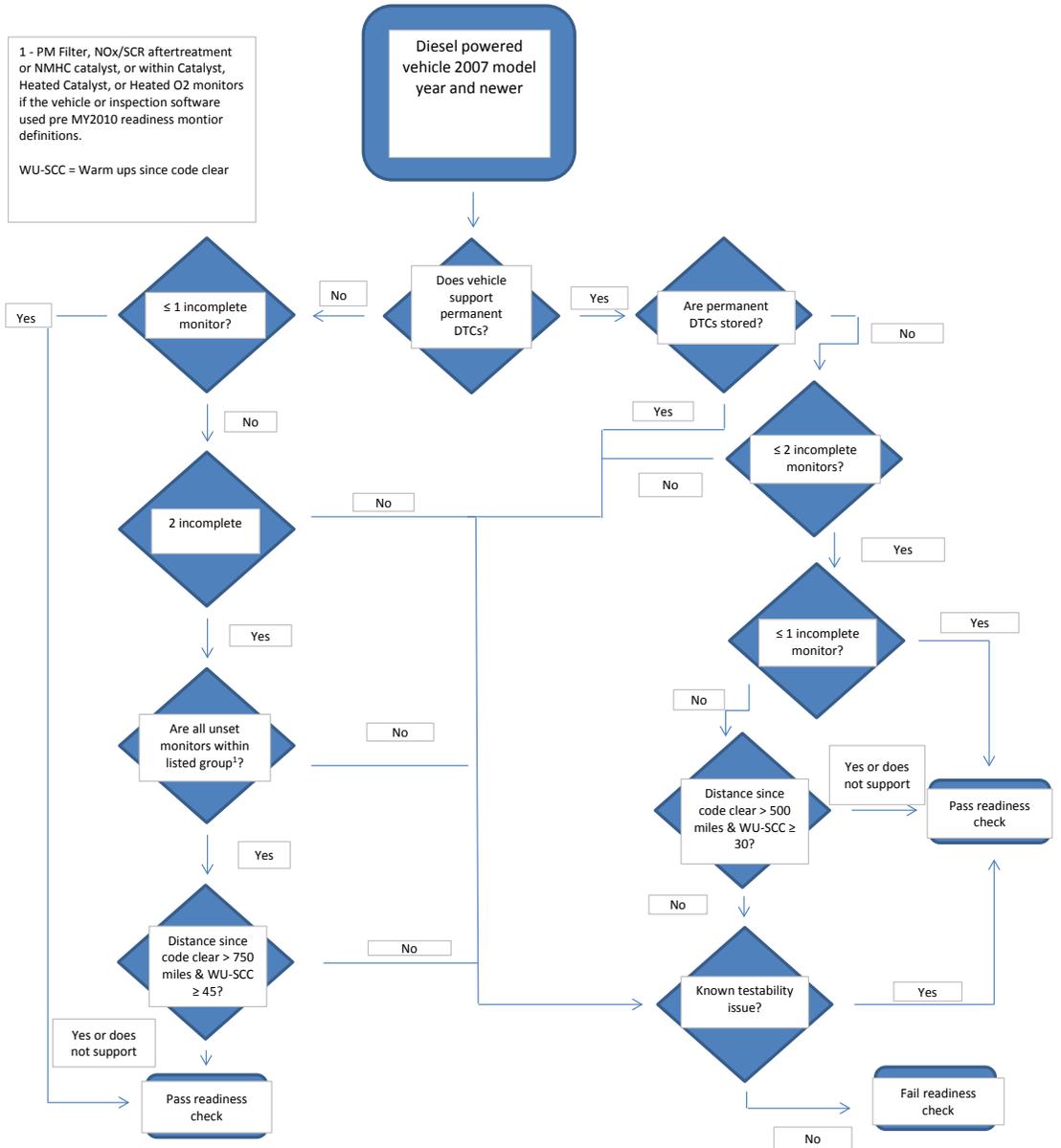
- 10.0 The Certified Emissions Inspector shall verify the presence of a gas cap and enter the information into the Analyzer.
- 11.0 Certain vehicles cannot be tested in the high speed (2200-2800 RPM) mode. The test equipment software will maintain a list of these vehicles and perform a modified test.
- 12.0 A Certificate of Compliance shall be issued if the vehicle emissions levels are the same as or less than the applicable cutpoint standards as referenced in Appendix B, and the vehicle has a gas cap present.

Diesel Powered Vehicles Test Procedures

- 1.0 All diesel powered vehicles 2007 and newer shall be tested in accordance with the following procedure:
 - 1.1 Locate the Diagnostic Link Connector (DLC) on the vehicle being tested. Connect the vehicle to the test equipment.
 - 1.1.1 If the DLC is missing, has been tampered with, or is otherwise inoperable, the vehicle fails the test and shall be repaired.
 - 1.1.2 If the DLC is inaccessible, the problem must be remedied before the test can continue.
 - 1.2 Turn the ignition switch to the off position for at least 30 seconds.
 - 1.3 Visually examine the instrument panel to determine if the malfunction indicator light (MIL) illuminates, at least briefly, when the ignition key is turned to the “key on, engine off” (KOEO) position. Enter your visual inspection result into the test equipment.
 - 1.3.1 If the MIL does not illuminate, the vehicle fails the test and must be repaired.
 - 1.4 Turn the ignition switch to the off position for at least 30 seconds.
 - 1.5 Start the engine so the vehicle is in the “key on, engine running” (KOER) condition and follow the test equipment screen prompts until the test is complete.
 - 1.6 If the vehicle has 1 or more monitors “not ready”, follow the attached flowchart to determine whether the readiness check will be marked as pass or fail.
 - 1.7 If the MIL is commanded on while the engine is running, regardless of Diagnostic Trouble Codes (DTC’s), the vehicle will fail the test and will require repairs.
 - 1.8 Certain vehicles have been determined by the EPA to be OBDII deficient. The test equipment software will maintain a list of these vehicles and perform a modified OBDII test.
 - 1.9 A Certificate of Compliance will be issued if the vehicle meets the requirements established in this section.

- 2.0 All diesel powered vehicles 1998-2006 shall be subject to a visual anti-tampering inspection. The air pollution control devices identified in the emission decal shall be in place and apparently operable on the vehicle. If the decal is missing the vehicle owner/operator shall have the decal replaced before the inspection can continue.
- 2.1 The devices listed on the decal must be present and apparently operable to pass the emission inspection.
- 2.2 If the OBD II system is identified in the emission decal, the procedure in Section 1.1 through 1.5 shall be followed.
- 2.3 If the decal is missing and is no longer available for replacement the vehicle owner/operator shall provide written documentation to the Department stating such. Approved documentation shall come from an authorized dealer or manufacturer of the vehicle in question.
- 2.3.1 If the emissions decal is missing and the vehicle meets the requirements of Section 2.3, the following emissions control devices should be present and apparently operable if factory equipped:
- Catalyst;
 - Exhaust Gas Recirculation System (EGR);
 - Diesel Particulate System (DPF);
 - Air Injection Reaction System (AIR);
 - Urea System (SCR); and
 - OBD II System.
- 2.4 A Certificate of Compliance shall be issued if the emissions control devices are in place and apparently operable. An inspection of the OBD II system as referenced in Section 2.2 shall be for informational purposes only and will not determine whether a vehicle passes or fails the emission inspection.

Diesel Readiness Check Flowchart



Appendix E - Technical Specifications and Calibration Gas

1.0 GENERAL

This appendix contains specifications for Emission Inspection System Contractors (hereafter, Contractors) to design Testing Equipment to be used in the Cache County Vehicle Emissions Inspection and Maintenance Program (hereafter, I/M Program). Testing Equipment to be used in the I/M Program must be capable of performing consistent Two-Speed Idle (TSI), and On-Board Diagnostics (OBD) emissions inspections.

1.1 Design Goals

Testing Equipment must be designed and constructed to provide reliable and accurate service in the automotive service environment and have a useful life of at least five years. The software must be designed for maximum operational simplicity and be capable of providing emissions readings or codes that can be used for vehicle diagnostics. A manual, non-test mode should be available to perform vehicle diagnostics. The software must prevent users from clearing Diagnostic Trouble Codes, changing readiness status, or performing other actions that could change the results of an official emissions test. In addition, the Testing Equipment must include security measures that will prevent unauthorized modifications to the software or inspection data, record unauthorized entry, also known as tampering, and prevent subsequent inspections when tampering is detected.

These technical specifications contain the minimum requirements for Testing Equipment used to perform emissions inspections in the I/M Program. Contractors may include additional items with approval from the Bear River Health Department (hereafter, the Department).

1.1.1 Identification Data

A nameplate including the following information must be permanently affixed to the housing of the Testing Equipment:

- Name and address of manufacturer;
- Model description;
- Serial number; and
- Date of assembly.

In addition, the Contractor shall affix a label to the housing of the Testing Equipment that contains a toll-free telephone number for customer service. This telephone number must also be displayed on error messages that recommend the need for service by the manufacturer.

The Testing Equipment must also electronically display:

- Nameplate data;
- Testing Equipment number; and
- Propane Equivalency Factor (PEF).

1.2 Manuals

All Testing Equipment sold or leased by the Contractor must be provided with a current copy of a manual that contains, at a minimum, operating instructions, maintenance instructions, and initial startup instructions. The manual may be provided in an electronic format and should be accessible from the Testing Equipment.

1.3 Certification Requirements

The Contractor shall submit a letter to the Department stating that the Testing Equipment model sold or leased by the Contractor or its authorized representatives satisfies all design and performance criteria described in these specifications. Unless otherwise specified, a copy of the software documentation listed below must be submitted to the Department as part of the certification application. The documentation must include, at a minimum, the following:

- Complete program listing(s);
- Functional specifications;
- Functional flowcharts of the software;
- Example inputs and outputs from all processes;
- Detailed interface information on system components including the identification of protocol and output specifications; and
- File layouts.

To ensure proper maintenance of all Testing Equipment, a full description of the Contractor's service procedures and policies, sample contracts, warranties, and extended service agreements must be provided as part of the certification application. The Contractor shall provide a training plan to the Department that will be used to conduct certification training of potential inspectors on the use of the Testing Equipment. The Contractor shall supply to the Department and maintain at least one piece of Testing Equipment.

1.3.1 Escrow of Software

The Contractor must submit a letter of corporate authorization agreeing to place software source codes and other pertinent technical information in an escrow placement approved by the Department. The Contractor shall contract with the approved escrow company and provide the Department with a copy of the contract including the Department as a beneficiary. Certification of the Testing Equipment will not be valid until this condition has been met.

The Contractor must place in escrow the most recent version of the Testing Equipment software, including but not limited to, the actual software code and related materials

used to meet this specification. The software will be turned over to the Department only if the Contractor defaults or cannot ensure continued performance of the contract.

In the event that the software is transferred, the Department shall protect it from public dissemination and commercial usage to the extent required by law. The software may be used, maintained, and updated by the Department, or its assignee, to support the I/M Program. At a minimum, the Department shall:

- Limit source code access to parties necessary to maintain and update the analyzers;
- Require all parties to sign a non-disclosure agreement before obtaining access to the code; and
- Grant no license permitting an entity to use any part of the codes for any commercial purpose other than to update and operate the analyzers.

The Department is not interested in the disclosure of proprietary information or the detailed inner workings of the software. However, it is essential that the software, schematics, and drawings be available in case the Contractor defaults.

As a prerequisite to certification, the Contractor shall furnish a performance bond to the Department. This bond must be in a form approved by the Department, executed as a surety by a bonding company authorized to do business in the State of Utah, and signed by a licensed resident agent. The performance bond must be for \$250,000 and must remain valid for the entire time period that the Contractor participates in the I/M Program. The performance bond must cover all Testing Equipment that is certified to conduct emissions inspections in the I/M Program.

The performance bond may be used by the Department at any time if the Contractor is in default of the requirements of these specifications, including but not limited, to the following "Events of Default":

- A. The Contractor fails to remedy a breach of covenant, representation, or warranty required by these specifications within thirty (30) days after written notice of such breach has been given to the Contractor by the Department;
- B. The Contractor makes a general assignment for the benefit of creditors, admits in writing its inability to pay debts as they mature, institutes proceedings to be adjudicated upon voluntary bankruptcy, consents to the filing of a bankruptcy proceeding against it, files a petition or answer or consent seeking reorganization, readjustment, arrangement, composition, or similar relief under federal bankruptcy or any other similar applicable law(s), consents to the filing of any such petition, consents to the appointment of a receiver, liquidator, trustee, or assignee in bankruptcy or insolvency of the manufacturer or a substantial part of its property, or takes action to further any of these purposes; or
- C. A court of competent jurisdiction enters a decree or order adjudging the Contractor as bankrupt or insolvent, or approving a properly filed petition seeking

reorganization, readjustment, arrangement, composition, or similar relief for the Contractor under the federal bankruptcy or any other similar applicable law(s), and such decree or order is not discharged or stayed continuously for a period of sixty (60) days; or a decree or order of a court of competent jurisdiction for the appointment of a receiver, liquidator, trustee or assignee in bankruptcy or insolvency of the manufacturer or of a substantial part of its property, or for the liquidation of its affairs, is entered, and such decree or order is not discharged or stayed continuously for a period of sixty (60) days; or any substantial part of the property of the Contractor is sequestered or attached and is not returned to the Contractor or released from such attachment within sixty (60) days thereafter.

To require performance by the surety under the performance bond, the Department shall give written notice of the event of default to the Contractor, specifying the date upon which the surety performance must begin.

The Director or his designee shall release the performance bond once it is determined that the Contractor has satisfactorily completed its obligations in accordance with the terms of these specifications, or at an earlier date, if it is determined by the Director to be in the best interest of the Department.

1.4 Warranty Coverage and Extended Service Agreements

A written warranty coverage agreement, signed by an authorized representative of the Contractor and the I/M Program Station, which provides a complete description of coverage for all systems and components and all Contractor provided services listed below in Contractor Provided Services, must accompany the sale or lease of each unit of Testing Equipment.

The original manufacturer's warranty must be a minimum of one year from the date of purchase. An extended warranty service agreement must be available to the Testing Equipment owner upon the expiration of the manufacturer's original warranty period. Cost disclosures of consumable inventory items and extended warranty service agreements with detailed descriptions of coverage must be available to all Testing Equipment owners.

The cost of extended warranty service agreements must be identified in the Contractor's response to the RFP

1.5 Contractor Provided Services

A Contractor-authorized repair technician is a Testing Equipment service technician that is authorized by the Contractor to perform service on their fleet of Testing Equipment. Only Contractor-authorized repair technicians may access the secure areas on the Testing Equipment.

The Contractor-authorized repair technician shall perform a gas calibration prior to returning an Analyzer to service whenever a component of the emissions measurement system is repaired or replaced. Similarly, the Contractor-authorized repair technician shall perform a leak check each

time the Analyzer's sample line is broken and repaired. Contractor-authorized repair technicians shall have software driven menu options or other acceptable method that records the transfer of inspection station, inspector information, and other data from one unit of Testing Equipment to another without manual inputs or the transfer of previous data.

The Department may require the Contractor to conduct on-site or laboratory testing of the Testing Equipment in order to document continued compliance. The Contractor shall supply the I/M Program Station a temporary replacement unit of Testing Equipment that meets the I/M Program requirements if a unit of Testing Equipment is removed from the I/M Program Station for repair or testing. The Contractor shall be responsible for any costs incurred under this requirement.

The Contractor shall correct software features that do not meet these specifications to the satisfaction of the Department. The enhancement of operational software must be specified by the Department and be designed to update through the internet. Unless authorized by the Department, software enhancements must be available for beta testing within 120 days of commencement of a software update contract and receipt of an updated Testing Equipment specification. The Contractor shall not modify any existing Testing Equipment software without obtaining approval from the Department.

The Contractor shall be responsible for training Department officials responsible for oversight of the I/M Program, including but not be limited to, the instruction on all operational, maintenance, and quality control features of the Testing Equipment sampling system, full access to and use of inspection, audit, and calibration menus, and optional programs offered to inspectors. This training must be conducted at the Contractor's expense as a condition of certification, and upon written request by the Department.

The Contractor shall provide the following services to the I/M Program Station as part of any sale, lease, or loan of Testing Equipment:

- Delivery, installation, calibration, and verification of the proper operating condition of the Testing Equipment;
- Two extra sample filters with each TSI Analyzer, and an additional printer cartridge or a certificate redeemable for a printer cartridge for all Testing Equipment;
- A minimum of two hours operation and maintenance training to the owners and operators for each unit of Testing Equipment purchased or leased.

The Contractor shall provide the following services to the I/M Program Station as part of the manufacturer's original warranty and thereafter as a portion of the extended warranty service agreement.

- Full systems support and repair, including temporary provision of units of equal quality and specification;

- Quarterly examination, calibration, and routine maintenance of Analyzer and sampling systems on the TSI Analyzers. Annual examination must be required on the OBD portion of the Testing Equipment.
- On-site service response by a Contractor-authorized repair technician within one business day (Saturday shall be considered a business day), excluding Sundays, national/state holidays (New Year's Day, Martin Luther King, Jr. Day, President's Day, Memorial Day, Independence Day, Pioneer Day, Labor Day, Veteran's Day, Thanksgiving, and Christmas), and other days the purchaser's business might be closed, of a request from the I/M Program Station. The names, toll free telephone number(s), and service facility addresses of the Contractor's representatives responsible for Equipment service must be provided to the I/M Program Station. All system repairs, component replacements, and/or Testing Equipment adjustments, including reset of quality control lockout systems, must be accomplished on-site within a minimum average response time of 8 business hours after a service request has been initiated. If the completion of this work is not possible within this time period, Testing Equipment of equal quality and specifications must be provided until the malfunctioning unit is properly repaired and returned to service.

1.6 Electronic Transmission Security

The Testing Equipment shall utilize a standard protocol encryption method for communications with the host incorporating error detection and not incorporating error correction. The Testing Equipment shall utilize bitsum checking for all messages.

1.7 Tamper Resistance

The controlled access design must be the responsibility of the Contractor, but all security measures must be submitted to the Department for approval. The Testing Equipment operators, Department personnel, and field representatives authorized by the Contractor shall be prevented from creating or changing any inspection results, programs, or data contained on the Testing Equipment. The Contractor shall use appropriate software and hardware provisions to protect I/M files and programs. The file and program protection may consist of mechanical systems in combination with electronic and software systems. The protection features must prevent access to the secured portions of the hard disk containing I/M programs and inspection data. The control key or its functional equivalent, which gives access to the operating system (OS), must not be activated except through the use of a password on the audit menu. The password must be chosen by the Department at the time of certification testing. Other security or protection alternatives may be proposed by the Contractor for approval by the Department.

The Contractor shall, at a minimum, develop tamper resistant features to prevent unauthorized access through the Testing Equipment cabinet. Micro switches, keyed and software controlled locks, and software algorithms requiring the use of an access code must all be used where appropriate. Any unauthorized access to the secured areas of the Testing Equipment must be detected, even when the power is off. A software lockout algorithm must be activated should

tampering occur, which would abort any existing inspection sequence and prevent further inspections until the lockout is cleared by a field representative authorized by the Department. The Contractor shall develop a system to allow Contractor-authorized repair technicians to clear tamper lockouts only during authorized service calls. The lockout system must be designed so that it can be activated from the audit menu by Department personnel. The Contractor may use keyed locks on the cabinet doors to secure the disk drives as long as the locks are built-in and can be changed by authorized personnel should a security problem be identified. A software controlled solenoid lock may also be used on the secured drive door of the Testing Equipment. The solenoid lock may be used instead of or in addition to any key or combination lock that may be provided. The Testing Equipment software must control the solenoid lock and unlatch the doors in response to authorized requests from the audit menu while maintaining the appropriate levels of security.

A tamper file must be created that includes the date, time, type, and location of the tamper lockout, date and time the lockout was cleared, and who cleared the lockout. The tamper lockout type and location must be accessible only through the lockout function of the Testing Equipment's audit menu.

Access to the compact disc drive (CD), if applicable, must be available to I/M Program Station personnel at all times. However, access to the BIOS, I/M related programs, and data must be secured separate from the CD and additional drives. The Contractor shall provide a security method approved by the Department for the CD drive(s) to prevent unauthorized reads, writes, and executable. However, the Contractor may offer Testing Equipment with additional disk drives that can run optional software application programs.

The Testing Equipment must prevent Contractor-authorized repair technicians from performing the following, except in a manner approved by the Department:

- Clearing a state lockout;
- Clearing a lockout for a failed three-day gas calibration or leak check;
- Adding, deleting, or modifying test data;
- Adding, deleting, or modifying I/M Program Station information or an Certified Emissions Inspector's license number; and
- Altering the calibration gas bottle values.

1.8 Automated Inspection Process Software and Displays

The inspection process, data collection, and quality control features of the Testing Equipment must be automated as much as possible. The software must automatically select the emission standards for the vehicle from an internal reference table. Vehicle identification information must be derived from a database accessed over a real time data system to the Testing Equipment. Access to the Vehicle Identification Database (VID) shall be accomplished by entry of the vehicle identification number (VIN) in its entirety. Provisions must be made for manual entry of data for vehicles not in the reference files of the Testing Equipment. The Contractor in

consultation with the Department shall customize how the emission testing results are displayed on the Testing Equipment and on the approved paperwork provided to the owner of the vehicle.

2.0 HARDWARE REQUIREMENTS

2.1 Overview

The hardware requirements for the Analyzer must meet or exceed specifications as published by the California Bureau of Automotive Repair (BAR) and contained in the "BAR-97 EMISSIONS INSPECTION SYSTEM SPECIFICATIONS" (BAR-97), dated May 1996, except where reference is made to ASM testing and NOx gas measurement requirements. The Analyzer may include all amendments made to the BAR-97 hardware specifications to present date. Each Analyzer shall be equipped with Bar Code Scanner, Engine Revolutions per Minute Detection System and Real-Time Inspection Testing Monitoring System.

2.2 Accessing the OBD System

The Testing Equipment must include hardware and software necessary to access the on-board computer systems on all model-year 1996 and newer gasoline and natural gas powered vehicles. The Testing Equipment must also be able to access the on-board computer system on all model years 2007 and newer diesel powered vehicles. The equipment design and operation of the Testing Equipment must meet the federal requirements contained in Title 40 of the Code of Federal Regulations (CFR), Chapters 85.2207-2231 and the recommended practices regarding OBD inspections contained in the J1962, J1978 and J1979 published by the Society of Automotive Engineers (SAE). The Testing Equipment must be able to connect to the vehicle's OBD connector and access, at a minimum, the following OBD data:

- Service modes: \$01, \$03, \$07, \$09, \$0A

At a minimum, the Testing Equipment must also be capable of communicating with all OBD vehicles that use the following communications protocols:

- International Organization for Standardization (ISO) 9141;
- Variable pulse width (VPW) as defined in the SAE's J1850;
- Pulse width modulation (PWM) as defined in the SAE's J1850;
- Keyword protocol 2000 (KWP); and
- Controller area network (CAN) as defined in the ISO 15765-4.3:2001.

The OBD interrogation process must be fully integrated into the Testing Equipment, automated, and require no inspector intervention to collect and record the OBD data retrieved via the OBD connector link. No separate interface may be used.

2.3 OBD Inspection Equipment

The OBD inspection Equipment apply only to the OBD communication components, which must meet all federal requirements contained in 40 CFR §§85.2207 - 85.2231 and recommended practices contained in the J1962, J1978, and J1979 published by the SAE. The Equipment must meet criteria contained in the EPA's guidance document, "Performing Onboard Diagnostic System Checks as Part of a Vehicle Inspection and Maintenance Program" (EPA, 2001) or EPA's applicable update to this document.

2.4 Bar Code Scanner

The bar code scanner must be able to read a one-dimensional (1-D) and a two-dimensional (2-D) bar code through a windshield and use visible laser diode technology or an equivalent approved by the Department. The bar code scanner must not be able to read Universal Product Code (UPC) 1-D bar codes. The bar code scanner must be able to withstand multiple drops to concrete covering a distance of at least 4 feet and be environmentally sealed to withstand the normal operating conditions of an automotive service environment.

2.5 Engine Revolutions per Minute Detection

Testing Equipment must be equipped with a tachometer, or equivalent software and hardware necessary to detect engine RPM from the original equipment manufacturer (OEM) ignition technologies in use at the time of certification. Possible updates may be required to enable future ignition systems to be monitored for engine RPM. A software "HELP" screen must be available to help the Certified Emissions Inspector locate an RPM signal. The cable-type connection must be at least 25 feet long (measured from the front of the Testing Equipment).

Based on the vehicle identification information available to the Certified Emissions Inspector, the Testing Equipment must display messages indicating when the vehicle under inspection requires a specific type or method of the tachometer pick-up connection. A digital display tachometer must be displayed to measure engine speed. For TSI Analyzers, RPM readings must be recorded on a second-by-second basis for the 10 second or 5 second period that is used to determine the pass or fail status of the TSI emissions inspection, respectively. The tachometer operation must use one of the following means:

- Radio frequency-type transmitter/receiver that requires no direct vehicle connection and can detect engine RPM on vehicles using distributorless ignition systems (DIS);
- Cable-type connection capable of detecting engine RPM of current OEM ignition technology;
- Battery/accessory power connection; or
- Cable-type connection capable of detecting engine RPM via the OBD port.

During the official inspection process the Testing Equipment must prompt the Certified Emissions Inspector to shut the engine off while connecting the cable-type RPM connection. The RPM bypass function must be made available when the live engine RPM is displayed for the first

time. If the RPM cannot be obtained, the Certified Emissions Inspector shall be allowed to bypass the RPM. The Certified Emissions Inspector must simultaneously strike at least two keys to activate the RPM bypass. The bypass function must no longer be available once the emission inspection has begun.

The Certified Emissions Inspector may use the previously listed methods for 1996 and newer model-year vehicles if the OBD port is unable to detect engine RPM. Tachometer performance must be no less than a 0.5 second RPM response time with an accuracy of +/-3 percent of actual RPM.

2.6 Real-Time Inspection Testing Monitoring System

All approved Testing Equipment conducting official emission testing shall be equipped with video capturing equipment. An I/M Program Station will be in violation if the video capturing equipment is not properly maintained or installed and capturing images of each inspection. If video equipment is not fully operational, the I/M Program Station must contact the Contractor immediately for repair or replacement.

2.7 Inspection Restrictions Based on Current Calibrations

The Analyzer must:

- prevent TSI emissions inspections if the leak check has not passed in the last 24 hours;
- prevent TSI emissions inspections if the gas calibration has not passed in the last 72 hours;

The Testing Equipment must display appropriate error messages that indicate when a leak check or other calibration is needed to allow TSI inspections to be performed.

2.8 Running Changes and Other Hardware Modifications

Changes to design characteristics, component specifications, or any other modifications to the Testing Equipment hardware must be approved by the Department. The Contractor is responsible for confirming that such changes will have no detrimental effect on performance of the Testing Equipment. The Department may require testing at approved beta test sites prior to the release of the modifications.

All proposed hardware modifications must be thoroughly tested by a third-party before being submitted to the Department, and be accompanied by a cover letter containing the following information:

- Description of all of the proposed modifications to be performed, a parts list, and the installation instructions for the Contractor-authorized repair technician;
- Test data and an engineering evaluation regarding the effects of the proposed modification(s) on the performance and reliability of the Testing Equipment for any modifications to the bench or sample system;

- Timeline showing timeframe in which the modifications are expected to occur and the number of existing units of Testing Equipment that will be updated;
- Description of any special procedures that are needed to perform the hardware modifications; and
- Documentation for any software update that would be required for the proposed hardware modifications.

2.9 Exhaust Gas Analysis Equipment Specifications

This section defines the requirements for the components needed to determine the concentrations of the exhaust gases during the TSI inspections.

2.9.1 Measured Gases

The Analyzer must measure hydrocarbons (HC) as hexane in parts per million (ppm), carbon monoxide (CO), carbon dioxide (CO₂), and oxygen (O₂) in percent. The Analyzer must have a digital display for vehicle engine speed and exhaust concentrations of HC, CO, CO₂, and O₂ and must be capable of measuring exhaust concentrations of HC, CO, CO₂, and O₂ at a minimum sample rate of twice per second.

2.9.2 Warm-up Conditions

The Analyzer must reach stability within 30 minutes from startup at 35 degrees Fahrenheit (°F). The Analyzer must be considered warmed-up when the internal verifications are complete and the zero and span readings for HC, CO, CO₂, and O₂ have stabilized within the allowable accuracy values for five minutes without adjustment. If stabilization has not been reached within an allotted time frame, then the Analyzer must prevent TSI inspection sequences and display a message instructing the Certified Emissions Inspector to call for service. Functional operation of the gas sampling system must remain disabled through an internal lockout until the instrument meets stability and warm-up requirements.

2.9.3 Sampling System Components

A) General:

The sampling system must extract exhaust gas from a subject vehicle, remove particulate matter and aerosols from the sampled gas, drain the condensed water from the sample if necessary, and deliver the resultant gas sample to the Analyzer's sensors for analysis. The sampling system must, at a minimum, consist of a tailpipe probe, flexible sample line, continuously draining water removal system, particulate trap, sample pump, and flow control components. Provisions must be made for the introduction of zero air and calibration gases. Materials that are in contact with the gases sampled must not contaminate or change the composition of the gases to be

analyzed, including gases from vehicles not fueled by gasoline. The system must be designed to be corrosion-resistant and to withstand vehicle exhaust.

B) Sample Probe and Hose Criteria:

Sample hose must be 25 feet in length with a tolerance of +/- 0.5 feet when measured from the front of the Analyzer cabinet. The hose must be composed of non-kinking material that will not be affected by or react to the exhaust gases.

Sample hose and probe provided with each Analyzer must withstand exhaust gas temperatures at the probe tip of up to 1,100°F for 10 minutes. Use of dissimilar metals with thermal expansion factors of more than 5 percent must not be used in either the construction of probes or connectors.

A positive means of retention must be incorporated to prevent the probe from slipping out of the tailpipe when in use.

A thermally insulated securely attached hand grip must be provided on the probe to ensure easy probe insertion using one hand.

The probe must be designed so that the tip extends 16 inches into the tailpipe and at least 10 inches into the vehicle's exhaust.

The probe tip must be shielded to avoid inadvertent debris collection and sealed to prevent any sample dilution when it is inserted into the tailpipe. Use of a tailpipe extension is permitted as long as the extension does not change the exhaust back pressure by more than +/- 1 inch of water pressure.

A straight probe tip must be provided that is bent less than 15 degrees, made of stainless steel solid-wall tubing with a 3/16 inch outside diameter, and designed so the connector between the removable probe tip and the rigid portion of tubing is up inside the tailpipe at least three inches to reduce the effects of any leak that might occur.

A probe tip cap suitable for performing a leak check must be provided if the vacuum decay method for performing a leak check is used. Otherwise, all hoses and connectors that are necessary to perform a leak check must be provided.

The sample system must include equipment necessary to inspect vehicles equipped with dual exhaust pipes. The flow in each leg of the dual exhaust probe sample system must be equal.

C) Particulate Filter and Water Trap:

- The particulate filter must be capable of trapping 97 percent of all particulates and aerosols five microns or larger;
- The filter must not absorb or adsorb HC;

- The filter housing must be transparent to allow the operator to observe the filter's condition without removing the housing. The filter must be removable and reliably seal after replacement;
- The water trap must be sized to remove exhaust sample water from vehicles fueled with, or a combination of gasoline, propane, compressed natural gas (CNG), oxygenated fuels, and alternative fuels. The filter bowl, filter, and housing must not react to these fuels or the vehicle's exhaust gases. The condensed water must be continuously and sufficiently drained from the water trap's bowl to prevent condensation in the sample system or in the optical bench's sample cell; and
- Incorporate a back-purge system.

D) Low Flow Indicator:

The Analyzer must lockout official TSI inspections when the sample flow is below the acceptable level. The Analyzer's sample system must be equipped with a flow meter or equivalent device that detects sample flow degradation. The Analyzer must display a low flow condition message when flow rate causes the measurement error for any gas to exceed 3 percent of the gas value used for calibration or audit or causes the analyzer response time to exceed 13 seconds to 90 percent of a step change in input, whichever is less. The sample vacuum may be continuously monitored to detect a low flow condition as an alternative.

E) Analyzer lockout:

The Analyzer must lockout official TSI inspections when the sample flow is below the acceptable level. The Analyzer's sample system must be equipped with a flow meter or equivalent device that must indicate when sample flow degradation for any gas other than NO causes:

- The measurement error to exceed 3 percent of the gas value used for checking; or
- The Analyzer response time to exceed 13 seconds for a 90 percent step change in input.

The sample vacuum may be continuously monitored to detect a low flow condition as an alternative.

3.0 Analyzer Requirements

3.1 Gas Calibration

A) General:

The Analyzer must automatically require and successfully pass a leak check and a gas calibration for HC, CO, CO₂, and O₂ by a method that is approved by the Department. The Analyzer must not allow an error of more than 2 percent of the readings using the high and low range span gases

for TSI inspections. The Analyzer must automatically prohibit the performance of the tailpipe portion of the vehicle emissions inspection when readings exceed the 2 percent error tolerance. The Analyzer channels must be adjusted to the center of the allowable tolerance range as a result of the gas calibration procedure.

The standard gases to be used to calibrate and audit the Analyzer must meet the requirements in the Federal Clean Air Act, §207(b) and described in Subpart W of Part 85 of Chapter I, Title 40 of the CFR. All standard gases purchased by the I/M Program Station for use in the Analyzer must conform to the requirements established by the BAR for emissions inspection analyzer calibration gases and the National Institute of Standards and Technology (NIST).

B) Gas Calibration Procedure:

- The Analyzer must maintain accuracy between gas calibrations taking into account all errors, including noise, repeatability, drift, linearity, temperature, and barometric pressure;
- The Analyzer must automatically require a zero gas calibration and a high and low range gas calibration for HC, CO, CO₂, and O₂, where applicable. The Analyzer must record the gas reading data prior to the adjustment and other data pertinent to control charting Analyzer performance;
- The gas calibration must be accomplished by the following method: Calibration gases that meet the requirements of Section 3.1: Calibration Gases for TSI Analyzers must be introduced into the calibration port of the Analyzer. The pressure in the sample cell must be the same with the calibration gas flowing as with the sample flowing during an inspection. Once the pressure is the same, the Analyzer must perform a zero gas calibration and a leak check. The leak check must ensure that the entire sample system does not leak.

3.2 Calibration Gases for TSI Analyzers

The following gases must be used for the two-point calibration and audit.

A) Low Range Calibration Gas

HC = 200 ppm propane

CO = 0.5 percent

CO₂ = 6.0 percent

O₂ = Shop Air

N₂ = Balance 99.99 percent pure

B) High Range Calibration Gas

HC = 3200 ppm propane

CO = 8.0 percent

CO₂ = 12.0 percent

O₂ = Shop Air

N₂ = Balance 99.99 percent pure

3.3 Dilution

The flow rate of the Analyzer must not cause more than 10 percent dilution during sampling of vehicle exhaust gases from a 1.6 liter engine at normal idle. Ten percent dilution is defined as a sample of 90 percent exhaust and 10 percent ambient air.

3.4 Calibration Prompts and Gas Usage

The Analyzer must display prompts to guide the inspector through the gas calibration procedure in a manner that minimizes the amount of gas used. The Analyzer must be designed to keep the loss of calibration gas to less than 0.5 liter in 24 hours when the valve on the calibration gas bottle is left open.

3.5 Propane Equivalency Factor

The value of the PEF must range from 0.490 to 0.540 and be displayed in a manner acceptable to the Department for each gas audit and gas calibration point. If an optical bench must be replaced in the field, then the Contractor-authorized repair technician must change any external labels to correspond to the PEF of the new bench. The Analyzer must incorporate an algorithm relating PEF to HC concentration. Corrections to the PEF must be made automatically and the corrected PEF value must range from 0.470 to 0.560.



State of Utah

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQ-064-13

MEMORANDUM

TO: Air Quality Board

THROUGH: Bryce C. Bird, Executive Secretary

FROM: Mark Berger, Environmental Planning Consultant

DATE: July 29, 2013

SUBJECT: PROPOSE FOR PUBLIC COMMENT: Amend R307-110-10. Section IX, Control Measures for Area and Point Sources, Part A, Fine Particulate Matter; and R307-110-36. Section X, Vehicle Inspection and Maintenance Program, Part F, Cache County.

When sections of the State Implementation Plan (SIP) are amended by the Board, those sections must be incorporated into the Air Quality Rules. If the Board proposes amendments to SIP Subsections X.F and IX.A.23, it will be necessary to propose for public comment amendments to R307-110-10 and R307-110-36 to incorporate into those rules the amended versions of the SIP.

Staff Recommendation: Staff recommends the Board propose for public comment R307-110-10 and R307-110-36 as proposed.

1 **R307. Environmental Quality, Air Quality.**
2 **R307-110. General Requirements: State Implementation Plan.**
3 **R307-110-10. Section IX, Control Measures for Area and Point Sources,**
4 **Part A, Fine Particulate Matter.**

5 The Utah State Implementation Plan, Section IX, Control Measures
6 for Area and Point Sources, Part A, Fine Particulate Matter, as most
7 recently amended by the Utah Air Quality Board on [~~December 5,~~
8 ~~2012~~ November 6, 2013, pursuant to Section 19-2-104, is hereby
9 incorporated by reference and made a part of these rules.

10

11

12 **KEY: air pollution, PM10, PM2.5, ozone**
13 **Date of Enactment or Last Substantive Amendment: December 6, 2012**
14 **Notice of Continuation: February 1, 2012**
15 **Authorizing, and Implemented or Interpreted Law: 19-2-104(3)(e)**

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

2 **R307-110. General Requirements: State Implementation Plan.**

3 **R307-110-36. Section X, Vehicle Inspection and Maintenance Program,**
4 **Part F, Cache County.**

5 The Utah State Implementation Plan, Section X, Vehicle Inspection
6 and Maintenance Program, Part F, Cache County, as most recently adopted
7 by the Utah Air Quality Board on [~~December 5, 2012~~November 6, 2013,
8 pursuant to Section 19-2-104, is hereby incorporated by reference
9 and made a part of these rules.

10

11 **KEY: air pollution, PM10, PM2.5, ozone**

12 **Date of Enactment or Last Substantive Amendment: [~~December 6,~~**
13 **2012]2013**

14 **Notice of Continuation: February 1, 2012**

15 **Authorizing, and Implemented or Interpreted Law: 19-2-104(3)(e)**



State of Utah

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQA-555-13

MEMORANDUM

TO: Utah Air Quality Board

FROM: Bryce C. Bird, Executive Secretary

DATE: July 5, 2013

SUBJECT: Air Toxics, Lead-Based Paint, and Asbestos (ATLAS) Section Compliance Activities – June 2013

MACT Compliance Inspections	0
Asbestos Demolition/Renovation NESHAP Inspections	16
Asbestos AHERA Inspections	18
Asbestos State Rules Only Inspections	6
Asbestos Notifications Accepted	128
Asbestos Phone Calls Answered	483
Asbestos Individuals Certifications Approved/Disapproved	27/0
Asbestos Company Certifications/Re-certifications	1/2
Asbestos Alternate Work Practices Approved/Disapproved	7/0
Lead-Based Paint (LBP) Inspections	6
LBP Notifications Approved	0
LBP Phone Calls Answered	54
LBP Letters Prepared and Mailed	21
LBP Courses Reviewed/Approved	0/0
LBP Course Audits	3
LBP Individual Certifications Approved/Disapproved	12/0

LBP Firm Certifications	4
Notices of Violation Issued	1
Compliance Advisories Issued	18
Warning Letters Issued	11
Settlement Agreements Finalized	0
Penalties Agreed to:	\$0.00



State of Utah

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Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQC-838-13

MEMORANDUM

TO: Air Quality Board
FROM: Bryce C. Bird, Executive Secretary
DATE: July 17, 2013
SUBJECT: Compliance Activities – June 2013

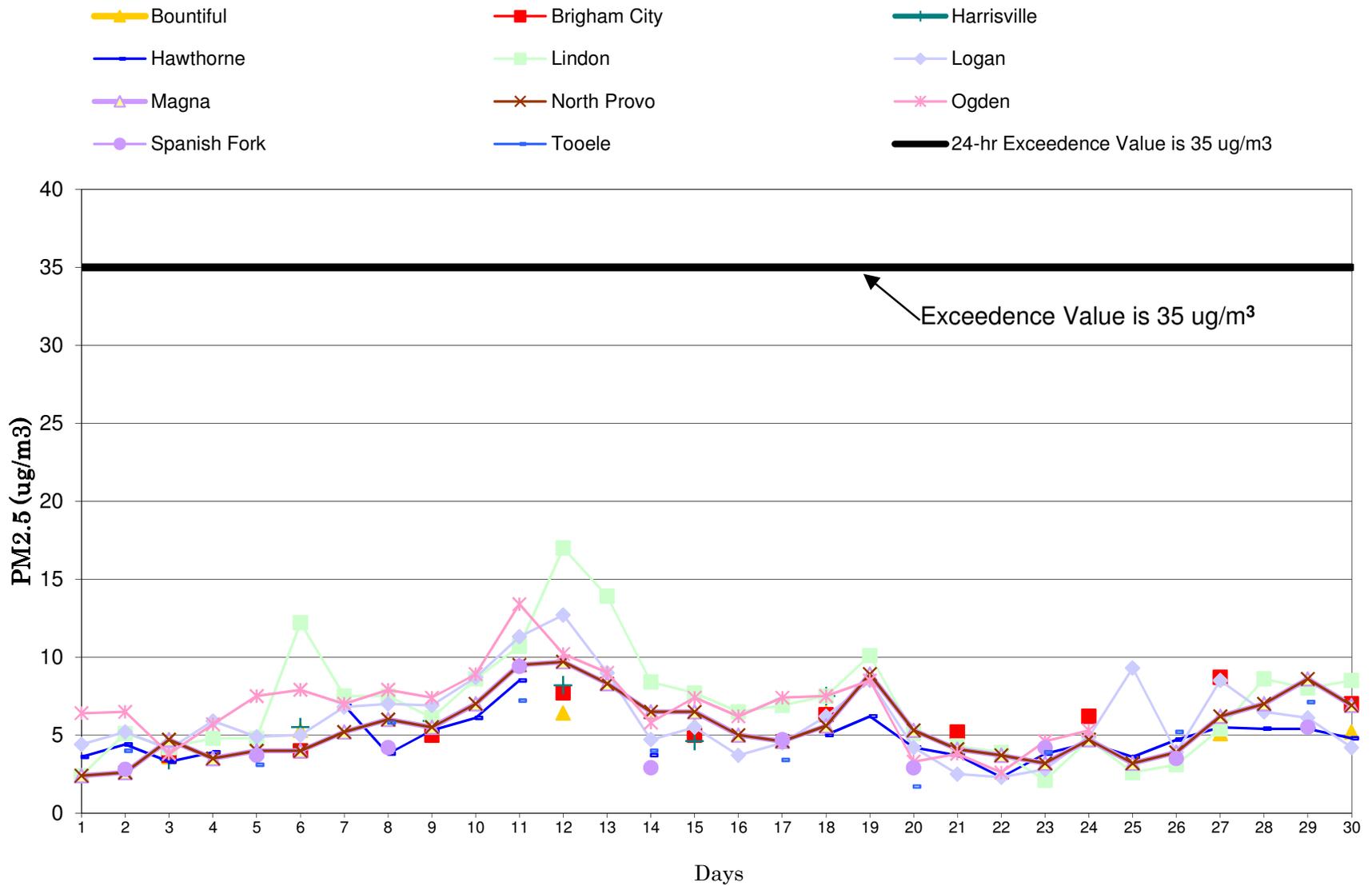
Annual Inspections Conducted:

Major.....	12
Synthetic Minor	2
Minor	17
On-Site Stack Test Audits Conducted:	25
Stack Test Report Reviews:	52
On-Site CEM Audits Conducted:	0
Emission Reports Reviewed:	0
Temporary Relocation Requests Reviewed & Approved:	3
Fugitive Dust Control Plans Reviewed & Accepted:.....	97
¹ Miscellaneous Inspections Conducted:.....	30
Complaints Received:	153
Warning Letters Issued:	0
Notices of Violation Issued:.....	0

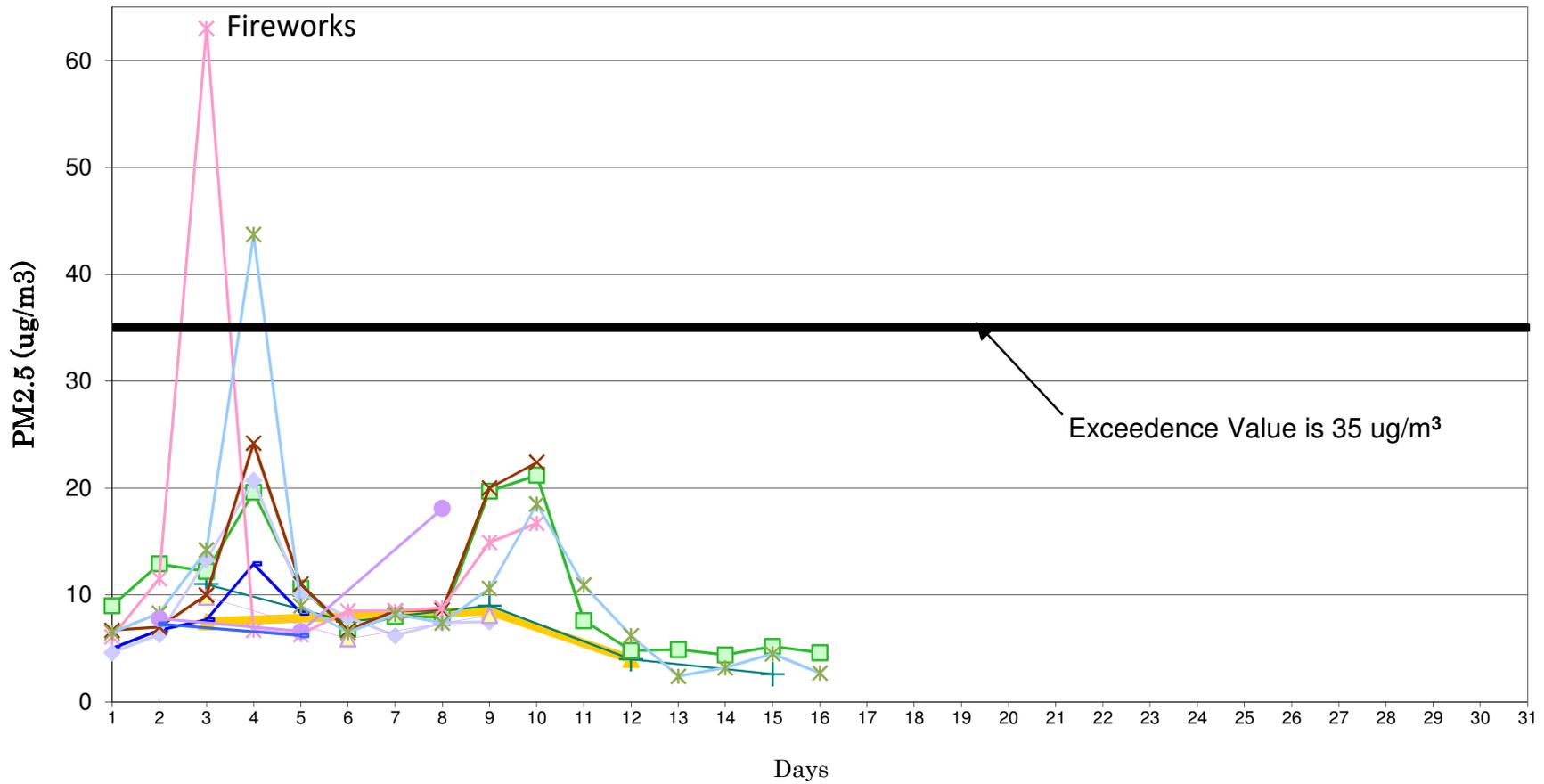
Compliance Advisories Issued:.....	2
Settlement Agreements Reached:	3
Utah Metal Works	\$3,009.00
Ash Grove Cement.....	\$6,000.00
Carl Hunt.....	\$150.00

¹Miscellaneous inspections include, e.g., surveillance, level I inspections, VOC inspections, complaints, on-site training, dust patrol, smoke patrol, open burning, etc.

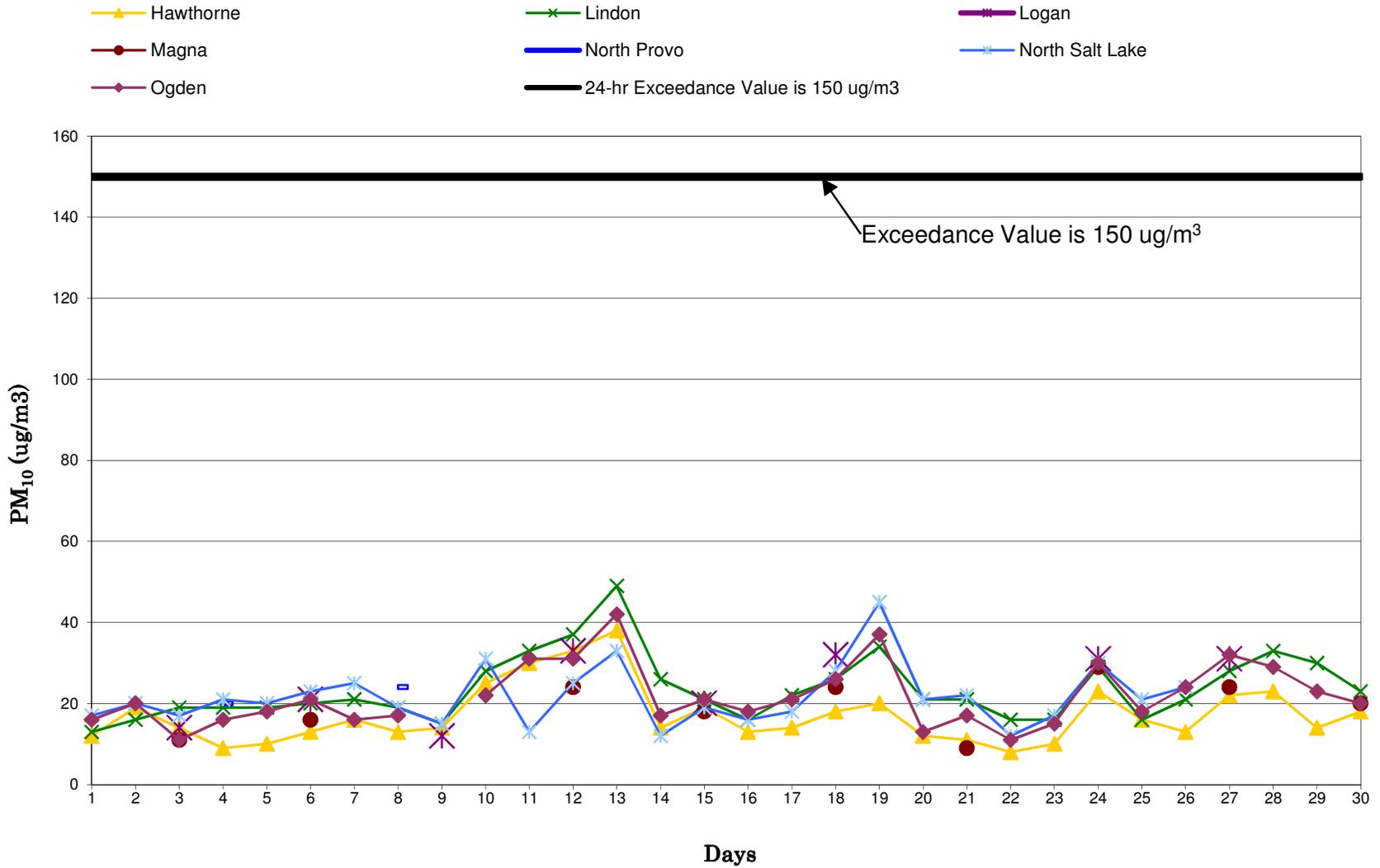
Utah 24-Hr PM_{2.5} Data June 2013



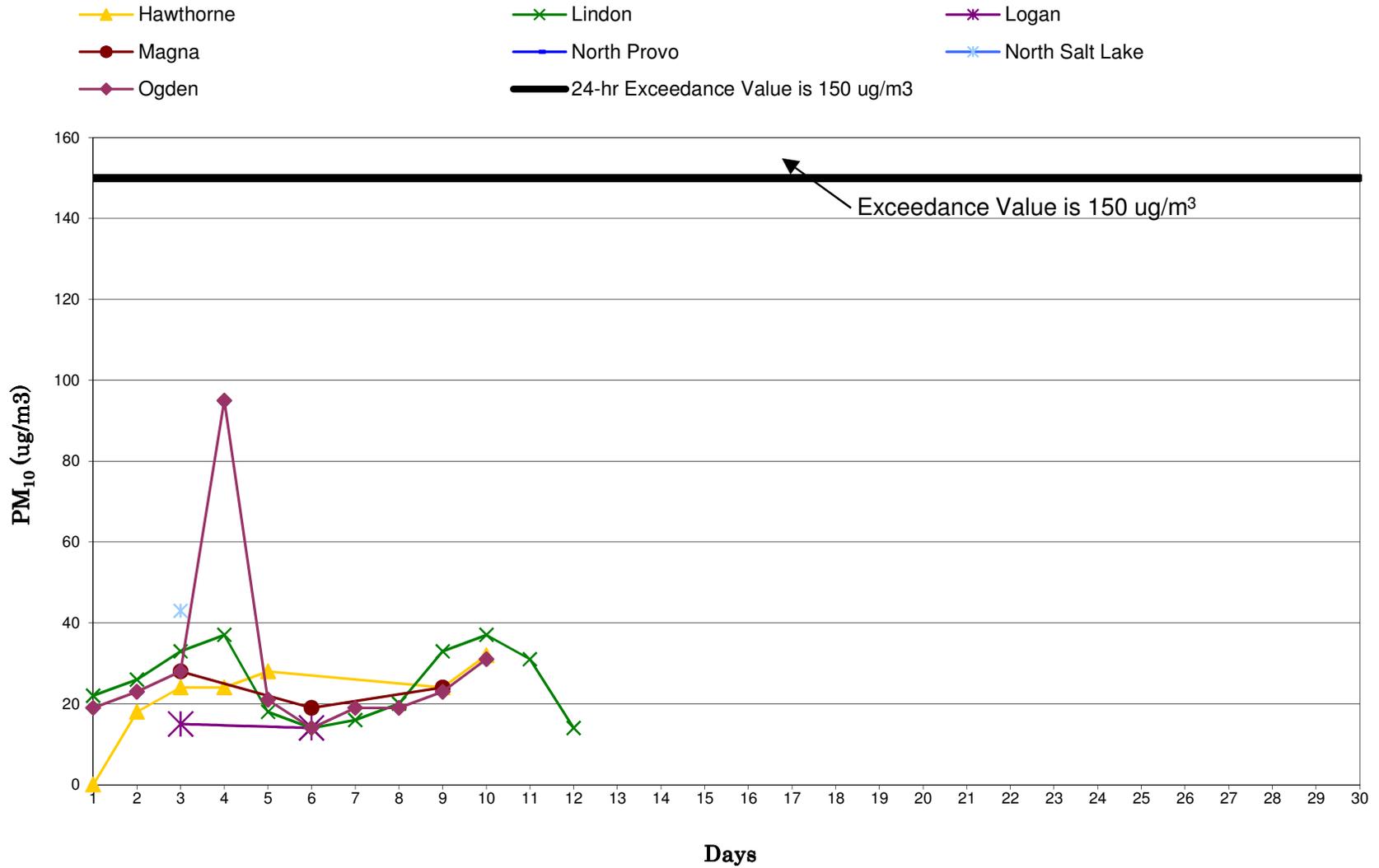
Utah 24-Hr PM2.5 Data July 2013



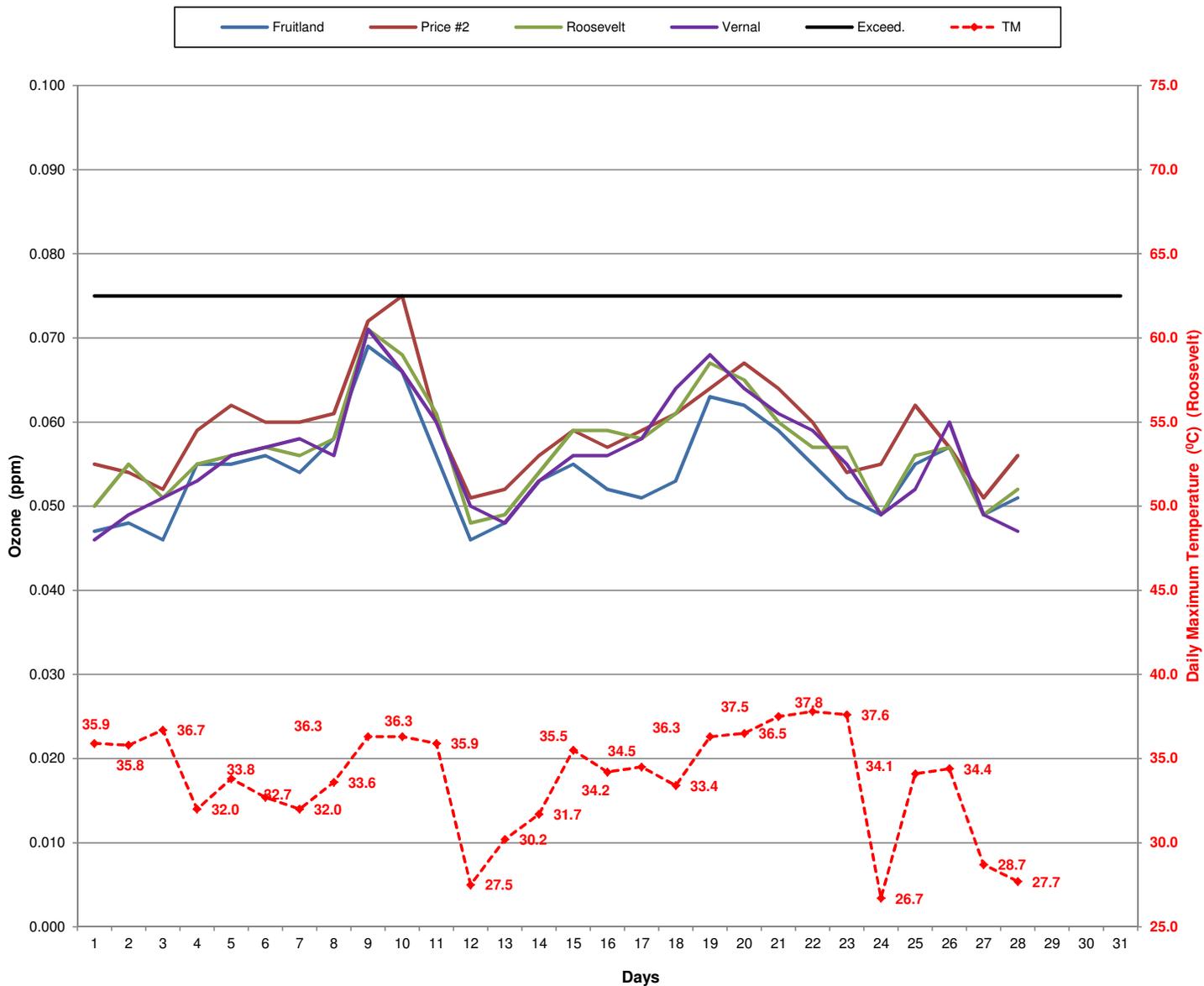
Utah 24-hr PM₁₀ Data June 2013



Utah 24-hr PM₁₀ Data July 2013

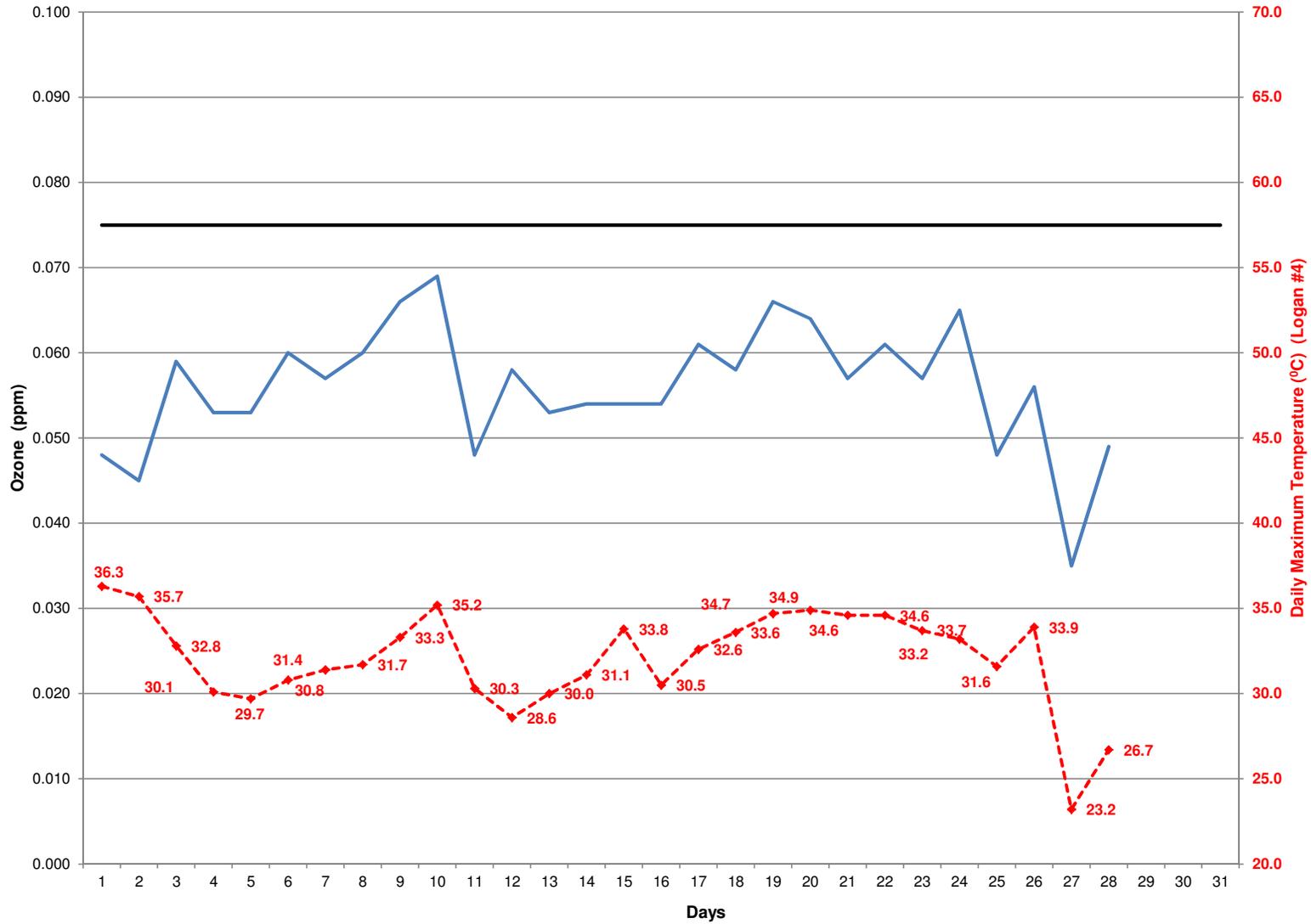


Highest 8-hr Ozone Concentration & Daily Maximum Temperature July 2013

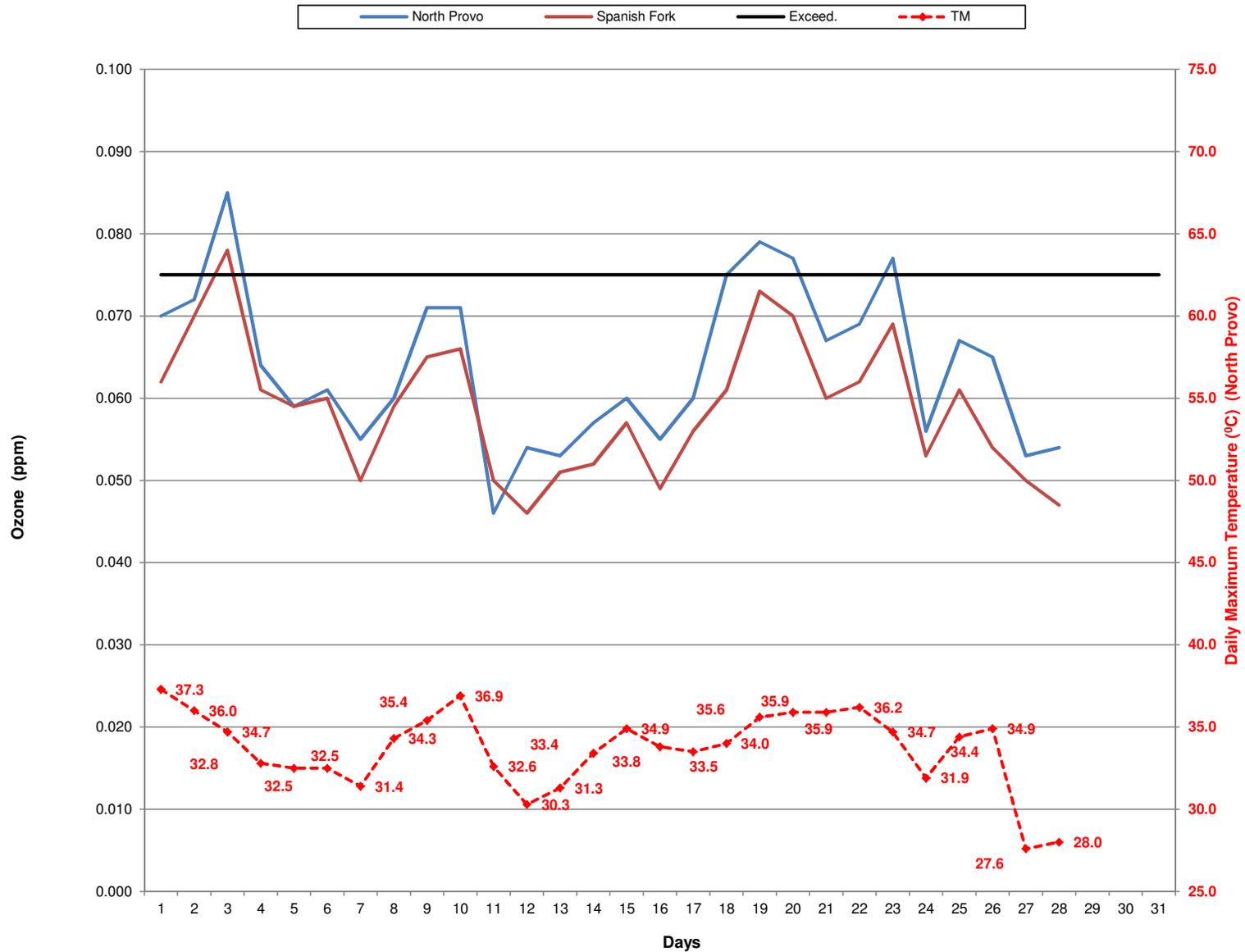


Highest 8-hr Ozone Concentration & Daily Maximum Temperature July 2013

Logan #4 Exceed. TM



Highest 8-hr Ozone Concentration & Daily Maximum Temperature July 2013



Highest 8-hr Ozone Concentration & Daily Maximum Temperature July 2013

