



State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

Air Quality Board
Stephen C. Sands II, *Chair*
Kerry Kelly, *Vice-Chair*
Tammie G. Lucero
Erin Mendenhall
Robert Paine III
Amanda Smith
Michael Smith
Karma M. Thomson
Kathy Van Dame
Bryce C. Bird,
Executive Secretary

DAQ-013-15a

UTAH AIR QUALITY BOARD MEETING

FINAL AGENDA

Wednesday, May 6, 2015 – 1:30 p.m.
195 North 1950 West, Room 1015
Salt Lake City, Utah 84116

- I. Call-to-Order
- II. Date of the Next Air Quality Board Meeting: June 3, 2015
- III. Approval of the Minutes for March 4, 2015, Board Meeting.
- IV. Propose for Public Comment: Amend R307-101-3. General Requirements. Version of Code of Federal Regulations Incorporated by Reference. Presented by Mark Berger.
- V. Propose for Public Comment: Amend R307-121. General Requirements: Clean Air and Efficient Vehicle Tax Credit. Presented by Mark Berger.
- VI. Propose for Public Comment: New Rule R307-122. General Requirements: Heavy Duty Vehicle Tax Credit. Presented by Mark Berger.
- VII. Propose for Public Comment: New Rule R307-230. NO_x Emission Limits for Natural Gas-fired Water Heaters. Presented by Mark Berger.
- VIII. Five-Year Review: R307-302. Solid Fuel Burning Devices in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah, and Weber Counties. Presented by Mark Berger.
- IX. Informational Items.
 - A. White Mesa Uranium Mill Radon Emissions. Presented by Sarah Fields, Uranium Watch.
 - B. Air Toxics. Presented by Robert Ford.
 - C. Compliance. Presented by Jay Morris and Harold Burge.
 - D. Monitoring. Presented by Kimberly Kreykes.
 - 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 Dana Powers, Office of Human Resources at (801) 536-4413 (TDD 536-4414).

ITEM 3



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UTAH AIR QUALITY BOARD MEETING

March 4, 2015 – 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 1:30 p.m.

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

Excused: Amanda Smith

Executive Secretary: Bryce Bird

II. Date of the Next Air Quality Board Meeting: May 6, 2015

At this time there are no action items to bring to the Board for an April meeting. The next board meeting is May 6, 2015.

III. Approval of the Minutes for February 4, 2015, Board Meeting.

- Erin Mendenhall motioned to approve the minutes as submitted. Kathy Van Dame seconded. The Board approved unanimously.

Public comment from Linda Johnson, a Salt Lake County resident, was introduced. Ms. Johnson commented that it occurs to her that sometimes a Board does not understand its full rights. One of those rights is to represent the public. Occasionally a Board may get asked by staff to do something it feels is not the best way to manage a situation, as was the case she feels at a recent public hearing she attended. Ms. Johnson reminded the Board that they can let staff or the public know when it disapproves of an idea.

IV. Final Adoption: Amend R307-120. General Requirements: Tax Exemption for Air Pollution Control Equipment. Presented by Mark Berger.

Mark Berger, Air Quality Policy Section Manager at DAQ, stated that in the 2014 legislative

session, the statute that governs the tax exemption for pollution control equipment was amended through House Bill 31. On December 3, 2014, the Air Quality Board proposed amendments to R307-120 to make the rule consistent with the modified statute. A 30-day public comment period was held from January 1 to February 2, 2015, during which no comments were received and no hearing was requested. Staff recommends the Board adopt R307-120 as proposed.

- Erin Mendenhall motioned for final adoption of amend R307-120, General Requirements, Tax Exemption for Air Pollution Control Equipment. Michael Smith seconded. The Board approved unanimously.

V. Final Adoption: Amend R307-311. Utah County: Trading of Emission Budgets for Transportation Conformity. Presented by Mark Berger.

Mark Berger, Air Quality Policy Section Manager at DAQ, stated that December 2014 the Board proposed for public comment this new rule as a means to alleviate a problem of demonstrating conformity to the NO_x budget brought on by EPA's release of a new motor vehicle emissions simulator model, known as MOVES. This model replaced an older model which was originally used to develop the NO_x budget in the 2002 PM₁₀ State Implementation Plan (SIP). The MOVES model must be used by the metropolitan planning organization (MPO) as it prepares its conformity demonstration. The main issue that this has caused is that the new MOVES model predicts much more NO_x from tailpipes than the previous model. This new rule allows the Utah County MPO to apply a potential surplus from its budget for direct PM₁₀ to a shortfall in its budget for NO_x at a ratio of 1:1. A public comment period was held from January 1 to February 12, 2015. No comments were submitted regarding to the rule language; however, EPA did submit comments on the technical basis for the rule. In response to those comments staff has worked with EPA to revise the technical support documents for the rule. Staff feels confident that the proposed rule is an EPA approvable rule. Staff recommends the Board adopt R307-311 as proposed.

- Robert Paine motioned for final adoption, amend R307-311, Utah County, Trading of Emission Budgets for Transportation Conformity. Kathy Van Dame seconded. The Board approved unanimously.

VI. Propose for Public Comment: Amend Utah State Implementation Plan Section XX.D.6. Regional Haze. Long-Term Strategy for Stationary Sources. Best Available Retrofit Technology (BART) Assessment for NO_x and PM; add new Utah State Implementation Plan Subsections IX.H.21 and 22. General Requirements: Control Measures for Area and Point Sources, Emission Limits and Operating Practices, Regional Haze Requirements; and Source Specific Emission Limitations: Regional Haze Requirements, Best Available Retrofit Technology. Presented by Colleen Delaney.

Colleen Delaney, Environmental Scientist at DAQ, presented to the Board that on October 1, 2014, the Board proposed a revision to Utah's Regional Haze State Implementation Plan (SIP) to address the EPA's partial disapproval of the best available retrofit technology (BART) provisions for nitrogen oxides (NO_x) and particulate matter (PM). The proposed change to the SIP maintained the BART determination that had been established in 2008 and also made enforceable the planned closure of the PacifiCorp Carbon plant this spring due to the substantial reduction in visibility impairing pollutants that would be achieved. The proposal was based on a 5-factor analysis of available control technologies for NO_x and PM and visibility modeling that had been completed by PacifiCorp in 2012. The DAQ analysis concluded that the most stringent PM controls were already required and the NO_x controls established in the 2008 SIP were cost-effective and met the presumptive BART requirements established by EPA. Additional NO_x controls were not

warranted due to the very high cost of control and uncertainty regarding the visibility improvement that would occur. The significant NO_x reductions required by the 2008 SIP did not result in improvements in nitrate values during the winter months as expected and the benefit of further NO_x reductions is therefore uncertain. Sulfur dioxide (SO₂) reductions have resulted in improvements in sulfate values throughout the year. DAQ completed additional visibility modeling after the proposal to evaluate the visibility improvement due to all of the reductions, including the closure of the Carbon Plant, and the results of this modeling were added to the technical support documentation.

A public comment period was held from November 1 through December 22, 2014, and a number of public comments were received. After reviewing the comments and consulting with EPA, DAQ staff determined that the additional emission reductions due to the expected closure of the Carbon Plant would be better addressed as an alternative to BART under 40 CFR 51.308(e)(2) rather than through the case-by-case analysis under 40 CFR 51.308(1). In addition, commenters identified several issues with DAQ's visibility modeling that have been addressed. For these reasons, DAQ staff prepared a new proposal to ensure adequate public review of these changes which include: retain the 2008 BART determination for PM; establish an alternative to BART for NO_x; and add enforceable BART conditions to Part H of the SIP to address EPA's determination that the approval orders and operating permits for PacifiCorp's Hunter and Huntington plants are not practicably enforceable. Staff recommends the Board propose the revisions to SIP Section XX, Part D.6 and the new SIP Sections IX, Part H.21 and H.22 for public comment.

In response to questions, Ms. Delaney answered that yes other states in the area did show a decrease as well at their power plants. There have also been decreases in emissions from automobiles and those other parts of our SIP that we think are very important like our prescribed fire enhanced smoke management plan. There are other aspects that are reflected in what you would see of visibility at the parks. This is not just the result of the power plants but a broader regional problem which needs to be viewed in the context of our overall SIP and to address the problem regionally for all Class I areas in the west. In regards to the selective catalytic reduction (SCR) technology issue, there have been a number of case by case BART determinations that have reached the conclusion that technology should be installed and it is just dependent upon the circumstances for those individual states. However, since what Utah is recommending is not a BART determination we have included in the documentation showing that this alternative would achieve greater progress than the installation of SCR. In closing, Ms. Delaney stated that this is the end of a very long process. All of the sources in Utah that have greater than 100 tons per year of SO₂ are included under our SO₂ milestone and backstop trading program requirement that has been in place since 2003. The one exception is the Bonanza power plant located in Indian Country which is not subject to our SIP. Although this is the end of a very long process, the whole regional haze process is not done. A new SIP is due in 2018 to address the next planning process, the planning has already started this year, and then a new SIP is due ten years after that. The idea is to keep making progress each decade towards this very long term goal of having no impairment at these Class I areas.

- Kerry Kelly motioned the Board propose agenda item six for public comment. Karma Thomson seconded. The Board approved unanimously.

VII. Propose for Public Comment: Amend R307-110-17. General Requirements: State Implementation Plan. Section IX, Control Measures for Area and Point Sources, Part H, Emissions Limits; and R307-110-28. General Requirements: State Implementation Plan. Regional Haze. Presented by Mark Berger.

Mark Berger, Air Quality Policy Section Manager at DAQ, stated the new SIPs for regional haze, along with the new emission limits added to Part H, will have to be incorporated into the Air Quality Rules to make them enforceable at the state level. R307-110-17 is the rule that incorporates Part H into the rules, and R307-110-28 is the rule that incorporates the regional haze SIP into the rules. These rules should go out for public comment at the same time as the proposed SIPs they adopt. Staff recommends the Board propose for public comment R307-110-17 and R307-110-28.

- Kathy Van Dame motioned to propose for public comment, amend R307-110-17, General Requirements, State Implementation Plan, Section IX, Control Measures for Area and Point Sources, Part H, Emissions Limits; and R307-110-28, General Requirements, State Implementation Plan, Regional Haze. Tammie Lucero seconded. The Board approved unanimously.

VIII. Propose for Public Comment: Amend R307-210. Stationary Sources. Presented by Mark Berger.

Mark Berger, Air Quality Policy Section Manager at DAQ, state that in accordance with Section 111 of the Federal Clean Air Act, the EPA promulgates standards for groups of stationary sources that have been identified as significant contributors to air pollution. These new source performance standards are found in 40 Code of Federal Regulations (CFR) Part 60. The new standards are applicable to new sources as they are put into operation. R307-210 is the rule that incorporates these standards into Utah's administrative code, making them enforceable on a state level. 40 CFR Part 60 has undergone several substantive changes since July 1, 2011, the last incorporation date of the section. This rulemaking incorporates those changes into R307-210. Staff recommends the Board propose R307-210 for public comment.

- Robert Paine motioned to propose for public comment, amend R307-210, Stationary Sources. Karma Thomson seconded. The Board approved unanimously.

IX. Propose for Public Comment: Amend R307-214. National Emission Standards for Hazardous Air Pollutants. Presented by Mark Berger.

Mark Berger, Air Quality Policy Section Manager at DAQ, stated that this rule must be updated periodically to reflect changes to the national emission standards for hazardous air pollutants as published in Title 40 of CFR parts 61 and 63. This amendment to R307-214 incorporates by reference the July 1, 2014, version of those parts. Staff recommends the Board propose R307-214 for public comment.

- Karma Thomson motioned to propose for public comment, amend R307-214, National Emission Standards for Hazardous Air Pollutants. Erin Mendenhall seconded. The Board approved unanimously.

X. Informational Items.

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

Bo Call updated the Board on monitoring data which included a PM_{2.5} comparison of the past three year winter seasons as requested by the Board. The data does not include the Uinta Basin because mostly it has been ozone that has been monitored. Currently, the Vernal monitor requires some physical modifications before the particulate monitor can be installed.

D. Other Items to be Brought Before the Board.

Mr. Bird updated that currently no air quality bills have gone all the way through the legislative process. The Governor in his budget had included six air quality related budget items which are still before the executive appropriations. He complimented those Board members who testified at hearings and appreciates their work and support. Also, through his interaction with legislators he received compliments of the work of the Board and staff on improving air quality. Kathy Van Dame and Michael Smith's board terms expire and they will stay up to 90 days until the Senate approves the Governor's recommendation for these Board vacancies.

Meeting adjourned at 2:25 p.m.

ITEM 4



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DIVISION OF AIR QUALITY
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DAQ-016-15

MEMORANDUM

TO: Air Quality Board

THROUGH: Bryce C. Bird, Executive Secretary

FROM: Mark Berger, Air Quality Policy Section Manager

DATE: April 21, 2015

SUBJECT: PROPOSE FOR PUBLIC COMMENT: Amend R307-101-3. General Requirements. Version of Code of Federal Regulations Incorporated by Reference.

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 R307-101-3 to update the incorporation date with only one rule amendment. The most current version of the CFR for environmental regulations has been updated from July 1, 2013, to July 1, 2014; therefore, it is necessary to amend R307-101-3 in incorporate the July 1, 2014, version of the CFR.

The rules that reference the version of the CFR incorporated by reference in R307-101-3 are listed in the attached table. Of those rules, only R307-101-2, which incorporates by reference the definition of volatile organic compound (VOC) found in 40 CFR 51.100(s), is affected by the update. A summary of the VOC definition changes to the 2014 version of 40 CFR 51.100(s) is included in the attached table.

Staff Recommendation: Staff recommends the Board propose the amended R307-101-3 for public comment.

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, [~~2013~~]2014.

8

9 **KEY: air pollution, definitions**

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

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

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

Summary of Code of Federal Regulations (CFR) Changes for July 1, 2014, Version

Rule	CFR section Incorporated	Summary of Changes to CFR
R307-101-2	40 CFR 51.100(s)	<p>August 28, 2013 -- Vol. 78, No. 167, Pg. 53029-53033 [EPA-HQ-OAR-2012-0393; FRL-9844-3] The Environmental Protection Agency (EPA) took final action to revise the regulatory definition of volatile organic compounds (VOCs) for purposes of preparing state implementation plans (SIPs) to attain the national ambient air quality standards (NAAQS) for ozone under title I of the Clean Air Act (CAA). This final action added trans 1-chloro-3,3,3- trifluoroprop-1-ene (also known as Solstice TM1233zd(E)) to the list of compounds excluded from the regulatory definition of VOCs on the basis that this compound makes a negligible contribution to tropospheric ozone formation.</p> <p>March 27, 2014 -- Vol. 79, No. 59, Pg. 17037-17043 [EPA-HQ-OAR-2013-0775; FRL-9906-73-OAR] The EPA took direct final action to revise the regulatory definition of VOCs under the Clean Air Act (CAA). This direct final action added 2-amino-2- methyl-1-propanol (also known as AMP; CAS number 124-68-5) to the list of compounds excluded from the regulatory definition of VOCs on the basis that this compound makes a negligible contribution to tropospheric ozone formation.</p>
R307-115	40 CFR Part 93, Subpart B	No Change
R307-170-7	40 CFR Part 75 CEM, Appendix A, Section 6.2	No Change
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

Summary of Code of Federal Regulations (CFR) Changes for July 1, 2014, Version

Rule	CFR section Incorporated	Summary of Changes to CFR
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
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

Summary of Code of Federal Regulations (CFR) Changes for July 1, 2014, Version

Rule	CFR section Incorporated	Summary of Changes to CFR
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
R307-310-2	Definitions contained in 40 CFR 93.101	No Change
R307-328	40 CFR Parts 63.421, 63.425(e), 63.425(i),	No Change
R307-415	40 CFR Parts 70, 72.2, 720.3(ee),	No Change
R307-417-1	40 CFR Part 72	No Change
R307-417-2	40 CFR Part 75	No Change
R307-417-3	40 CFR Part 76	No Change
R307-801-4	40 CFR 763 Subpart E, and appendices	No Change

ITEM 5



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DAQ-018-15

MEMORANDUM

TO: Air Quality Board

THROUGH: Bryce C. Bird, Executive Secretary

FROM: Mat Carlile, Environmental Planning Consultant

DATE: April 21, 2015

SUBJECT: PROPOSE FOR PUBLIC COMMENT: Amend R307-121. General Requirements: Clean Air and Efficient Vehicle Tax Credit.

During the 2015 Utah legislative session, the Legislature passed Senate Bill 156 (SB 156), revising the statute governing the state's clean fuel tax credit. The bill provided for a new tax credit for qualifying electric motorcycles. Because R307-121 is the air quality rule that establishes criteria used to determine eligibility for a tax credit for qualifying vehicles, it needs to be revised to meet the requirements of SB 156.

As a result of SB 156, we are proposing the following amendments to R307-121:

- adding the definition of "Qualifying electric motorcycle" and
- adding requirements to demonstrate proof of purchase and lease for qualifying electric motorcycles under R307-121-4 and 6.

In addition, other technical changes were made throughout the rule to clarify requirements and help administer the clean fuel tax credit.

Staff Recommendation: Staff recommends the Board propose R307-121 for public comment.

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

2 **R307-121. General Requirements: Clean Air and Efficient Vehicle**
3 **Tax Credit.**

4 **R307-121-1. Authorization and Purpose.**

5 (1) This rule is authorized by Sections 59-7-605 and 59-10-1009.
6 These statutes establish criteria and definitions used to determine
7 eligibility for an income tax credit.

8 (2) R307-121 establishes procedures to provide proof of
9 purchase or lease, in accordance with 59-7-605(3)(b) or
10 59-10-1009(3)(b), to the director for an OEM vehicle, qualifying
11 electric motorcycle, or the conversion of a motor vehicle or special
12 mobile equipment for which an income tax credit is allowed under
13 Sections 59-7-605 or 59-10-1009.

14
15 **R307-121-2. Definitions.**

16 The following additional definitions apply to R307-121.

17 "Air quality standards" means air quality standards as defined
18 in Subsection 59-7-605(1)(a) and 59-10-1009(1)(a).

19 "Clean fuel" means clean fuel as defined in Subsection
20 19-1-402(1).

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

23 "Conversion equipment" means a package that may include fuel,
24 ignition, emissions control, and engine components that are modified,
25 removed, or added to a motor vehicle or special mobile equipment to
26 make that motor vehicle or equipment eligible for the tax credit.

27 "Motor Vehicle" means a motor vehicle as defined in 41-1a-102.

28 "Original equipment manufacturer(OEM) vehicle" means original
29 equipment manufacturer(OEM) as defined in Subsection 19-1-402(8).

30 "Original purchase" means original purchase as defined in
31 Subsection 59-7-605(1)(g) and 59-10-1009(1)(g).

32 "Qualifying electric motorcycle" means qualifying electric
33 motorcycle as defined in 59-7-605(1)(h) or 59-10-1009(1)(h).

34 "Qualifying electric vehicle" means qualifying electric vehicle
35 as defined in 59-7-605(1)([h]i) or 59-10-1009(1)([h]i).

36 "Qualifying plug-in hybrid vehicle" means qualifying plug-in
37 hybrid vehicle as defined in 59-7-605(1)([+j]) or
38 59-10-1009(1)([+j]).

39 "Window Sticker" means the label required by United States Code
40 Title 15 Sections 1231 and 1232, as effective January 3, 2012.

41
42 **R307-121-3. Proof of Purchase to Demonstrate Eligibility for New**
43 **OEM Natural Gas, Propane, Qualifying Electric or Qualifying Plug-in**
44 **Hybrid Vehicles.**

45 To demonstrate that an OEM natural gas, propane, qualifying
46 electric, or qualifying plug-in hybrid motor vehicle is eligible for
47 the tax credit, proof of purchase shall be made in accordance with
48 59-7-605(3)(b) or 59-10-1009(3)(b), by submitting the following
49 documents to the director:

50 (1)(a) a copy of the motor vehicle's window sticker, which
51 includes its Vehicle Identification Number (VIN), or equivalent

1 manufacturer's documentation showing that the motor vehicle is an
2 OEM natural gas, propane, qualifying electric or qualifying plug-in
3 hybrid vehicle, or

4 (b) a signed statement by either an Automotive Service
5 Excellence (ASE)-certified technician or Canadian Standards
6 Association (CSA) America CNG Fuel System Inspector that includes
7 the VIN, the technician's ASE or CSA America certification number,
8 and states that the motor vehicle is an OEM natural gas, propane,
9 qualifying electric or qualifying plug-in hybrid vehicle;

10 (2) an original or copy of the purchase order, customer invoice,
11 or receipt that includes the name of the taxpayer seeking the credit,
12 the name of the seller of the motor vehicle, the VIN, purchase date,
13 and price of the motor vehicle;

14 (3) a copy of the current Utah vehicle registration in the name
15 of the taxpayer seeking the credit;

16 (4) an original or copy of the odometer disclosure statement
17 required in Utah Code Annotated Title 41 Chapter 1a Section 902 for
18 the motor vehicle that was acquired as an original purchase; and

19 (5) the underhood identification number or engine group of the
20 motor vehicle.

21
22 **R307-121-4. Proof of Purchase to Demonstrate Eligibility for New**
23 **Qualifying Electric Motorcycle.**

24 To demonstrate that a qualifying electric motorcycle is eligible
25 for the tax credit, proof of purchase shall be made in accordance
26 with 59-7-605(3)(b) or 59-10-1009(3)(b), by submitting the following
27 documents to the director:

28 (1)(a) a copy of the Manufacturer's Statement of Origin (MSO)
29 or equivalent manufacturer's documentation showing that the motor
30 vehicle is a qualifying electric motorcycle, or

31 (b) a signed statement by an Automotive Service Excellence
32 (ASE)-certified technician that includes the VIN, the technician's
33 ASE certification number, and states that the motorcycle is a
34 qualifying electric motorcycle;

35 (2) an original or copy of the purchase order, customer invoice,
36 or receipt that includes the name of the taxpayer seeking the credit,
37 the name of the seller of the motor vehicle, the VIN, purchase date,
38 and price of the motor vehicle;

39 (3) a copy of the current Utah vehicle registration in the name
40 of the taxpayer seeking the credit; and

41 (4) an original or copy of the odometer disclosure statement
42 required in Utah Code Annotated Title 41 Chapter 1a Section 902 for
43 the motor vehicle that was acquired as an original purchase.

44
45 **R307-121-[4]5. Proof of Lease to Demonstrate Eligibility for New**
46 **OEM Natural Gas, Propane, Qualifying Electric or Qualifying Plug-in**
47 **Hybrid Vehicles.**

48 To demonstrate that an OEM natural gas, propane, qualifying
49 electric or qualifying plug-in hybrid vehicle is eligible for the
50 tax credit, proof of lease shall be made in accordance with
51 59-7-605(3)(b) or 59-10-1009(3)(b), by submitting the following

1 documents to the director:

2 (1)(a) a copy of the motor vehicle's window sticker, which
3 includes its Vehicle Identification Number (VIN), or equivalent
4 manufacturer's documentation showing that the motor vehicle is an
5 OEM natural gas, propane, qualifying electric or qualifying plug-in
6 hybrid vehicle; or

7 (b) a signed statement by either an Automotive Service
8 Excellence (ASE)-certified technician or Canadian Standards
9 Association (CSA) America CNG Fuel System Inspector that includes
10 the VIN, the technician's ASE or CSA America certification number,
11 and states that the motor vehicle is an OEM natural gas, propane,
12 qualifying electric or qualifying plug-in hybrid vehicle;

13 (2) an original or copy of the lease agreement that includes
14 the name of the taxpayer seeking the credit, the name of the lessor
15 of the vehicle, the VIN, the beginning date of the lease, the value
16 of the vehicle at the beginning of the lease, and the value of the
17 vehicle at the end of the lease;

18 (3) a copy of the current Utah vehicle registration in the name
19 of the taxpayer seeking the credit;

20 (4) an original or copy of the odometer disclosure statement
21 required in Utah Code Annotated Title 41 Chapter 1a Section 902 for
22 the motor vehicle that was acquired as an original purchase; and

23 (5) the underhood identification number or engine group of the
24 motor vehicle.

25
26 **R307-121-6. Proof of Lease to Demonstrate Eligibility for Qualifying**
27 **Electric Motorcycle.**

28 To demonstrate that a qualifying electric motorcycle is eligible
29 for the tax credit, proof of lease shall be made in accordance with
30 59-7-605(3)(b) or 59-10-1009(3)(b), by submitting the following
31 documents to the director:

32 (1)(a) a copy of the Manufacturer's Statement of Origin (MSO)
33 or equivalent manufacturer's documentation showing that the motor
34 vehicle is a qualifying electric motorcycle, or

35 (b) a signed statement by an Automotive Service Excellence
36 (ASE)-certified technician that includes the VIN, the technician's
37 ASE certification number, and states that the motorcycle is a
38 qualifying electric motorcycle;

39 (2) an original or copy of the lease agreement that includes
40 the name of the taxpayer seeking the credit, the name of the lessor
41 of the vehicle, the VIN, the beginning date of the lease, the value
42 of the vehicle at the beginning of the lease, and the value of the
43 vehicle at the end of the lease;

44 (3) a copy of the current Utah vehicle registration in the name
45 of the taxpayer seeking the credit; and

46 (4) an original or copy of the odometer disclosure statement
47 required in Utah Code Annotated Title 41 Chapter 1a Section 902 for
48 the motor vehicle that was acquired as an original purchase.

49
50 **R307-121-[5]7. Proof of Purchase to Demonstrate Eligibility for**
51 **Motor Vehicles Converted to a Clean Fuel.**

1 To demonstrate that a conversion of a motor vehicle to be fueled
2 by a clean fuel is eligible for the tax credit, proof of purchase
3 shall be made, in accordance with 59-7-605(3)(b) or 59-10-1009(3)(b),
4 by submitting the following documentation to the director:

5 (1) an original or copy of the purchase order, customer invoice,
6 or receipt that includes the name of the taxpayer seeking the credit;
7 the name, address, and phone number of the person that converted the
8 motor vehicle to run on a clean fuel; the VIN; the date of conversion;
9 and the price of the conversion equipment installed on the motor
10 vehicle; ~~and~~

11 (2) a copy of the current Utah vehicle registration in the name
12 of the taxpayer seeking the credit~~[-]~~; and

13 (3) a signed statement by the person who converted the motor
14 vehicle certifying that the conversion does not tamper with,
15 circumvent, or otherwise affect the vehicle's on-board diagnostic
16 system, in accordance with 19-1-406(2).

17
18 **R307-121-[6]8. Proof of Purchase to Demonstrate Eligibility for**
19 **Special Mobile Equipment Converted to Clean Fuels.**

20 To demonstrate that a conversion of special mobile equipment
21 to be fueled by clean fuel is eligible for the tax credit, proof of
22 purchase shall be made, in accordance with 59-7-605(3)(b) or
23 59-10-1009(3)(b), by submitting the following documentation to the
24 director:

25 (1) a description, including serial number, of the special
26 mobile equipment for which credit is to be claimed; and

27 (2) an original or copy of the purchase order, customer invoice,
28 or receipt that includes the name of the taxpayer seeking the credit,
29 the serial number, the date of conversion, and the price of the
30 conversion equipment installed on the special mobile equipment.

31
32 **KEY: air pollution, alternative fuels, tax credits, motor vehicles**
33 **Date of Enactment or Last Substantive Amendment: [~~January 1,~~**
34 **2015]2015**

35 **Notice of Continuation: January 23, 2012**

36 **Authorizing, and Implemented or Interpreted Law: 19-2-104; 19-1-402;**
37 **59-7-605; 59-10-1009**

ITEM 6



State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQ-017-15

MEMORANDUM

TO: Air Quality Board

THROUGH: Bryce C. Bird, Executive Secretary

FROM: Mat Carlile, Environmental Planning Consultant

DATE: April 21, 2015

SUBJECT: PROPOSE FOR PUBLIC COMMENT: New Rule R307-122. General Requirements: Heavy Duty Vehicle Tax Credit.

House Bill 406 (HB 406), which provides an income tax credit for the purchase of a natural gas heavy duty vehicle, was passed during the 2015 General Legislative Session. HB 406 gives authority to the Air Quality Board to make rules specifying the requirements and procedures for the tax credit. This proposed new rule, R307-122, is the air quality rule that would do this.

Staff Recommendation: Staff recommends the Board propose new rule R307-122 for public comment.

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

2 **R307-122. General Requirements: Heavy Duty Vehicle Tax Credit.**

3 **R307-122-1. Authorization and Purpose.**

4 (1) This rule is authorized by Sections 59-7-618 and 59-10-1033.
5 These statutes establish criteria and definitions used to determine
6 eligibility for an income tax credit.

7 (2) R307-122 establishes procedures to provide proof of a
8 qualified purchase, in accordance with 59-7-618(6)(a) or
9 59-10-1033(6)(a), to the director for a qualified heavy duty vehicle
10 for which an income tax credit is allowed under Sections 59-7-618
11 or 59-10-1033.
12

13 **R307-122-2. Definitions.**

14 The following additional definitions apply to R307-122.

15 "Heavy duty vehicle" means heavy duty vehicle as defined in
16 Subsection 59-7-618(1)(b) and 59-10-1033(1)(b).

17 "Original equipment manufacturer(OEM) vehicle" means original
18 equipment manufacturer(OEM) as defined in Subsection 19-1-402(8).

19 "Qualified heavy duty vehicle" means qualified heavy duty vehicle
20 as defined in 59-7-618(1)(d) and 59-10-1033(1)(d).

21 "Qualified purchase" means qualified purchase as defined in
22 59-7-618(1)(e) and 59-10-1033(1)(e).

23 "Qualified taxpayer" means qualified taxpayer as defined in
24 59-7-618(1)(f) and 59-10-1033(1)(f).
25

26 **R307-122-3 Reservation of a Qualified Heavy Duty Vehicle Tax Credit.**

27 (1) A qualified taxpayer shall reserve a qualified heavy duty
28 vehicle tax credit before submitting proof of qualified purchase to
29 obtain approval from the division for the heavy duty vehicle tax
30 credit. A qualified taxpayer shall apply to reserve the tax credit
31 on forms provided by the division, which will include the following:

32 (a) the name of the qualified taxpayer and the qualified taxpayers
33 registered name with the United States Department of Transportation
34 (USDOT),

35 (b) the last four digits of the qualified taxpayer's social
36 security number(SSN) or employer identification number (EIN),

37 (c) the qualified taxpayer's address, and

38 (d) the qualified taxpayer's USDOT number.

39 (2) The tax credit shall be reserved for the qualified taxpayer
40 for up to 180 calendar days from the division's approval of the request
41 to reserve the credit.

42 (3) If the qualified taxpayer does not meet all of the
43 requirements of R307-122-4 before 181 calendar days after the
44 division's approval of the request to reserve the tax credit, the
45 tax credit will no longer be reserved for the qualified taxpayer.
46

47 **R307-122-4. Proof of Qualified Purchase for a Qualified Heavy Duty
48 Vehicles**

49 To demonstrate that a heavy duty vehicle is eligible for the
50 tax credit, proof of qualified purchase shall be made in accordance
51 with 59-7-605(6)(a) or 59-10-1009(6)(a), by submitting the following
52 documents to the director:

1 (1)(a) a copy of the motor vehicle's window sticker, which
2 includes its Vehicle Identification Number (VIN), or equivalent
3 manufacturer's documentation showing that the heavy duty vehicle is
4 an OEM natural gas vehicle; or

5 (b) a signed statement by either an Automotive Service
6 Excellence (ASE)-certified technician or Canadian Standards
7 Association (CSA) America CNG Fuel System Inspector that includes
8 the VIN, the technician's ASE or CSA America certification number,
9 and states that the heavy duty vehicle is an OEM natural gas vehicle;

10 (2) an original or copy of the purchase order, customer invoice,
11 or receipt that includes the name of the qualified taxpayer seeking
12 the credit, the name of the seller of the heavy duty vehicle, the
13 VIN, purchase date, and price of the heavy duty vehicle;

14 (3) a copy of the current Utah vehicle registration in the name
15 of the qualified taxpayer seeking the credit; and

16 (4) the certification required under Subsection 59-7-618(2)(b)
17 and 59-10-1033(2)(b).

18
19
20 **KEY: air pollution, alternative fuels, tax credits, heavy duty**
21 **vehicles**

22 **Date of Enactment or Last Substantive Amendment:**

23 **Notice of Continuation:**

24 **Authorizing, and Implemented or Interpreted Law: 19-2-104; 19-1-402;**
25 **59-7-618; 59-10-1033**

ITEM 7



State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQ-015-15

MEMORANDUM

TO: Air Quality Board

THROUGH: Bryce C. Bird, Executive Secretary

FROM: Joel Karmazyn, Environmental Scientist

DATE: April 21, 2015

SUBJECT: PROPOSE FOR PUBLIC COMMENT: New Rule R307-230. NO_x Emission Limits for Natural Gas-Fired Water Heaters.

The state implementation plan (SIP) modeling indicates that future nitrogen oxides (NO_x) reductions will be necessary to help attain the PM_{2.5} standard. The largest contribution of NO_x from area sources come from combustion of natural gas.

The 2014 area source inventory shows that commercial, institutional and residential combustion of natural gas accounts for 5,479 tons per year of NO_x.

2014 Area Source Category	Combustion, Natural Gas, Commercial & Institutional	Combustion, Natural Gas, Residential	Total All Anthropogenic Area Sources
County	NO _x	NO _x	NO _x
Box Elder	146	51	
Cache	175	113	
Davis	364	314	
Salt Lake	810	1263	
Tooele	234	50	
Utah	869	451	
Weber	371	268	
TOTAL (tons per year)	2969	2510	9365

Reasonable Available Control Technology (RACT) Analysis

NO_x-emitting area sources include natural gas-fired furnaces, boilers, and water heaters. The South Coast Air Quality Management District (SCAQMD) has taken the leadership role in working with the heating industry to develop ultra-low NO_x burners and has recently completed testing of ultra-low NO_x furnaces and boilers rated at 14 ng/Joule of NO_x and are in the process of rulemaking for these appliances. We will follow these developments for future rulemaking in Utah.

Water heater technology is further along. Ultra-low NO_x water heaters are required by SCAQMD and the Bay Area Air Quality Management District (BAAQMD). The BAAQMD Regulation 9 Rule 6 requires the lowest available NO_x burners for water heaters, and it draws its requirements from the SCAQMD product testing. The SCAQMD has a certification process for approved water heaters and has certified many water heaters at the ultra-low NO_x level of 10 ng/Joule.

A limited number and type of SCAQMD certified residential water heaters are currently available in Utah through online purchases from several major box stores. The costs of these limited units are currently comparable to conventional units. Plumbing supply houses are not stocking SCAQMD certified appliances because there is no demand for them. We currently do not have supply and cost information for commercially sized SCAQMD certified water heaters. Staff has requested supply and cost information for both residential and commercial SCAQMD certified water heaters from the major commercial and residential builders, the major box stores, and plumbing supply houses located in Utah. We will also be asking for this information during the public comment period.

The Air-Conditioning, Heating, and Refrigeration Institute (ACHRI) has been actively engaged with the California initiative to bring forth commercially available ultra-low NO_x appliances. Mr. Frank Stanonik, chief technical advisor at the ACHRI, was consulted regarding the supply chain of ultra-low NO_x appliances. Mr. Stanonik concurred with our assessment that the industry could meet market demand in Utah if given two years to re-align their market distribution.

Rulemaking Proposal

Envision Utah petitioned the Air Quality Board on February 4, 2015, to propose for public comment rulemaking to require ultra-low NO_x water heaters based on limits established by the BAAQMD.

Envision Utah is proposing the lowest available NO_x burners for most residentially sized water heaters at 10 ng/Joule. Larger commercial units will have a higher NO_x limit of 14 ng/Joule. Mobile homes and smaller pool/spa heaters will have the highest limit of 40 ng/Joule.

<u>Category</u>	<u>Limit (ng/Joule)</u>
Water heater up to 75,000 BTU/hr, excluding those Installed in mobile homes	10
Water heater 75,001-2,000,000 BTU/hr	14
Any tank with power assist	10
Mobile home water heater	40
Pool/spa heater 400,001-2,000,000 BTU/hr	40
Pool/spa heater less than 400,000 BTU/hr	14

Labeling and Recordkeeping

Our peers at SCAQMD and BAAQMD have recommended labeling requirements on the appliance shipping box and the appliance itself to assure that the correct appliances would be installed in accordance with the proposed implementation schedule.

Implementation Schedule

Reducing NO_x year round will also play a role in controlling ozone. Therefore, the proposal is for a state-wide rule, with implementation first within the PM_{2.5} nonattainment area, followed by outlying counties on the following schedule:

<u>Location</u>	<u>Rule Implementation Date</u>
Box Elder, Cache, Davis, Salt Lake, Tooele, Utah, and Weber Counties	January 1, 2017
Washington, Duchesne, and Uintah Counties	January 1, 2018
Remaining portions of Utah	January 1, 2019

Stakeholder Support

On October 15, 2013, Governor Gary Herbert announced the formation of the Clean Air Action Team (CAAT). The CAAT includes representatives from health care, business, nonprofit organizations, government, academia, transportation, and other community representatives. This independent team works to provide a set of broadly supported recommendations to improve our air quality. The CAAT has reviewed modeling and inventory data associated with this proposal and has concluded that this proposal will have substantial air quality benefits statewide. Consequently, the CAAT supports this proposal.

SIP Credit

Manufacturers have been required to comply with the Department of Energy’s conservation standards for water heaters, ultimately leading to the current NO_x value of 40 ng/Joule, with the exception of mobile homes, which are higher. Mobile home water heaters may be as high as 110 ng/Joule. Even though the NO_x reduction from mobile home water heaters will be significant, the numbers of mobile homes are too low to quantify. The same holds true for the pool and spa heaters.

Future reductions are calculated from the 40 ng/Joule base NO_x value (SCAQMD and BAAQMD applied the same credits for their rules):

- Residential: 40 to 10 ng/Joule = 75% reduction
- Commercial: 40 to 14 ng/Joule = 65% reduction

Residential appliance apportionment: Each home has at least one furnace and one water heater. Many homes in Utah have a gas fireplace. Assumed apportionment: 45% furnace, 45% water heater and 10% fireplace.

$$\text{Residential Reduction for Water Heater: } (75\%)/2.22 = 33.8\% = \text{Control Efficiency}$$

Commercial appliance apportionment: One furnace and one water heater

Commercial Reduction for Water Heater: $(75\%)/2 = 37.5\% = \text{Control Efficiency}$

Rule effectiveness is 100% because national manufacturers will be held to the standards.

Rule penetration is based on an average water heater equipment life (normal lifetime is 10-13 years) when exposed to the natural hard water in the Wasatch Front - seven years. Seven years is consistent with most manufacturers' warranties, and this shorter timeline may also help account for the mobile home and pool and spa heater reductions that are not being quantified. The seven year rule penetration translates to a 4.8% inventory reduction for the residential area source for seven years and a 5.4% inventory reduction for commercial and institutional area source for seven years.

Staff Recommendation: Staff recommends the Board propose new rule R307-230, NO_x Emissions Limits for Natural Gas-Fired Water Heaters, for public comment.

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

2 **R307-230. NO_x Emission Limits for Natural Gas-Fired Water Heaters.**

3
4 **R307-230-1. Purpose.**

5 The purpose of R307-230 is to reduce emissions of nitrogen
6 oxides (NO_x) from natural gas-fired water heaters.

7
8 **R307-230-2. Applicability.**

9 R307-230 applies to the sale and installation of natural
10 gas-fired water heaters on the implementation schedule as
11 outlined in Table 1:

12
13 Table 1
14 Statewide Implementation Schedule of R307-230

16 Location	16 Rule Implementation Date
18 Box Elder, Cache, Davis, Salt Lake, 19 Tooele, Utah, and Weber Counties	January 1, 2017
21 Washington, Duchesne, and Uintah Counties	January 1, 2018
23 Remaining portions of Utah	January 1, 2019

24
25 **R307-230-3. Exemptions.**

26 The requirements of R307-230 shall not apply to:

- 27 (1) units using a fuel other than natural gas;
28 (2) units used in recreational vehicles; and
29 (3) units manufactured in Utah for shipment and use outside
30 of Utah.

31
32 **R307-230-4. Definitions.**

33 The following additional definitions apply to R307-370:

34 "Heat output" means the enthalpy of the working fluid
35 output of the unit.

36 "Heat input" means the heat of combustion released by fuels
37 burned in a unit based on the higher heating value of fuel. This
38 does not include the enthalpy of incoming combustion air.

39 "Recreational vehicle" means a motor home, travel trailer,
40 truck camper, or camping trailer, with or without motive power,
41 designed for human habitation for recreational, emergency, or
42 other occupancy.

43 "Natural gas-fired water heater" means a device that heats
44 water by the combustion of natural gas to a thermostatically-
45 controlled temperature not exceeding 210°F (99°C) for use external
46 to the vessel at pressures not exceeding 160 psig.

47

R307-230-5. Standards

(1) Beginning on the rule implementation date specified in Table 1 for each area of the state, no person shall sell or install any natural gas-fired water heater with an emission rate exceeding the limit in Table 2. The NO_x limits are expressed in nanograms of nitrogen oxides (calculated as NO₂) per Joule of heat output.

TABLE 2

NO_x Emission Rate for Natural Gas-Fired Water Heaters

Category	Limits(ng/Joule)
Water heater up to 75,000 BTU/hr, excluding those installed in mobile homes	10
Water heater 75,001-2,000,000 BTU/hr	14
Any tank with power assist	10
Mobile home water heater	40
Pool/spa heater less than 400,000 BTU/hr	40
Pool/spa heater 400,001-2,000,000 BTU/hr	14

(2) The water heater manufacturer shall display the model number and the NO_x emission rate of a water heater complying with this rule on the shipping carton and on the permanent rating plate of each unit.

KEY: Water heaters, natural gas, NO_x, air quality

Date of Enactment or Last Substantive Amendment: 2015

Authorizing, and Implemented or Interpreted Law: 19-2-101; 19-2-104

ITEM 8



State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQ-014-15

MEMORANDUM

TO: Air Quality Board

THROUGH: Bryce C. Bird, Executive Secretary

FROM: Mark Berger, Air Quality Policy Section Manager

DATE: April 21, 2015

SUBJECT: FIVE-YEAR REVIEW: R307-302. Solid Fuel Burning Devices in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah, and Weber Counties.

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 received during and since the last five-year review of each rule. This process is not the time to revisit those comments or to respond to them.

DAQ has completed the five-year review for R307-302, Solid Fuel Burning Devices in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah, and Weber Counties. The results of the 5-year review are found in the attached Five-Year Notice of Review and Statement of Continuation form. Based on our review of the rule, we believe it is both allowed under federal and state statute and necessary because it reduces pollution during winter temperature inversions and is part of Utah's State Implementation Plan.

Staff Recommendation: Staff recommends that the Board continue R307-302, Solid Fuel Burning Devices in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah, and Weber Counties by approving the attached 5-Year Notice of Review and Statement of Continuation form to be filed with the Division of Administrative Rules.

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

2 **R307-302. Solid Fuel Burning Devices in Box Elder, Cache, Davis,**
3 **Salt Lake, Tooele, Utah, and Weber Counties.**

4 **R307-302-1. Purpose and Definitions.**

5 (1) R307-302 establishes emission standards for fireplaces and
6 solid fuel burning devices used in residential, commercial,
7 institutional and industrial facilities and associated outbuildings
8 used to provide comfort heating.

9 (2) The following additional definitions apply to R307-302:

10 "Sole source of heat" means the solid fuel burning device is
11 the only available source of heat for the entire residence, except
12 for small portable heaters.

13 "Solid fuel burning device" means fireplaces, wood stoves and
14 boilers used for burning wood, coal, or any other nongaseous and
15 non-liquid fuel, both indoors and outdoors, but excluding outdoor
16 wood boilers, which are regulated under R307-208.

17
18 **R307-302-2. Applicability.**

19 (1) R307-302-3 and R307-302-6 shall apply to any solid fuel
20 burning device in PM10 and PM2.5 nonattainment and maintenance areas
21 as defined in 40 CFR 81.345 (July 1, 2011) and geographically described
22 as all regions of Salt Lake and Davis counties; all portions of the
23 Cache Valley; all regions in Weber and Utah counties west of the Wasatch
24 mountain range; in Box Elder County, from the Wasatch mountain range
25 west to the Promontory mountain range and south of Portage; and in
26 Tooele County, from the northernmost part of the Oquirrh mountain
27 range to the northern most part of the Stansbury mountain range and
28 north of Route 199.

29 (2) R307-302-4 shall apply only within the city limits of Provo
30 in Utah County.

31 (3) R307-302-5 shall apply in all portions of Box Elder, Cache,
32 Davis, Salt Lake, Tooele, Utah and Weber counties.

33 (4) The following exemptions apply to R307-302:

34 (a) R307-302 does not apply to restaurant and institutional
35 food preparation.

36 (b) R307-302 does not apply to commercial and industrial boilers
37 subject to an approval order issued under R307-401.

38 (c) R307-302-3 does not apply to sources located above 7,000
39 feet in elevation within Box Elder, Davis, Salt Lake, Tooele, Utah
40 and Weber counties.

41 (d) R307-302 does not apply to firefighting training devices
42 that meet the definition of a solid fuel burning device.

43
44 **R307-302-3. No-Burn Periods for Fine Particulate.**

45 (1) By June 1, 2015, sole sources of residential heating using
46 solid fuel burning devices must be registered with the director in
47 order to be exempt during mandatory no-burn periods.

48 (2) When the ambient concentration of PM10 measured by the
49 monitors in Salt Lake, Davis, Weber, or Utah counties reaches the
50 level of 120 micrograms per cubic meter and the forecasted weather
51 for the specific area includes a temperature inversion which is

1 predicted to continue for at least 24 hours, the director will issue
2 a public announcement and will distribute such announcement to the
3 local media notifying the public that a mandatory no-burn period for
4 solid fuel burning devices and fireplaces is in effect. The mandatory
5 no-burn periods will only apply to those areas or counties impacting
6 the real-time monitoring site registering the 120 micrograms per cubic
7 meter concentration. Residents, commercial, institutional and
8 industrial facilities of the affected areas shall not use solid fuel
9 burning devices or fireplaces except those that are the sole source
10 of heat for the entire residence and registered with the director.

11 (3) PM10 Contingency Plan. If the PM10 Contingency Plan
12 described in Section IX, Part A, of the State Implementation Plan
13 has been implemented, the trigger level for no-burn periods as
14 specified in R307-302-3(2) will be 110 micrograms per cubic meter
15 for that area where the PM10 Contingency Plan has been implemented.

16 (4) When the ambient concentration of PM2.5 measured by monitors
17 in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah or Weber counties
18 are forecasted to reach or exceed 25 micrograms per cubic meter, the
19 director will issue a public announcement to provide broad
20 notification that a mandatory no-burn period for solid fuel burning
21 devices and fireplaces is in effect. The mandatory no-burn periods
22 will only apply to those counties identified by the director.
23 Residents, commercial, institutional and industrial facilities within
24 the geographical boundaries described in R307-302-2(1) shall not use
25 solid fuel burning devices or fireplaces except those that are the
26 sole source of heat for the entire residence and registered with the
27 director.

28 (5) PM2.5 Contingency Plan. If the PM2.5 contingency plan of
29 the State Implementation Plan has been implemented, the trigger level
30 for no-burn periods as specified in R307-302-3(4) shall be 15
31 micrograms per cubic meter for the area where the PM2.5 contingency
32 plan has been implemented.

33

34 **R307-302-4. No-Burn Periods for Carbon Monoxide.**

35 (1) Beginning on November 1 and through March 1, the director
36 will issue a public announcement and will distribute such announcement
37 to the local media notifying the public that a mandatory no-burn period
38 for solid fuel burning devices and fireplaces is in effect when the
39 running eight-hour average carbon monoxide concentration as monitored
40 by the state at 4:00 PM reaches a value of 6.0 ppm or more.

41 (2) In addition to the conditions contained in R307-302-4(1),
42 the director may use meteorological conditions to initiate a no-burn
43 period. These conditions are:

44 (a) A national weather service forecasted clearing index value
45 of 250 or less;

46 (b) Forecasted wind speeds of three miles per hour or less;

47 (c) Passage of a vigorous cold front through the Wasatch Front;
48 or

49 (d) Arrival of a strong high pressure system into the area.

50 (3) During the no-burn periods specified in R307-302-4(1) and
51 (2), residents, commercial, institutional and industrial facilities

1 in Provo City shall not use solid fuel burning devices or fireplaces
2 except those that are the sole source of heat for the entire residence
3 and are registered with the director or the local health district
4 office.
5

6 **R307-302-5. Opacity for Heating Appliances.**

7 Except during no-burn periods as required by R307-302-3 and 4,
8 visible emissions from solid fuel burning devices and fireplaces shall
9 be limited to a shade or density no darker than 20% opacity as measured
10 by EPA Method 9, except for the following:

- 11 (1) An initial fifteen minute start-up period, and
12 (2) A period of fifteen minutes in any three-hour period in
13 which emissions may exceed the 20% opacity limitation for refueling.
14

15 **R307-302-6. Prohibition.**

16 (1) Beginning September 1, 2013, no person shall sell, offer
17 for sale, supply, install, or transfer a wood burning stove that is
18 not EPA Phase 2 certified or a fireplace that is not EPA qualified.

19 (2) Ownership of a non EPA Phase 2 certified stove within a
20 residential dwelling installed prior to March 6, 2014 may be
21 transferred as part of a real estate transaction, so long as the unit
22 remains intact within the real property of sale.
23

24 **KEY: air pollution, fireplaces, stoves, solid fuel burning**

25 **Date of Enactment or Last Substantive Amendment: February 4, 2015**

26 **Notice of Continuation: June 2, 2010**

27 **Authorizing, and Implemented or Interpreted Law: 19-2-101; 19-2-104**

FIVE-YEAR NOTICE OF REVIEW AND STATEMENT OF CONTINUATION

Rule Information

DAR file no: Date filed:
State Admin Rule Filing Key: 156017
Utah Admin. Code ref. (R no.): R307-302

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
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City, state, zip: SALT LAKE CITY UT 84114-4820

Contact person(s):

Table with 5 columns: Name, Phone, Fax, E-mail, Remove. Row 1: 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):
Solid Fuel Burning Devices in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah, and Weber Counties

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:
Rule R307-302 identifies no-burn periods for solid fuel burning devices in areas that sometimes exceed the health standards for fine particulate and carbon monoxide. 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 the establishment of the maximum quantity of air contaminants that may be emitted by any air contaminant source."

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:
R307-302 has gone through four rulemakings since its last five-year review. With DAR# 36611, amendments were made effective 1/1/2013, and three comments were submitted in general support of the proposed amendments. With DAR# 38166, amendments were made effective 3/6/2014; two comments were submitted with the rulemaking; however, none were pertinent to the proposed amendment. With DAR# 38842, amendments were made effective 2/4/2015. With DAR# 38842 comments centered around suggestions to clarify the intent of the rule or to ask for exemptions; there were no comments made directly opposing the rule. The fourth rulemaking since the last five-year review was for DAR# 38994, which proposed a seasonal solid fuel heating ban in the PM2.5 nonattainment areas from November 1 to March 15. During the public comment period for DAR# 38994, DAQ received over 2,000 oral and written comments, with the majority opposed to the proposal in one form or another. Commenters brought up several issues that are currently taking a significant amount of time and resources to evaluate, address and resolve.

Additionally, during the 2015 legislative session, the State Legislature passed H.B. 396, which prohibited the Division of Air Quality from "imposing a burning ban prohibiting burning during a specified seasonal period of time." Therefore, the filed rulemaking lapsed on May 1, 2015 without any final action being taken.

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 provisions to regulate solid fuel burning are part of the requirements to reduce particulates and carbon monoxide that are included in Utah's state implementation plans for particulate matter and carbon monoxide. Because the provisions in this rule are needed to reduce pollution during winter temperature inversions when pollutants build up in the air, and because the rule is part of Utah's state implementation plan, the rule should be continued.

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, fireplaces, stoves, solid fuel burning

File Information

7. Attach an RTF document containing the text of this rule change (filename):
There is a document associated with this rule 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): 04/20/2015

ITEM 9

Informational Items

White Mesa
Uranium Mill
Radon
Emissions

RADON EMISSIONS FROM WHITE MESA URANIUM MILL LIQUID EFFLUENTS - SAN JUAN COUNTY, UTAH

Air Quality Board Meeting
May 6, 2015

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WHITE MESA MILL

Photo by Dom Smith of EcoFlight



White Mesa Mill Aerial View

Cell 1 (Left), Cell 3 (Center-Right),
Cell 4A (Right Rear), Cell 4B (Right Front)

EPA RADON EMISSION STANDARDS FOR OPERATING URANIUM MILLS

- ❖ The Environmental Protection Agency (EPA) regulates radon emissions from operating uranium mill tailings under the Clean Air Act National Emission Standards for Hazardous Air Pollutants (NESHAPS), at 40 C.F.R. Part 61 Subpart W.¹
- ❖ The Division of Air Quality administers and enforces Subpart W for Utah.
- ❖ Subpart W limits radon emissions from uranium mill tailings impoundments constructed before Dec. 1989 to 20 pico Curies per square meter per second (20 pCi/m²-sec).
- ❖ Licensees must determine radon emissions annually by measuring radon from dry top areas, benches, sides, and liquid covers—averaging the results for the total surface.
- ❖ The EPA's method for determining the emissions assumes the radon emissions from liquid covers and ponds are “zero.” 40 C.F.R. Part 61, Method 115, Section 2.1.3(a).²

LIQUID EFFLUENT RADON EMISSIONS

- ❖ The EPA proposed revisions to Subpart W in 2014.³ For the Subpart W Rulemaking, the EPA developed site-specific formulas for determining radon emissions from liquid effluents, based on site-specific meteorological data and solution radium content.⁴
- ❖ The EPA determined that for every 1,000 pico Curies per liter of radium in White Mesa tailings and processing solutions, the radon emissions were 7 pCi/m²-sec.⁵
- ❖ In May 2009 the EPA requested data from the White Mesa Mill licensee, including data on the radium content of the liquid effluents.⁶ The licensee did not submit this data. Even though the EPA stated that they could initiate enforcement action if the information was not submitted, the EPA failed to follow up when the data was not provided.
- ❖ Data on the gross radium alpha from the liquid effluents has been submitted to the Div. of Radiation Control (DRC) in the Annual Tailings Wastewater Monitoring Reports.⁷

LIQUID EFFLUENT RADON EMISSIONS

- ❖ The EPA did not use the formula they had developed, which needed data on the radium content of the White Mesa liquid effluents, to determine the radon emissions from those solutions.
- ❖ Impoundments contain liquid effluents from the processing of ore, dewatering of Cell 2, precipitation, and runoff. Solutions are currently used as a water cover on part of Cell 3; completely cover the tailings in Cell 4A; and are being held for evaporation in Cells 1 and 4B, for a total of about 145 acres.
- ❖ Combining the EPA formula and the Energy Fuels Resources (USA) Inc. (Energy Fuels) data on the radium content of the tailings effluents for 2013⁸ and 2014⁹ shows high radon emissions. The radium content increased dramatically in 2014.
- ❖ The Ute Mountain Ute Tribe did their own calculations, based on site-specific meteorological data, and came up with similar results.^{10, 11}

WHITE MESA MILL LIQUID EFFLUENT RADON EMISSIONS

CELL	2013 Gross Radium Alpha	2013 Radon Emissions	2014 Gross Radium Alpha	2014 Radon Emissions
Cell 1 (55 acres)	32,700 pCi/L	228.9 pCi/m ² -sec	331,000 pCi/L	2,317 pCi/m ² -sec
Cell 3	81,900 pCi/L	573.3 pCi/m ² -sec	19,700 pCi/L	137.9 pCi/m ² -sec
Cell 4A (40 acres)	15,800 pCi/L	110.6 pCi/m ² -sec	240,000 pCi/L	1,680 pCi/m ² -sec
Cell 4B (40 acres)	14,600 pCi/L	102.2 pCi/m ² -sec	148,000 pCi/L	1,036 pCi/m ² -sec

Data in the table above is based on the 2010 EPA formula (7 pCi/m²-sec radon flux for every 1,000 pCi/L of radium) and White Mesa Mill 2013 and 2014 Annual Tailings Wastewater Monitoring Reports submitted to the DRC in compliance with Groundwater Discharge Permit UGW 370004.

ISSUES AND CONCLUSIONS

- ❖ If Energy Fuels included the radon flux from the water cover on Cell 3, rather than assuming it is “zero,” the annual radon flux from Cell 3 would exceed the 20 pCi/m²-sec standard.^{12, 13}
- ❖ There are high levels of radon emissions from liquid effluents that are not recognized by the EPA. These emission levels exceed the radon emission standard for uranium mills that the EPA determined was protective of the public health and safety in 1989.
- ❖ The EPA is delaying any response to the issue of high radon emissions from solutions.
- ❖ The EPA’s failure to establish radon emission standards in 1989 for new impoundments, such as Cells 4A and 4B, violated Section 112(e) of the Clean Air Act, amended in 1977.
- ❖ The DAQ has the authority to take action NOW to regulate radon emissions from White Mesa liquid effluent impoundments.

CONCLUSIONS

- ★ There is an On-going Health And Safety Concern at the White Mesa Mesa Uranium Mill.
- ★ The Health and Safety of the nearby residents are being threatened by the high levels of unregulated and uncontrolled radon emissions from ~ 145 acres of radium-laden liquid effluents at the Mill.
- ★ The EPA and DAQ are aware of these emissions, but have yet to acknowledge the problem and take action.
- ★ The DAQ and Board must act NOW.

DAQ ACTIONS

- ❖ The DAQ must not rely on the EPA and EPA Subpart W Rulemaking to resolve the issue of radon emissions from liquid effluents. The EPA has lost credibility.
- ❖ The DAQ must order Energy Fuels to provide data on the radium content of the liquid effluents in Cells 1, 3, 4A, 4B, and Roberts Pond on a quarterly basis.
- ❖ The DAQ must order Energy Fuels to use that data to calculate the radon flux from the liquid effluents, based on the EPA formula and/or the revised Ute Mt. Ute formula.
- ❖ The DAQ must order Energy Fuels to include the calculated radon flux from Cell 3 liquid cover to determine Annual Cell 3 Subpart W compliance.
- ❖ The DAQ must order Energy Fuels to take corrective actions to keep liquid effluent radon emissions within 20 pCi/m²-sec at Cells 1, 3, 4A, and 4B, and Roberts Pond.
- ❖ If the Mill cannot meet the standard, the effluents must be evaporated and the Mill and impoundments reclaimed in accordance with an approved Reclamation Plan.

REFERENCES

1. <http://www.epa.gov/radiation/neshaps/subpartw/index.html>
2. <http://www.epa.gov/radiation/docs/neshaps/subpart-w/historical-rulemakings/december151989finalrule.pdf>
3. <http://www.epa.gov/radiation/neshaps/subpartw/rulemaking-activity.html>
4. *Risk Assessment for Revision for 40 CFR Part 61 Subpart W - Radon Emissions from Operating Mill Tailings: Task 5 - Radon Emissions from Evaporation Ponds*; S. Cohen and Associates, November 9, 2010.
<http://www.epa.gov/radiation/docs/neshaps/subpart-w/riskassessmentrevision.pdf>
5. Id., Table 6, page 17.
6. <http://www.epa.gov/radiation/docs/neshaps/subpart-w/uranium-denison-test.pdf>
7. http://www.deq.utah.gov/businesses/E/energyfuels/reports/tailingswastewater_rpt.htm
8. <http://www.deq.utah.gov/businesses/E/energyfuels/docs/2013/12Dec/2013AnnualTailingsReportFinal.pdf>
9. <http://www.deq.utah.gov/businesses/E/energyfuels/docs/2014/12Dec/TailingsReport2014Annual.pdf>

REFERENCES (CONT.)

10. Ute Mt. Ute Calculations Brief.

EPA Subpart W Rulemaking Non-Privileged Records (July-Sept. 2014, Part 1), pages 405-416. <http://www.epa.gov/radiation/docs/neshaps/npr/2014-july-sept-part1.pdf>

EPA Subpart W Rulemaking Non-Privileged Records (July-Sept. 2014, Part 2), pages 1-3. <http://www.epa.gov/radiation/docs/neshaps/npr/2014-july-sept-part2.pdf>

11. *Ute Mt. Ute Supplement to Calculations Brief (July 2014)*.

http://www.uraniumwatch.org/whitemesamill/UMtUte_CalculationsBrief.150210.pdf

12. <http://www.uraniumwatch.org/whitemesamill/>

[WhiteMesa_2014SubpartWReport_cell3.140330.pdf](http://www.uraniumwatch.org/whitemesamill/WhiteMesa_2014SubpartWReport_cell3.140330.pdf)

13. *Ute Mt. Ute Supplement to Calculations Brief (July 2014)*.

April 27, 2015

February 10, 2015

Air and Radiation Docket
Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington D.C. 20460

SUPPLEMENT TO CALCULATION BRIEF (JULY 7, 2014)

INTRODUCTION

On July 7, 2014, the Ute Mountain Ute Tribe (Tribe) submitted a Calculation Brief to the Environmental Protection Agency (EPA) as part of a larger effort to prepare for a government-to-government consultation meeting regarding the EPA's 40 C.F.R. Part 61, Revisions to National Emission Standards for Radon Emissions from Operating Mill Tailings (Proposed Rule). In the Calculation Brief, the Tribe discussed its initial radon flux calculations for Tailings Cell 1 at the White Mesa Mill using the actual radium pond concentration reported to the Utah Division of Radiation Control in 2013. The Tribe initially determined that Tailings Cell 1 at the White Mesa Mill is a significant source of radon-222 emissions and expressed concern that the EPA was proposing to use a 1 meter liquid cover as the only control on radon-222 emissions from non-conventional impoundments based on a finding that keeping 1 meter of liquid on existing impoundments "has been sufficient to limit the amount of radon emitted from the ponds, in many cases, to almost zero." 79 Fed. Reg. at 25,398. At the July 10, 2014 consultation meeting between the Tribe and the EPA, the EPA was not prepared to substantively respond to issues raised in the Calculation Brief.

On October 29, 2014, the Tribe submitted written comments on the Proposed Rule. The Tribe's comments included a section regarding the EPA's proposed use of a 1-meter cover as the sole work practice standard to control radon emissions from non-conventional impoundments. In that Section, the Tribe used the site-specific analysis at the White Mesa Mill (from the Calculation Brief) to demonstrate that the placement of a 1-meter liquid cover (especially if that liquid is radium-laced process water from conventional milling activities) will not sufficiently control radon-222 emissions from non-conventional impoundments to near zero, and it may allow some non-conventional impoundments to exist with annual mean radon flux numbers that grossly exceed the 20 pCi/(m²s) numerical flux standard.

The purpose of this Supplement to the July 7, 2014 Calculation Brief is to update the Tribe's July 2014 calculation work using the 2014 Annual Tailings Wastewater Monitoring Report (which reflects the most recent tailings cell chemistry data—collected in August of 2014).

SUMMARY OF THE 2014 ANNUAL TAILINGS WASTEWATER MONITORING REPORT

The 2014 Annual Tailings Wastewater Monitoring Report (2014 Report) shows a large increase in the Gross Radium Alpha content in Tailings Cells 1, 4A, and 4B, and a decrease in the Gross Radium Alpha content in Tailings Cell 3. See Table 1.

TABLE 1: Increase in Gross Radium Alpha, 2013-2014

Cell	2013 Gross Radium Alpha	2014 Gross Radium Alpha
Cell 1	32,700 pCi/L	331,000 pCi/L
Cell 3	81,900 pCi/L	19,700 pCi/L
Cell 4A	15,800 pCi/L	240,000 pCi/L
Cell 4B	14,600 pCi/L	148,000 pCi/L

Source: 2013 Annual Wastewater Monitoring Report; Groundwater Quality Discharge Permit UGW370004, White Mesa Uranium Mill, November 2013. Web Access 2013; 2014 Annual Wastewater Monitoring Report; Groundwater Quality Discharge Permit UGW370004, White Mesa Uranium Mill, November 24, 2014. Web Access 2014.

In the 2014 Report, the White Mesa Mill owner explained the observed increase in Gross Radium Alpha activity by correlating it to an increase in total dissolved solids (TDS) and asserting that the increase in both TDS and Gross Radium Alpha were caused by drought conditions and a decrease in the amount of fresh water added to the Mill process. However, past increases in measured concentration of TDS in the White Mesa Mill tailings impoundments have not resulted in the kind of increases in Gross Radium Alpha that were observed between 2013 and 2014, and the White Mesa Mill owner's explanation for the marked increase in Gross Radium Alpha remains speculative.

UPDATED CALCULATION OF ANNUAL MEAN RADON FLUX, WHITE MESA MILL

Using the Gross Radium Alpha content from the 2014 Report, the Tribe was able update its July 2014 initial calculation of the annual mean radon flux for Tailings Cell 1. Using the 2010 EPA Risk Assessment formulas for determining radon emissions and an annual wind speed of 2.7 m/sec collected at the White Mesa Air Monitoring Station, the Tribe also calculated the annual mean radon flux for Tailings Cells 3, 4A, and 4B.

TABLE 2 Initial Calculations of Annual Mean Radon Flux Using 2014 Data

Cell	2013 Calculated Annual Mean Radon Flux (Initial)	2014 Calculated Annual Mean Radon Flux (Initial)
Cell 1	125.8 pCi/(m ² s)	1,257.4 pCi/(m ² s)
Cell 3	311.1 pCi/(m ² s)*	74.8 pCi/(m ² s)*
Cell 4A	60.0 pCi/(m ² s)*	911.7 pCi/(m ² s)*
Cell 4B	55.5 pCi/(m ² s)	562.2 pCi/(m ² s)

* Calculated Radon Flux for liquid-covered regions of these impoundments

The Tribe believes that additional work assessing the radon flux of these Tailings Cells will likely yield even higher annual mean radon flux numbers for the reasons noted in Section 1.3 of the Calculation Brief.

UPDATED CALCULATED ANNUAL MEAN RADON FLUX AND NON-CONVENTIONAL IMPOUNDMENTS

In the Calculation Brief and in the October 29, 2014 comments, the Tribe urged the EPA to reconsider its finding that a 1-meter liquid cover will reduce radon emissions from liquid covered impoundment “in many cases to almost zero.” The Tribe’s revised calculations using the 2014 tailings cell chemistry data more clearly demonstrate why the EPA cannot move forward with the Proposed Rule without evaluating control technologies or emissions limits other than a 1-meter liquid cover to address significant emissions off liquid-covered impoundments at the White Mesa Mill.

UPDATED CALCULATED ANNUAL RADON FLUX AND CONVENTIONAL IMPOUNDMENTS

The Tribe’s calculations for Tailings Cells 3 and 4A at the White Mesa Mill also raise additional concerns about the efficacy of Method 115 Monitoring for conventional impoundments and about the EPA’s assumption that the acreage limitations in the phased disposal work practice standards are adequately controlling radon emissions for conventional impoundments.

Concerns Regarding Method 115 Monitoring for Conventional Impoundments

When facilities like the White Mesa Mill use Method 115 to monitor the radon flux from “existing impoundments”, *see* 40 C.F.R. §§ 61.252(a), 61.253, those facilities are currently allowed to assume that the radon flux from liquid-covered regions of the existing, conventional impoundments is zero. Method 115, 2.1.3(a). Section 2.1.7 of Method 115 allows those facilities to calculate the mean radon flux of the conventional impoundment using the total area of the impoundment (including the area of the liquid-covered regions). Section 2.1.3(a)’s assumption of a zero radon flux and 2.1.7’s calculation equation including the total impoundment area result in the dilution of the radon flux measured in other regions of the impoundment. When the emissions from the liquid-covered areas of the impoundment are above zero, Sections 2.1.3(a) and 2.1.7 of Method 115 also result in a dilution or a decrease in the mean radon flux for the entire impoundment.

The Tribe’s calculation of the radon emissions from the liquid-covered region of Tailings Cell 3 demonstrates that the actual radon emissions from this Tailings Cell, taking into account the measured emissions from the other (dry or saturated) areas of this impoundment and the calculated emissions from any liquid-covered region of the impoundment, are much higher than the emissions reported by the White Mesa Mill owner to the Utah Division of Air Quality. Accordingly, the Tribe requests that, as a part of the EPA’s evaluation of emissions from liquid-

covered regions of tailings impoundments, the EPA reconsider Method 115's assumption that liquid-covered regions of conventional impoundments are assumed to have zero emissions.¹

Concerns Regarding Phased Disposal Work Practice Standard Efficacy

In the Proposed Rule, the EPA assumed that the phased disposal work practice standard acreage limitation was working to control radon emissions from newer conventional impoundments like Tailings Cell 4A at the White Mesa Mill. *See* October 29, 2014 Comments at 17. In the October 2014 Comments, the Tribe asserted that the EPA could not determine whether the 40-acre limitation on tailings impoundments was working to control radon-222 emissions because the current work practice standard does not require Method 115 or other monitoring on these impoundments. However, the Tribe was able to calculate the annual mean radon flux from the liquid in Cell 4A, and that calculation shows that the anticipated annual mean radon flux, at least from the liquid-covered areas of the impoundment, is 911.7 pCi/(m²s). Accordingly, the Tribe requests that, as a part of the EPA's evaluation of emissions from liquid-covered tailings impoundments, the EPA reconsider whether the 40-acre limitation on tailings impoundments is sufficient—without additional monitoring or measurement of radon emissions—to control radon emissions to 20 pCi/(m²s) and to control adverse impacts to the environment and human health near these tailings impoundments.

IMMEDIATE CONCERNS ABOUT PUBLIC HEALTH NEAR THE WHITE MESA MILL

When the Tribe performed its initial calculation of the annual radon flux from Tailings Cell 1 using the 2013 tailings cell chemistry data, the Tribe immediately expressed its concern to the EPA that the radon emissions from the White Mesa Mill were at unsafe levels for White Mesa community members and to human health in other areas of southeastern Utah. The drastic increase in the calculated emissions between 2013 and 2014 has elevated the Tribe's concerns about the health and safety of Ute Mountain Ute Tribal members living close to the White Mesa Mill, and the Tribe believes that the EPA should consider taking emergency actions to protect human health and the environment in southeastern Utah.

CONCLUSION

On January 13, 2015, the Tribe sent the EPA administrator a request for a second government-to-government consultation meeting regarding the Subpart W rulemaking activity. At that consultation meeting, the Tribe will expect the EPA to substantively respond to the Tribe's Calculation Brief and to this Supplement. The Tribe looks forward to communicating at a government-to-government level about the important issues raised in the Calculation Brief, the October 2014 Comments, and this Supplement.

¹The Tribe recognizes that the EPA has proposed removing the 40 C.F.R. § 252(a) "existing impoundment" standard and the 40 C.F.R. § 253 requirement to use Method 115 monitoring. The Tribe has provided public comments urging the EPA to reconsider removing the "existing impoundment" standard and to consider imposing Method 115 monitoring and an emissions standard for conventional tailings impoundments. The Tribe also notes here that the State of Utah is currently requiring the White Mesa Mill to use Method 115 monitoring on Tailings Cell 2, and that this deficiency in Method 115 monitoring may impact monitoring efforts during impoundment and facility closure.

TABLE 2 TO PART 61, SUBPART V.—SURGE CONTROL VESSELS AND BOTTOMS RECEIVERS AT NEW SOURCES

Vessel capacity (cubic meters)	Vapor pressure ¹ (kilopascals)
38 ≤ capacity < 151	≥ 13.1
151 ≤ capacity	≥ 0.7

¹ Maximum true vapor pressure as defined in § 61.241.

[65 FR 78283, Dec. 14, 2000]

Subpart W—National Emission Standards for Radon Emissions From Operating Mill Tailings

SOURCE: 54 FR 51703, Dec. 15, 1989, unless otherwise noted.

§ 61.250 Designation of facilities.

The provisions of this subpart apply to owners or operators of facilities licensed to manage uranium byproduct materials during and following the processing of uranium ores, commonly referred to as uranium mills and their associated tailings. This subpart does not apply to the disposal of tailings.

§ 61.251 Definitions.

As used in this subpart, all terms not defined here have the meaning given them in the Clean Air Act or 40 CFR part 61, subpart A. The following terms shall have the following specific meanings:

- (a) *Area* means the vertical projection of the pile upon the earth's surface.
- (b) *Continuous disposal* means a method of tailings management and disposal in which tailings are dewatered by mechanical methods immediately after generation. The dried tailings are then placed in trenches or other disposal areas and immediately covered to limit emissions consistent with applicable Federal standards.
- (c) *Dewatered* means to remove the water from recently produced tailings by mechanical or evaporative methods such that the water content of the tailings does not exceed 30 percent by weight.
- (d) *Existing impoundment* means any uranium mill tailings impoundment which is licensed to accept additional

tailings and is in existence as of December 15, 1989.

(e) *Operation* means that an impoundment is being used for the continued placement of new tailings or is in standby status for such placement. An impoundment is in operation from the day that tailings are first placed in the impoundment until the day that final closure begins.

(f) *Phased disposal* means a method of tailings management and disposal which uses lined impoundments which are filled and then immediately dried and covered to meet all applicable Federal standards.

(g) *Uranium byproduct material or tailings* means the waste produced by the extraction or concentration of uranium from any ore processed primarily for its source material content. Ore bodies depleted by uranium solution extraction and which remain underground do not constitute byproduct material for the purposes of this subpart.

§ 61.252 Standard.

- (a) Radon-222 emissions to the ambient air from an existing uranium mill tailings pile shall not exceed 20 pCi/(m²-sec) (1.9 pCi/(ft²-sec)) of radon-222.
- (b) After December 15, 1989, no new tailings impoundment can be built unless it is designed, constructed and operated to meet one of the two following work practices:
 - (1) Phased disposal in lined tailings impoundments that are no more than 40 acres in area and meet the requirements of 40 CFR 192.32(a) as determined by the Nuclear Regulatory Commission. The owner or operator shall have no more than two impoundments, including existing impoundments, in operation at any one time.
 - (2) Continuous disposal of tailings such that tailings are dewatered and immediately disposed with no more than 10 acres uncovered at any time and operated in accordance with § 192.32(a) as determined by the Nuclear Regulatory Commission.
- (c) All mill owners or operators shall comply with the provisions of 40 CFR 192.32(a) in the operation of tailings

Environmental Protection Agency

§ 61.256

piles, the exemption for existing piles in 40 CFR 192.32(a) notwithstanding.

[54 FR 51703, Dec. 15, 1989, as amended at 65 FR 62159, Oct. 17, 2000]

§ 61.253 Determining compliance.

Compliance with the emission standard in this subpart shall be determined annually through the use of Method 115 of appendix B. When measurements are to be made over a one year period, EPA shall be provided with a schedule of the measurement frequency to be used. The schedule may be submitted to EPA prior to or after the first measurement period. EPA shall be notified 30 days prior to any emissions test so that EPA may, at its option, observe the test.

§ 61.254 Annual reporting requirements.

(a) The owners or operators of operating existing mill impoundments shall report the results of the compliance calculations required in § 61.253 and the input parameters used in making the calculation for each calendar year shall be sent to EPA by March 31 of the following year. Each report shall also include the following information:

- (1) The name and location of the mill.
- (2) The name of the person responsible for the operation of the facility and the name of the person preparing the report (if different).
- (3) The results of the testing conducted, including the results of each measurement.
- (4) Each report shall be signed and dated by a corporate officer in charge of the facility and contain the following declaration immediately above the signature line: "I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment. See, 18 U.S.C. 1001."

(b) If the facility is not in compliance with the emission limits of § 61.252 in the calendar year covered by the report, then the facility must commence

reporting to the Administrator on a monthly basis the information listed in paragraph (a) of this section, for the preceding month. These reports will start the month immediately following the submittal of the annual report for the year in noncompliance and will be due 30 days following the end of each month. This increased level of reporting will continue until the Administrator has determined that the monthly reports are no longer necessary. In addition to all the information required in paragraph (a) of this section, monthly reports shall also include the following information:

- (1) All controls or other changes in operation of the facility that will be or are being installed to bring the facility into compliance.
- (2) If the facility is under a judicial or administrative enforcement decree, the report will describe the facilities performance under the terms of the decree.
- (c) The first report will cover the emissions of calendar year 1990.

§ 61.255 Recordkeeping requirements.

The owner or operator of the mill must maintain records documenting the source of input parameters including the results of all measurements upon which they are based, the calculations and/or analytical methods used to derive values for input parameters, and the procedure used to determine compliance. In addition, the documentation should be sufficient to allow an independent auditor to verify the accuracy of the determination made concerning the facility's compliance with the standard. These records must be kept at the mill for at least five years and upon request be made available for inspection by the Administrator, or his authorized representative.

§ 61.256 Exemption from the reporting and testing requirements of 40 CFR 61.10.

All facilities designated under this subpart are exempt from the reporting requirements of 40 CFR 61.10.

Subpart X [Reserved]

METHOD 115-MONITORING FOR RADON-222 EMISSIONS

This appendix describes the monitoring methods which must be used in determining the radon-222 emissions from underground uranium mines, uranium mill tailings piles, phosphogypsum stacks, and other piles of waste material emitting radon.

1. Radon-222 Emissions from Underground Uranium Mine Vents.

1.1 Sampling Frequency and Calculation of Emissions. Radon-222 emissions from underground uranium mine vents shall be determined using one of the following methods:

1.1.1 Continuous Measurement. These measurements shall be made and the emissions calculated as follows:

(a) The radon-222 concentration shall be continuously measured at each mine vent whenever the mine ventilation system is operational.

(b) Each mine vent exhaust flow rate shall be measured at least 4 times per year.

(c) A weekly radon-222 emission rate for the mine shall be calculated and recorded weekly as follows:

$$A_w = C_1 Q_1 T_1 + C_2 Q_2 T_2 + \dots + C_i Q_i T_i$$

where:

A_w = Total radon-222 emitted from the mine during week (C_i)

C_i = Average radon-222 concentration in mine vent i (C_i/m^3)

Q_i = Volumetric flow rate from mine vent i (m^3/hr)

T_i = Hours of mine ventilation system operation during week for mine vent i (hr)

(d) The annual radon-222 emission rate is the sum of the weekly emission rates during a calendar year.

1.1.2 Periodic Measurement. This method is applicable only to mines that continuously operate their ventilation system except for extended shutdowns. Mines which start up and shut down their ventilation system frequently must use the continuous measurement method describe in Section 1.1.1 above. Emission rates determined using periodic measurements shall be measured and calculated as follows:

(a) The radon-222 shall be continuously measured at each mine vent for at least one week every three months.

(b) Each mine vent exhaust flow rate shall be measured at least once during each of the radon-222 measurement periods.

(c) A weekly radon-222 emission rate shall be calculated for each weekly period according to the method described in Section 1.1.1. In this calculation $T=168$ hr.

(d) The annual radon-222 emission rate from the mine should be calculated as follows:

$$A_y = \frac{52 - W_s}{n} (A_{w1} + A_{w2} + \dots + A_{wi})$$

where:

A_y = Annual radon-222 emission rate from the mine (C_i)

A_{wi} = Weekly radon-222 emission rate during the measurement period i (C_i)

n = Number of weekly measurement periods per year

W_s = Number of weeks during the year that the mine ventilation system is shut down in excess of 7 consecutive days, i.e.,

the sum of the number of weeks each shut down exceeds 7 days

1.2 Test Methods and Procedures

Each underground mine required to test its emissions, unless an equivalent or alternative method has been approved by the Administrator, shall use the following test methods:

1.2.1 Test Method 1 of appendix A to part 60 shall be used to determine velocity traverses. The sampling point in the duct shall be either the centroid of the cross section or the point of average velocity.

1.2.2 Test Method 2 of appendix A to part 60 shall be used to determine velocity and volumetric flow rates.

1.2.3 Test Methods A-6 or A-7 of appendix B, Method 114 to part 61 shall be used for the analysis of radon-222. Use of Method A - 7 requires prior approval of EPA based on conditions described in appendix B.

1.2.4 A quality assurance program shall be conducted in conformance with the programs described for Continuous Radon Monitors and Alpha Track Detectors in EPA 520/1-89-009. (2)

2. Radon-222 Emissions from Uranium Mill Tailings Piles.

2.1 Measurement and Calculation of Radon Flux from Uranium Mill Tailings Piles.

2.1.1 Frequency of Flux Measurement. A single set of radon flux measurements may be made, or if the owner or operator chooses, more frequent measurements may be made over a one year period. These measurements may involve quarterly, monthly or weekly intervals. All radon measurements shall be made as described in paragraphs 2.1.2 through 2.1.6 except that for measurements made over a one year period, the requirement of paragraph 2.1.4(c) shall not apply. The mean radon flux from the pile shall be the arithmetic mean of the mean radon flux for each measurement period. The weather conditions, moisture content of the tailings and area of the pile covered by water existing at the time of the measurement shall be chosen so as to provide measurements representative of the long term radon flux from the pile and shall be subject to EPA review and approval.

2.1.2 Distribution of Flux Measurements. The distribution and number of radon flux measurements required on a pile will depend on clearly defined areas of the pile (called regions) that can have significantly different radon fluxes due to surface conditions. The mean radon flux shall be determined for each individual region of the pile. Regions that shall be considered for operating mill tailings piles are:

- (a) Water covered areas,
- (b) Water saturated areas (beaches),
- (c) Dry top surface areas, and
- (d) Sides, except where earthen material is used in dam construction.

For mill tailings after disposal the pile shall be considered to consist of only one region.

2.1.3 Number of Flux Measurements. Radon flux measurements shall be made within each region on the pile, except for those areas covered with water. Measurements shall be made at regularly spaced locations across the surface of the region, realizing that surface roughness will prohibit measurements in some areas of a region. The minimum number of flux measurements considered necessary to determine a representative mean radon flux value for each type of region on an operating pile is:

- (a) Water covered area-no measurements required as radon flux is assumed to be zero,
- (b) Water saturated beaches-100 radon flux measurements,
- (c) Loose and dry top surface-100 radon flux measurements,
- (d) Sides-100 radon flux measurements, except where earthen material

is used in dam construction.

For a mill tailings pile after disposal which consists of only one region a minimum of 100 measurements are required.

2.1.4 Restrictions to Radon Flux Measurements. The following restrictions are placed on making radon flux measurements:

- (a) Measurements shall not be initiated within 24 hours of a rainfall.
- (b) If a rainfall occurs during the 24 hour measurements period, the measurement is invalid if the seal around the lip of the collector has washed away or if the collector is surrounded by water.
- (c) Measurements shall not be performed if the ambient temperature is below 35°F or if the ground is frozen.

2.1.5 Areas of Pile Regions. The approximate area of each region of the pile shall be determined in units of square meters.

2.1.6 Radon Flux Measurement. Measuring radon flux involves the adsorption of radon on activated charcoal in a large-area collector. The radon collector is placed on the surface of the pile area to be measured and allowed to collect radon for a time period of 24 hours. The radon collected on the charcoal is measured by gamma-ray spectroscopy. The detailed measurement procedure provided in appendix A of EPA 520/5-85-0029(1) shall be used to measure the radon flux on uranium mill tailings, except the surface of the tailings shall not be penetrated by the lip of the radon collector as directed in the procedure, rather the collector shall be carefully positioned on a flat surface with soil or tailings used to seal the edge.

2.1.7 Calculations. The mean radon flux for each region of the pile and for the total pile shall be calculated and reported as follows:

- (a) The individual radon flux calculations shall be made as provided in appendix A EPA 86 (1). The mean radon flux for each region of the pile shall be calculated by summing all individual flux measurements for the region and dividing by the total number of flux measurements for the region.
- (b) The mean radon flux for the total uranium mill tailings pile shall be calculated as follows.

$$J_s = \frac{J_1 A_1 + J_2 A_2 + \dots + J_i A_i}{A_t}$$

where:

J_s	=	Mean flux for the total pile (pCi/m ² -s)
J_i	=	Mean flux measured in region i (pCi/m ² -s)
A_i	=	Area of region i (m ²)
A_t	=	Total area of the pile (m ²)

2.1.8 Reporting. The results of individual flux measurements, the approximate locations on the pile, and the mean radon flux for each region and the mean radon flux for the total stack shall be included in the emission test report. Any condition or unusual event that occurred during the measurements that could significantly affect the results should be reported.

3.0 Radon-222 Emissions from Phosphogypsum Stacks.

3.1 Measurement and Calculation of the Mean Radon Flux. Radon flux measurements shall be made on phosphogypsum stacks as described below:

3.1.1 Frequency of Measurements. A single set of radon flux measurements may be made after the phosphogypsum stack becomes inactive, or if the owner or operator chooses, more frequent measurements may be made over a

one year period. These measurements may involve quarterly, monthly or weekly intervals. All radon measurements shall be made as described in paragraphs 3.1.2 through 3.1.6 except that for measurements made over a one year period, the requirement of paragraph 3.1.4(c) shall not apply. For measurements made over a one year period, the radon flux shall be the arithmetic mean of the mean radon flux for each measurement period.

3.1.2 Distribution and Number of Flux Measurements. The distribution and number of radon flux measurements required on a stack will depend on clearly defined areas of the stack (called regions) that can have significantly different radon fluxes due to surface conditions. The mean radon flux shall be determined for each individual region of the stack. Regions that shall be considered are:

- (a) Water covered areas,
- (b) Water saturated areas (beaches),
- (c) Loose and dry top surface areas,
- (d) Hard-packed roadways, and
- (e) Sides.

3.1.3 Number of Flux Measurements. Radon flux measurements shall be made within each region on the phosphogypsum stack, except for those areas covered with water. Measurements shall be made at regularly spaced locations across the surface of the region, realizing that surface roughness will prohibit measurements in some areas of a region. The minimum number of flux measurements considered necessary to determine a representative mean radon flux value for each type of region is:

- (a) Water covered area-no measurements required as radon flux is assumed to be zero,
- (b) Water saturated beaches-50 radon flux measurements,
- (c) Loose and dry top surface-100 radon flux measurements,
- (d) Hard-packed roadways-50 radon flux measurements, and
- (e) Sides-100 radon flux measurements.

A minimum of 300 measurements are required. A stack that has no water cover can be considered to consist of two regions, top and sides, and will require a minimum of only 200 measurements.

3.1.4 Restrictions to Radon Flux Measurements. The following restrictions are placed on making radon flux measurements:

- (a) Measurements shall not be initiated within 24 hours of a rainfall.
- (b) If a rainfall occurs during the 24 hour measurement period, the measurement is invalid if the seal around the lip of the collector has washed away or if the collector is surrounded by water.
- (c) Measurements shall not be performed if the ambient temperature is below 35 °F or if the ground is frozen.

3.1.5 Areas of Stack Regions. The approximate area of each region of the stack shall be determined in units of square meters.

3.1.6 Radon Flux Measurements. Measuring radon flux involves the adsorption of radon on activated charcoal in a large-area collector. The radon collector is placed on the surface of the stack area to be measured and allowed to collect radon for a time period of 24 hours. The radon collected on the charcoal is measured by gamma-ray spectroscopy. The detailed measurement procedure provided in appendix A of EPA 520/5-85-0029(1) shall be used to measure the radon flux on phosphogypsum stacks, except the surface of the phosphogypsum shall not be penetrated by the lip of the radon collector as directed in the procedure, rather the collector shall be carefully positioned on a flat surface with soil or phosphogypsum used to seal the edge.

3.1.7 Calculations. The mean radon flux for each region of the phosphogypsum stack and for the total stack shall be calculated and reported as follows:

- (a) The individual radon flux calculations shall be made as provided in appendix A EPA 86 (1). The mean radon flux for each region of the stack shall be calculated by summing all individual flux measurements for the region and dividing by the total number of flux measurements for the region.
- (b) The mean radon flux for the total phosphogypsum stack shall be calculated as follows.

$$J_s = \frac{J_1 A_1 + J_2 A_2 + \dots + J_i A_i}{A_t}$$

where:

J_s	=	Mean flux for the total stack (pCi/m ² -s)
J_i	=	Mean flux measured in region i (pCi/m ² -s)
A_i	=	Area of region i (m ²)
A_t	=	Total area of the stack

3.1.8 Reporting. The results of individual flux measurements, the approximate locations on the stack, and the mean radon flux for each region and the mean radon flux for the total stack shall be included in the emission test report. Any condition or unusual event that occurred during the measurements that could significantly affect the results should be reported.

4.0 Quality Assurance Procedures for Measuring Rn-222 Flux.

A. Sampling Procedures

Records of field activities and laboratory measurements shall be maintained. The following information shall be recorded for each charcoal canister measurement:

- (a) Site
- (b) Name of pile
- (c) Sample location
- (d) Sample ID number
- (e) Date and time on
- (f) Date and time off
- (g) Observations of meteorological conditions and comments

Records shall include all applicable information associated with determining the sample measurement, calculations, observations, and comments.

B. Sample Custody

Custodial control of all charcoal samples exposed in the field shall be maintained in accordance with EPA chain-of-custody field procedures. A control record shall document all custody changes that occur between the field and laboratory personnel.

C. Calibration Procedures and Frequency

The radioactivity of two standard charcoal sources, each containing a carefully determined quantity of radium-226 uniformly distributed through 180g of activated charcoal, shall be measured. An efficiency factor is computed by dividing the average measured radioactivity of the two standard charcoal sources, minus the background, in cpm by the known radioactivity of the charcoal sources in dpm. The same two standard charcoal sources shall be counted at the beginning and at the end of each day's counting as a check of the radioactivity counting equipment. A background count using unexposed charcoal should also be made at the beginning and at the end of each counting day to check for inadvertent contamination of the detector or other changes affecting the background. The unexposed charcoal comprising the blank is changed with each new batch of charcoal used.

D. Internal Quality Control Checks and Frequency

The charcoal from every tenth exposed canister shall be recounted. Five percent of the samples analyzed shall be either blanks (charcoal having no radioactivity added) or samples spiked with known quantities of radium-226.

E. Data Precision, Accuracy, and Completeness

The precision, accuracy, and completeness of measurements and analyses shall be within the following limits for samples measuring greater than 1.0 pCi/m² -s.

- (a) Precision: 10%

- (b) Accuracy: $\pm 10\%$
- (c) Completeness: at least 85% of the measurements must yield useable results.

5.0 References.

(1) Hartley, J.N. and Freeman, H.D., "Radon Flux Measurements on Gardinier and Royster Phosphogypsum Piles Near Tampa and Mulberry, Florida," U.S. Environmental Protection Agency Report, EPA 520/5-85-029, January 1986.

(2) Environmental Protection Agency, "Indoor Radon and Radon Decay Product Measurement Protocols", EPA 520/1-89-009, U.S. Environmental Protection Agency, Washington, DC. (1989).

[38 FR 8826, Apr. 6, 1973]

Air Toxics



State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQA-289-15

MEMORANDUM

TO: Air Quality Board

FROM: Bryce C. Bird, Executive Secretary

DATE: March 5, 2015

SUBJECT: Air Toxics, Lead-Based Paint, and Asbestos (ATLAS) Section Compliance Activities – February 2015

MACT Compliance Inspections	0
Asbestos Demolition/Renovation NESHAP Inspections	40
Asbestos AHERA Inspections	40
Asbestos State Rules Only Inspections	6
Asbestos Notifications Accepted	150
Asbestos Telephone Calls Answered	396
Asbestos Individuals Certifications Approved/Disapproved	63/4
Asbestos Company Certifications/Re-Certifications	0/13
Asbestos Alternate Work Practices Approved/Disapproved	12/0
Lead-Based Paint (LBP) Inspections	13
LBP Notifications Approved	1
LBP Telephone Calls Answered	141
LBP Letters Prepared and Mailed	97
LBP Courses Reviewed/Approved	0/0
LBP Course Audits	2
LBP Individual Certifications Approved/Disapproved	25/0

LBP Firm Certifications	17
Notices of Violation Issued	0
Compliance Advisories Issued	18
Warning Letters Issued	15
Settlement Agreements Finalized	1
Penalties Agreed to:	1
Plumbing Plus	\$600.00



State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQA-427-15

MEMORANDUM

TO: Air Quality Board

FROM: Bryce C. Bird, Executive Secretary

DATE: April 7, 2015

SUBJECT: Air Toxics, Lead-Based Paint, and Asbestos (ATLAS) Section Compliance Activities – March 2015

MACT Compliance Inspections	2
Asbestos Demolition/Renovation NESHAP Inspections	46
Asbestos AHERA Inspections	53
Asbestos State Rules Only Inspections	13
Asbestos Notifications Accepted	160
Asbestos Telephone Calls Answered	481
Asbestos Individuals Certifications Approved/Disapproved	105/1
Asbestos Company Certifications/Re-Certifications	1/6
Asbestos Alternate Work Practices Approved/Disapproved	14/0
Lead-Based Paint (LBP) Inspections	11
LBP Notifications Approved	1
LBP Telephone Calls Answered	82
LBP Letters Prepared and Mailed	95
LBP Courses Reviewed/Approved	0/0
LBP Course Audits	3
LBP Individual Certifications Approved/Disapproved	52/1

LBP Firm Certifications	16
Notices of Violation Issued	0
Compliance Advisories Issued	19
Warning Letters Issued	16
Settlement Agreements Finalized	0
Penalties Agreed to:	

Compliance



State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQC-335-15

MEMORANDUM

TO: Air Quality Board
FROM: Bryce C. Bird, Executive Secretary
DATE: March 12, 2015
SUBJECT: Compliance Activities – February 2015

Annual Inspections Conducted:

Major.....	9
Synthetic Minor	2
Minor	24
On-Site Stack Test Audits Conducted:	16
Stack Test Report Reviews:	22
On-Site CEM Audits Conducted:	17
Emission Reports Reviewed:	4
Temporary Relocation Requests Reviewed & Approved:	9
Fugitive Dust Control Plans Reviewed & Accepted:.....	85
Soil Remediation Report Reviews:	2
¹ Miscellaneous Inspections Conducted:.....	8
Complaints Received:	23
Wood Burning Complaints	3
Breakdown Reports Received:.....	0

Compliance Actions Resulting From a Breakdown.....	0
Warning Letters Issued:	1
Notices of Violation Issued:.....	0
Compliance Advisories Issued:.....	4
Settlement Agreements Reached:	3
EP Energy	\$359.00
Storm Products.....	\$3,271.00
Miller Paving	\$1,390.00

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



State of Utah

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SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQC-471-15

MEMORANDUM

TO: Air Quality Board
FROM: Bryce C. Bird, Executive Secretary
DATE: April 10, 2015
SUBJECT: Compliance Activities – March 2015

Annual Inspections Conducted:

Major.....	12
Synthetic Minor	8
Minor	29
On-Site Stack Test Audits Conducted:	9
Stack Test Report Reviews:	21
On-Site CEM Audits Conducted:	7
Emission Reports Reviewed:	1
Temporary Relocation Requests Reviewed & Approved:	16
Fugitive Dust Control Plans Reviewed & Accepted:.....	98
Soil Remediation Report Reviews:	1
¹ Miscellaneous Inspections Conducted:.....	41
Complaints Received:	28
Wood Burning Complaints	0
Breakdown Reports Received:.....	0

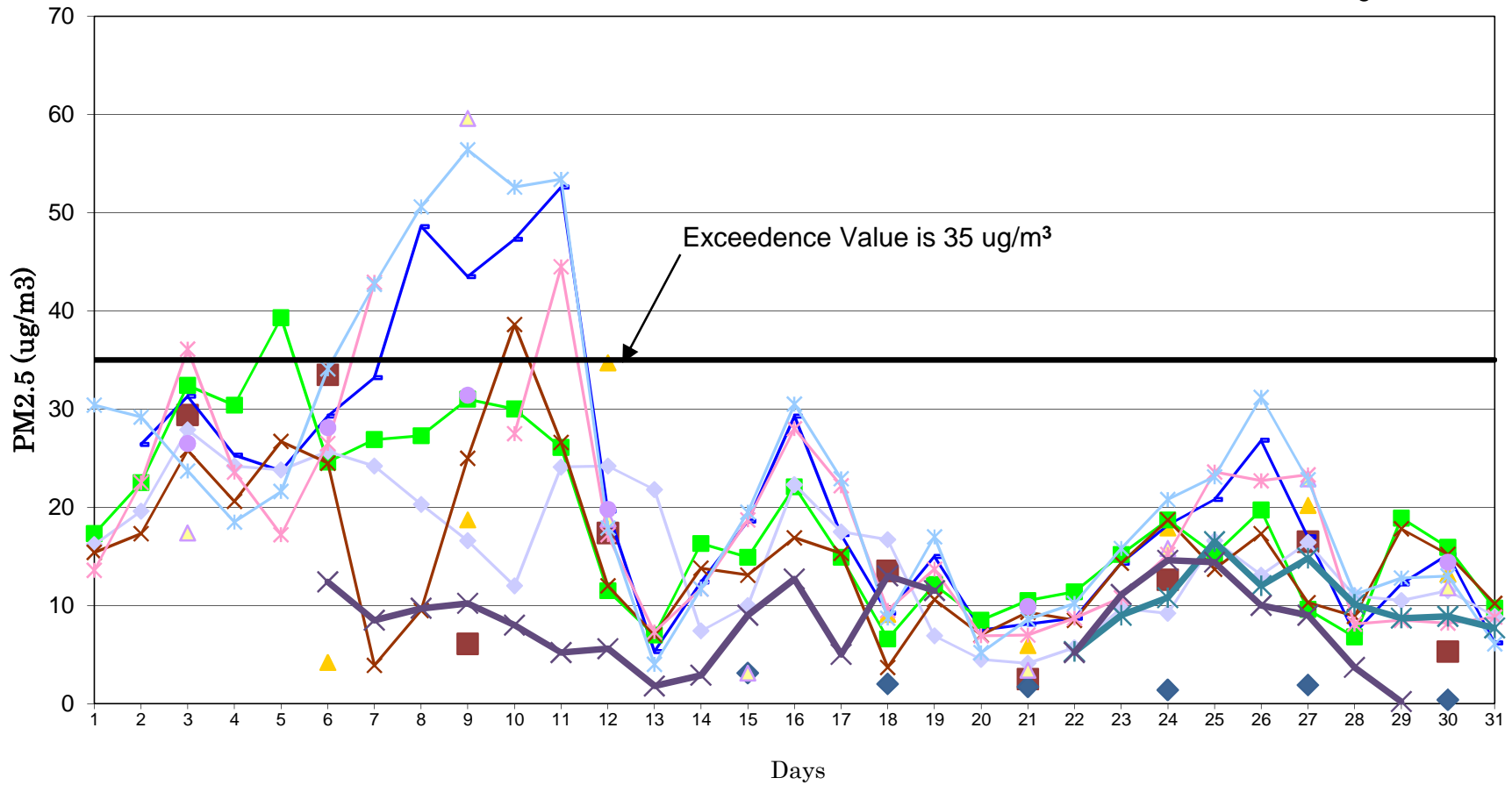
Compliance Actions Resulting From a Breakdown.....	0
Warning Letters Issued:	1
Notices of Violation Issued:.....	0
Compliance Advisories Issued:.....	5
Settlement Agreements Reached:	4
Marion Energy	\$2,480.00
Snowbird Resorts	\$5,694.00
Gordon Creek, LLC	\$2,160.00
Witaker Construction.....	\$1,007.00

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

Air Monitoring

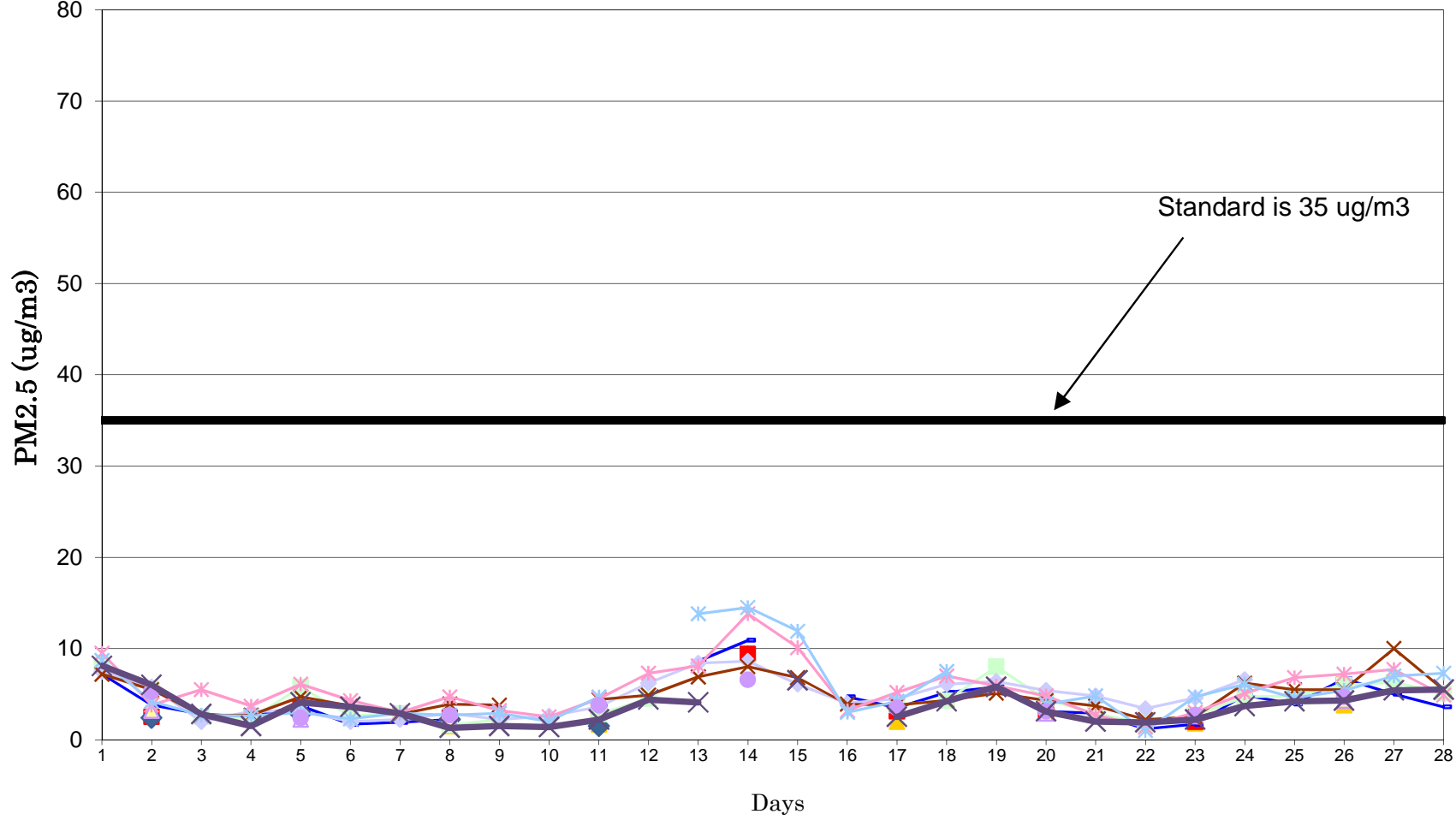
Utah 24-Hr PM_{2.5} Data January 2015

- ★ Bountiful
- Bringham City
- Hawthorne
- ◆ Hurricane
- Lindon
- ◇ Logan
- ▲ Magna
- × North Provo
- * Ogden
- * Rose Park
- * Smithfield
- Spanish Fork
- Tooele
- 24-hr Exceedence Value is 35 ug/m³

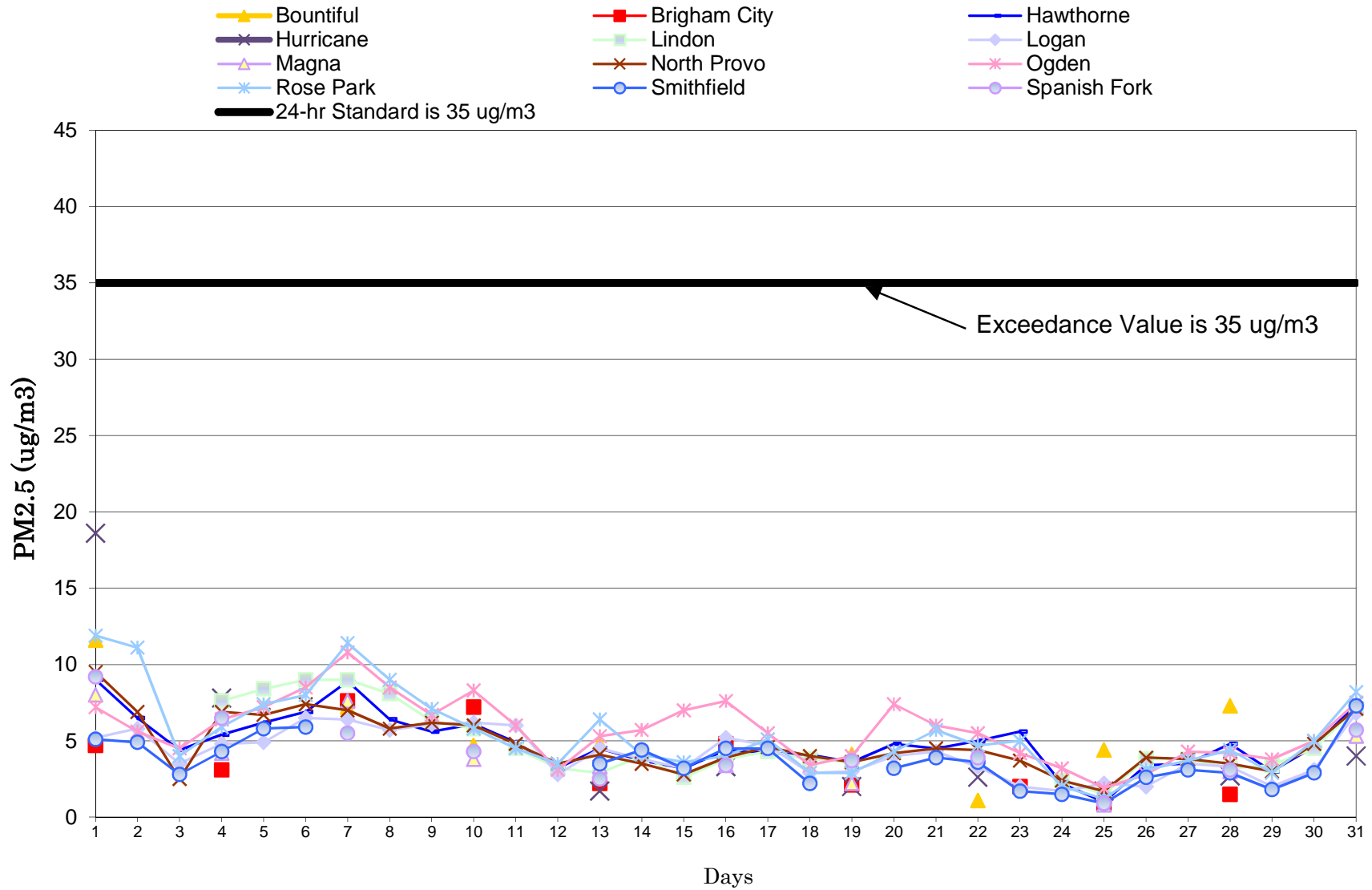


Utah 24-Hr PM_{2.5} Data February 2015

- Bountiful
- Hurricane
- Magna
- Rose Park
- Tooele
- Brigham City
- Lindon
- North Provo
- Spanish Fork
- Hawthorne
- Logan
- Ogden
- Smithfield
- 24-hr Standard is 35 ug/m3

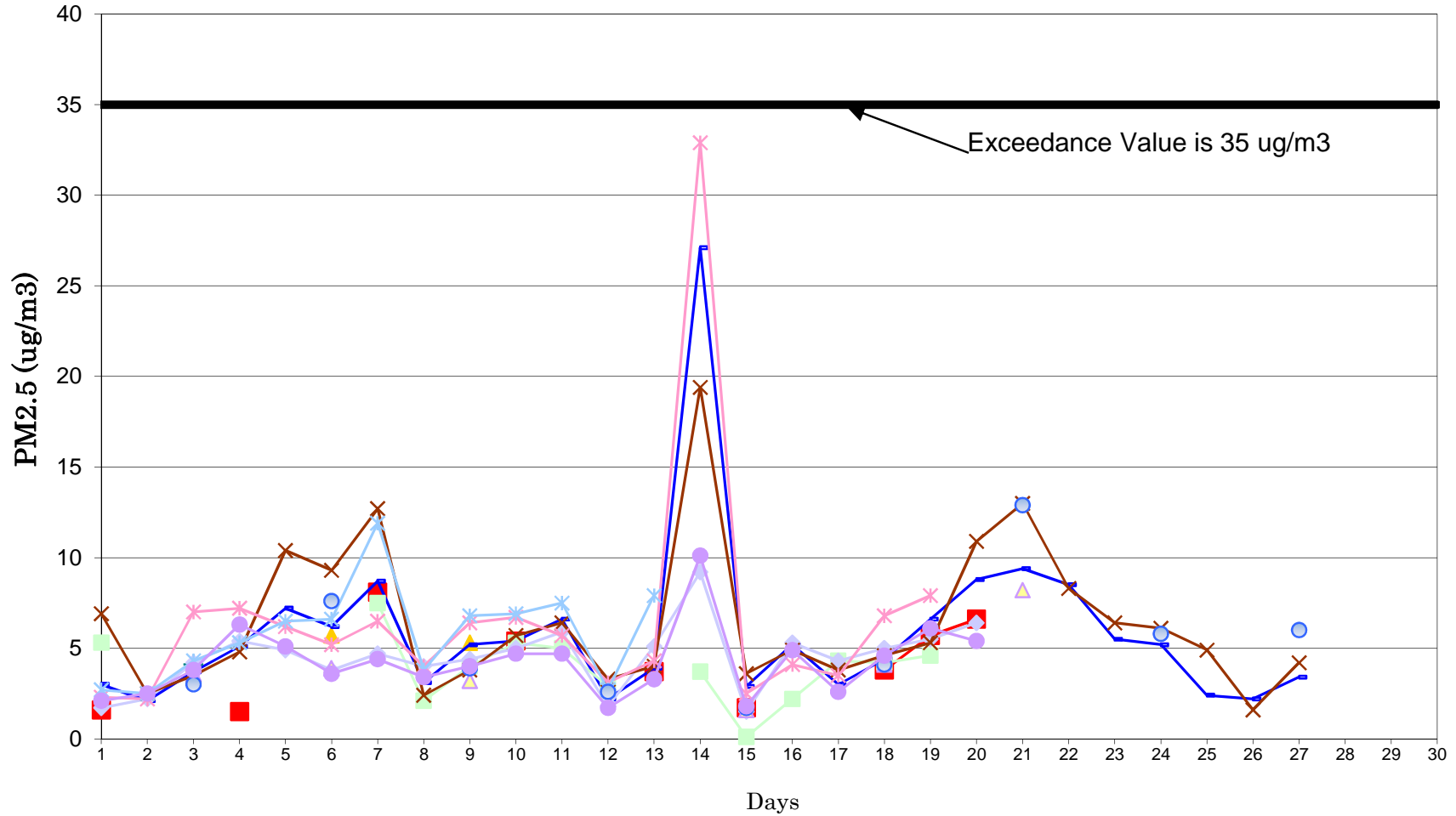


Utah 24-Hr PM2.5 Data March 2015



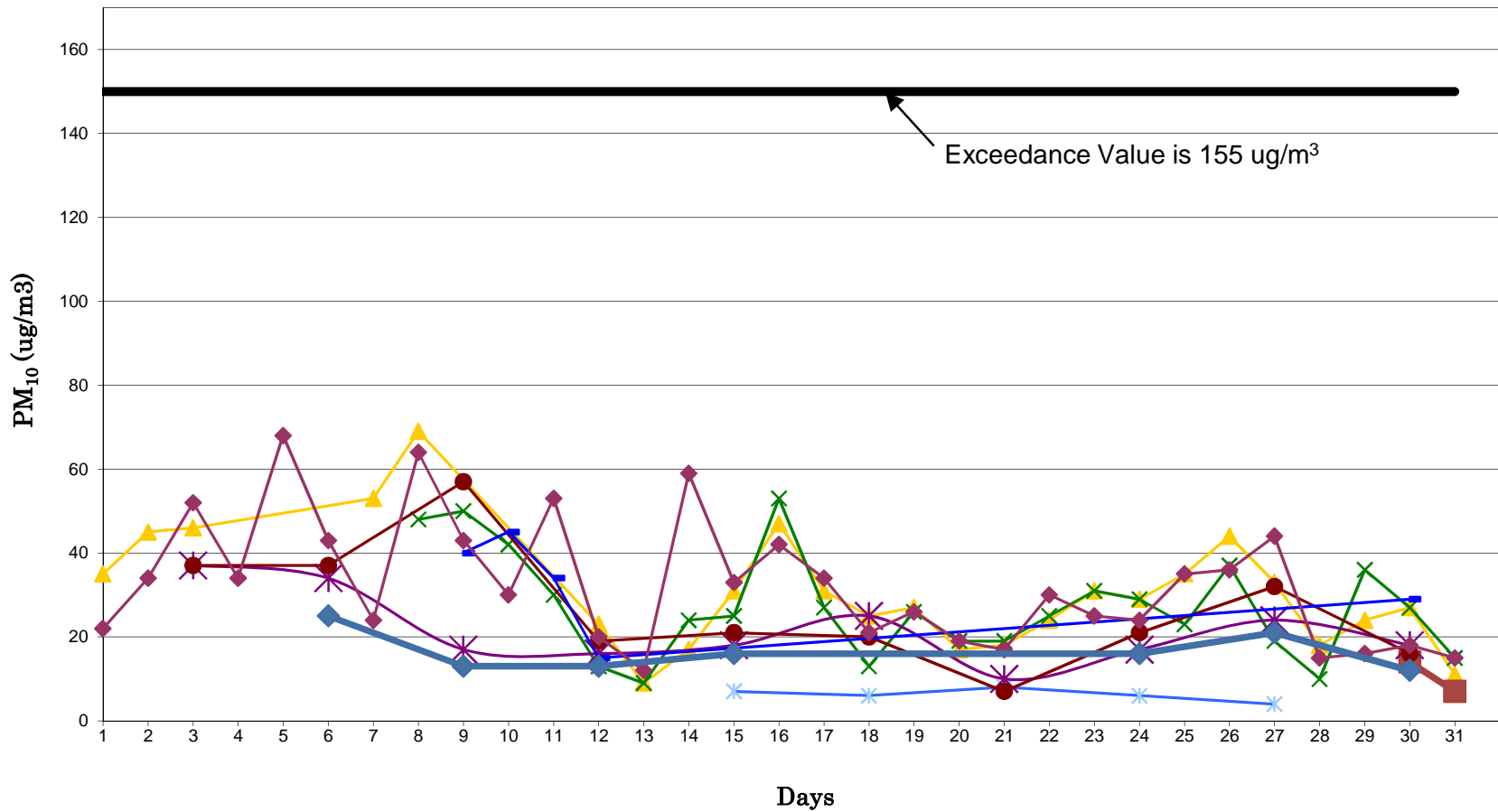
Utah 24-Hr PM2.5 Data April 2015

- ◆ Bountiful
- Lindon
- ▲ Magna
- ✱ Rose Park
- Exceedance Value is 35 ug/m3
- Brigham City
- + Hurricane
- ✕ North Provo
- Smithfield
- Hawthorne
- ◆ Logan
- ✱ Ogden
- Spanish Fork



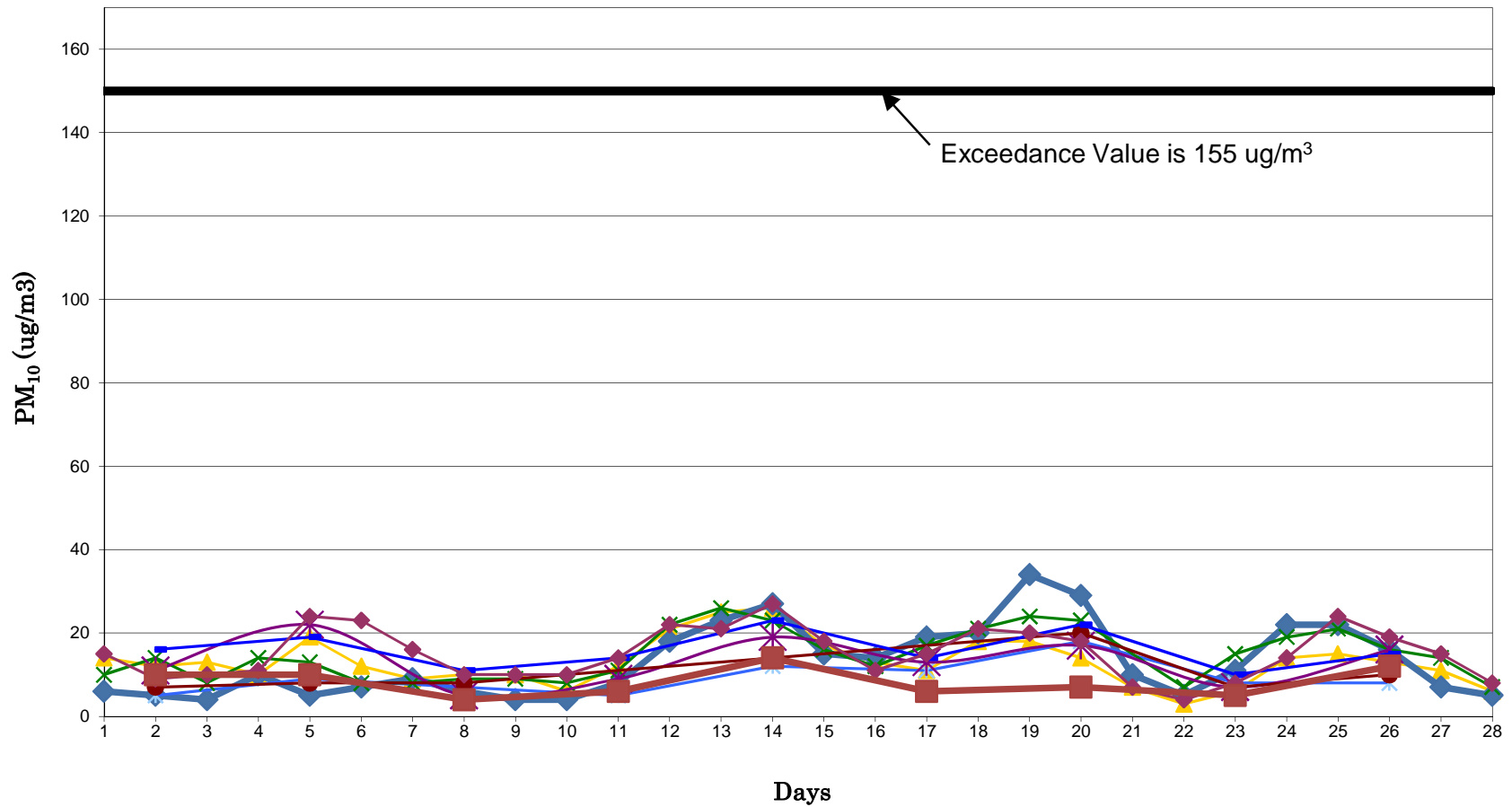
Utah 24-hr PM₁₀ Data January 2015

- Hawthorne
- Hurricane
- Logan
- North Provo
- Smithfield
- Herriman
- Lindon
- Magna
- Ogden
- 24-hr Exceedance Value is 150 ug/m³

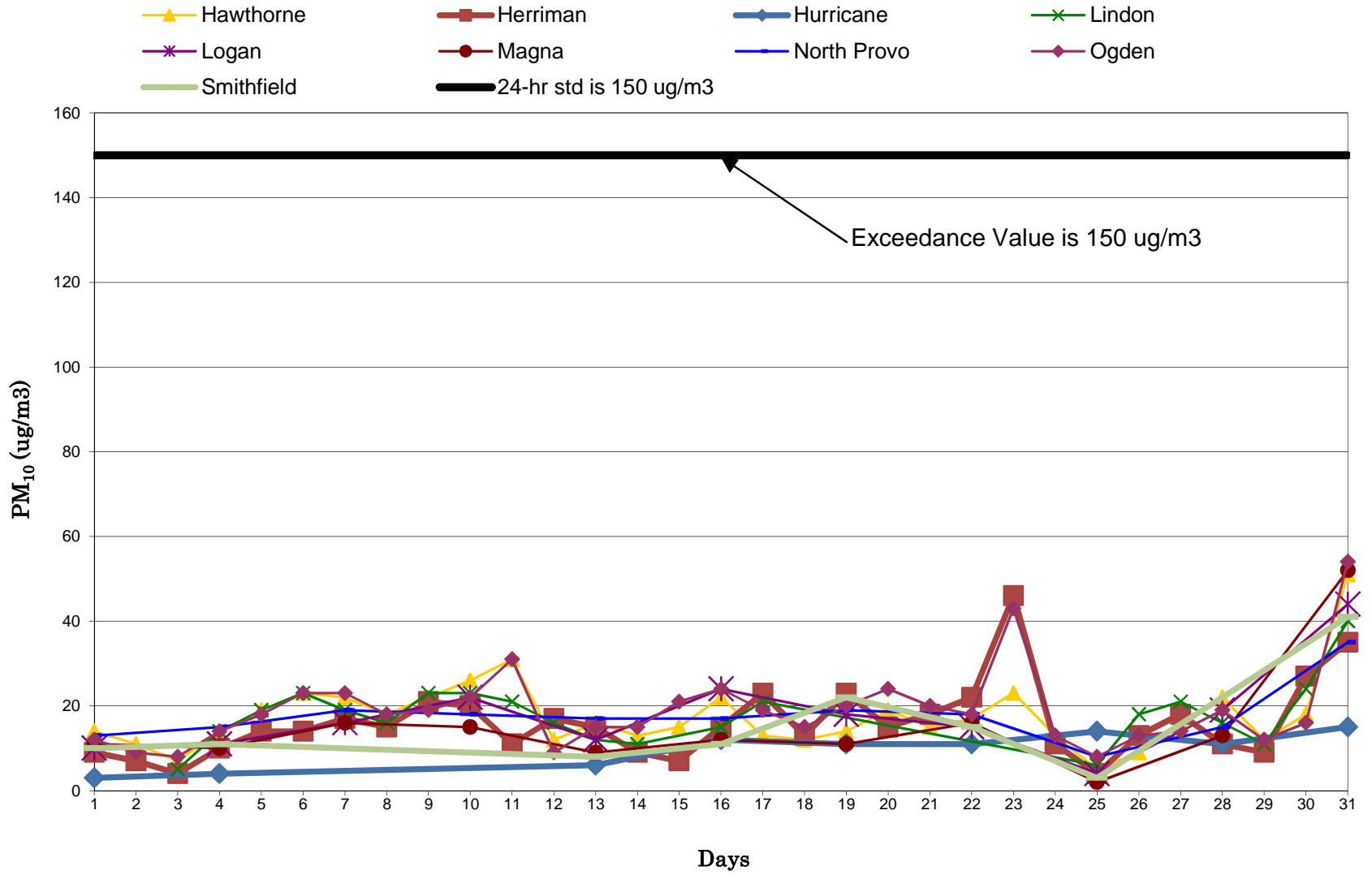


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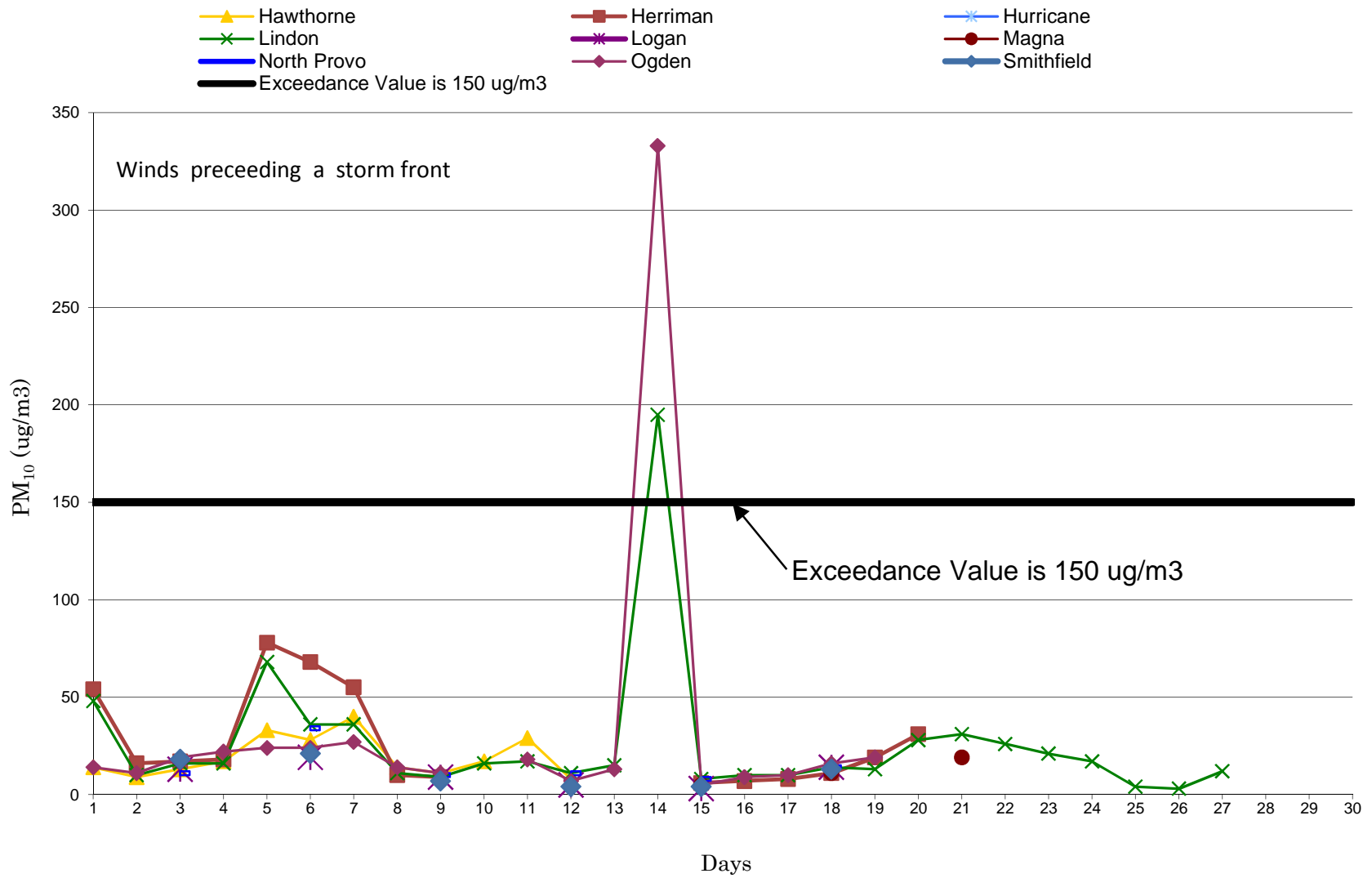
- Hawthorne
- Hurricane
- Logan
- North Provo
- Smithfield
- Herriman
- Lindon
- Magna
- Ogden
- 24-hr Exceedance Value is 150 ug/m³



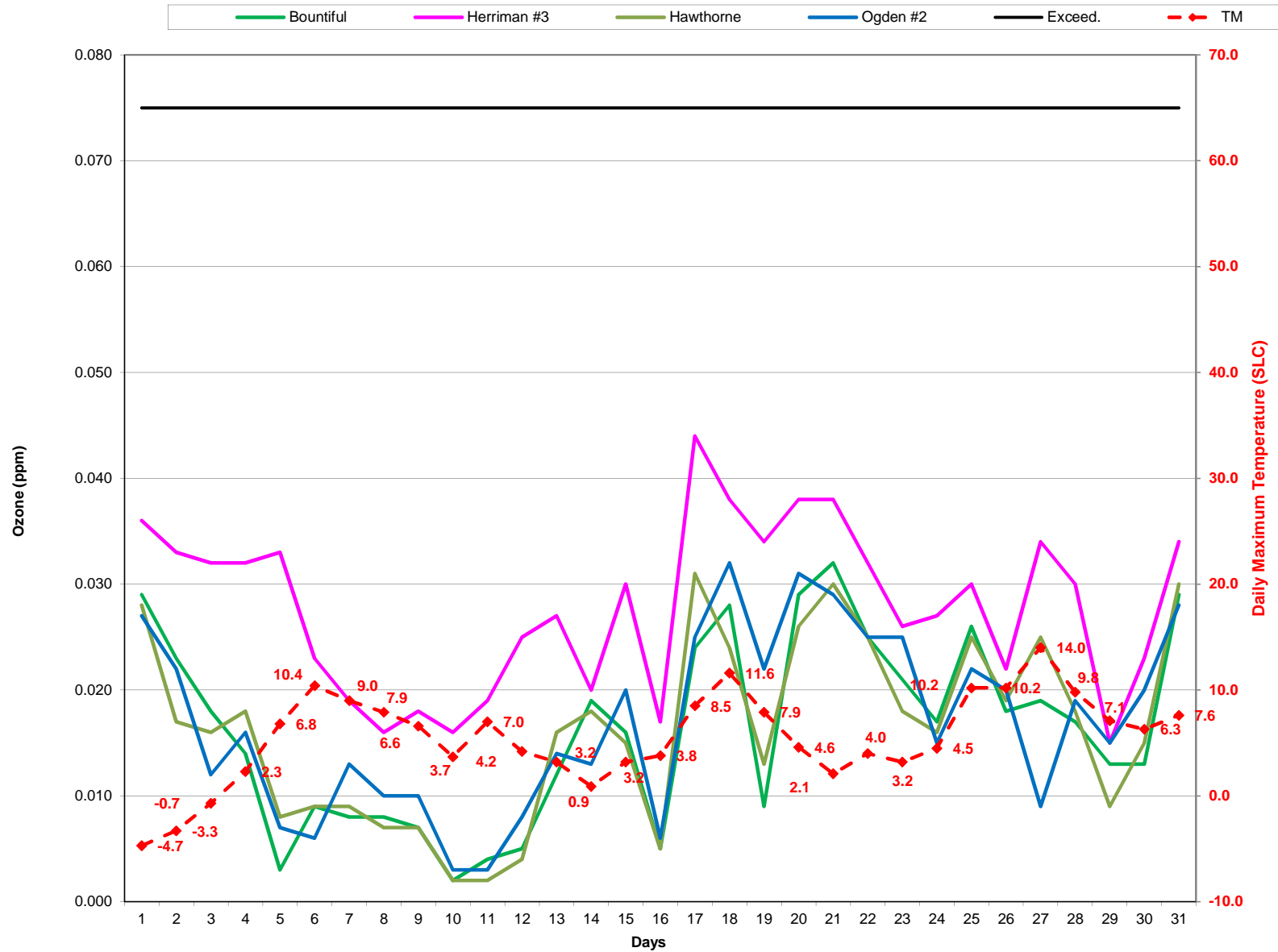
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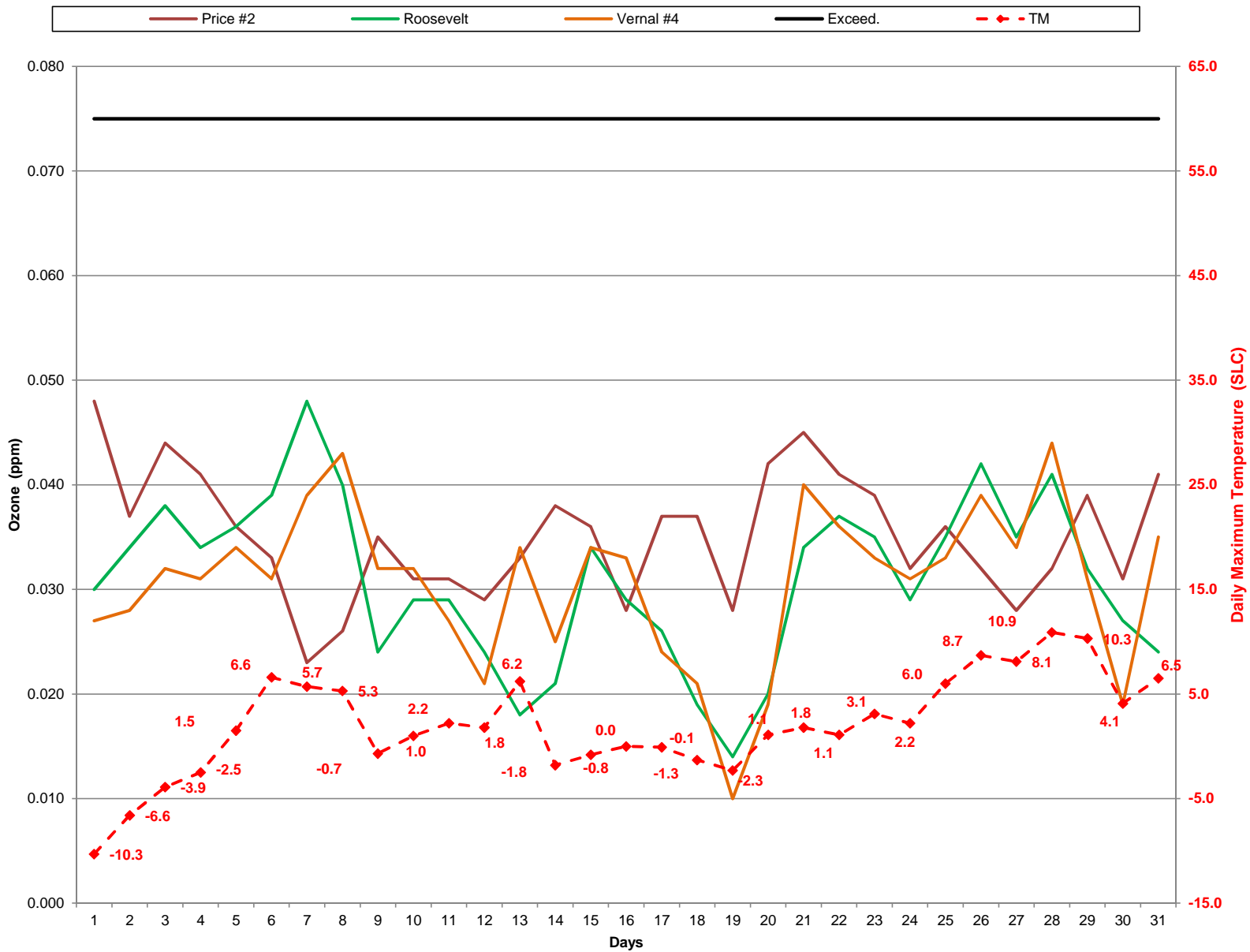
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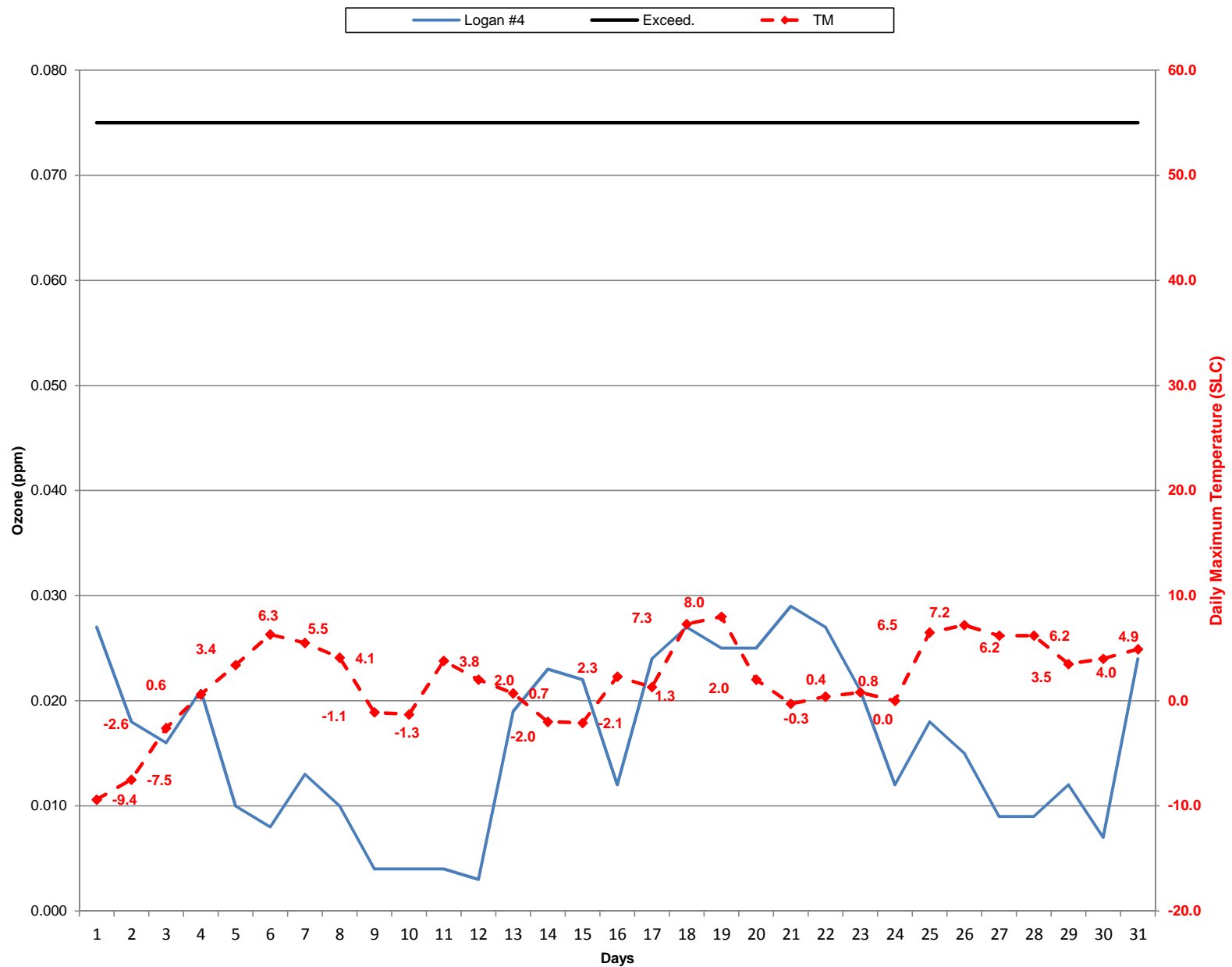
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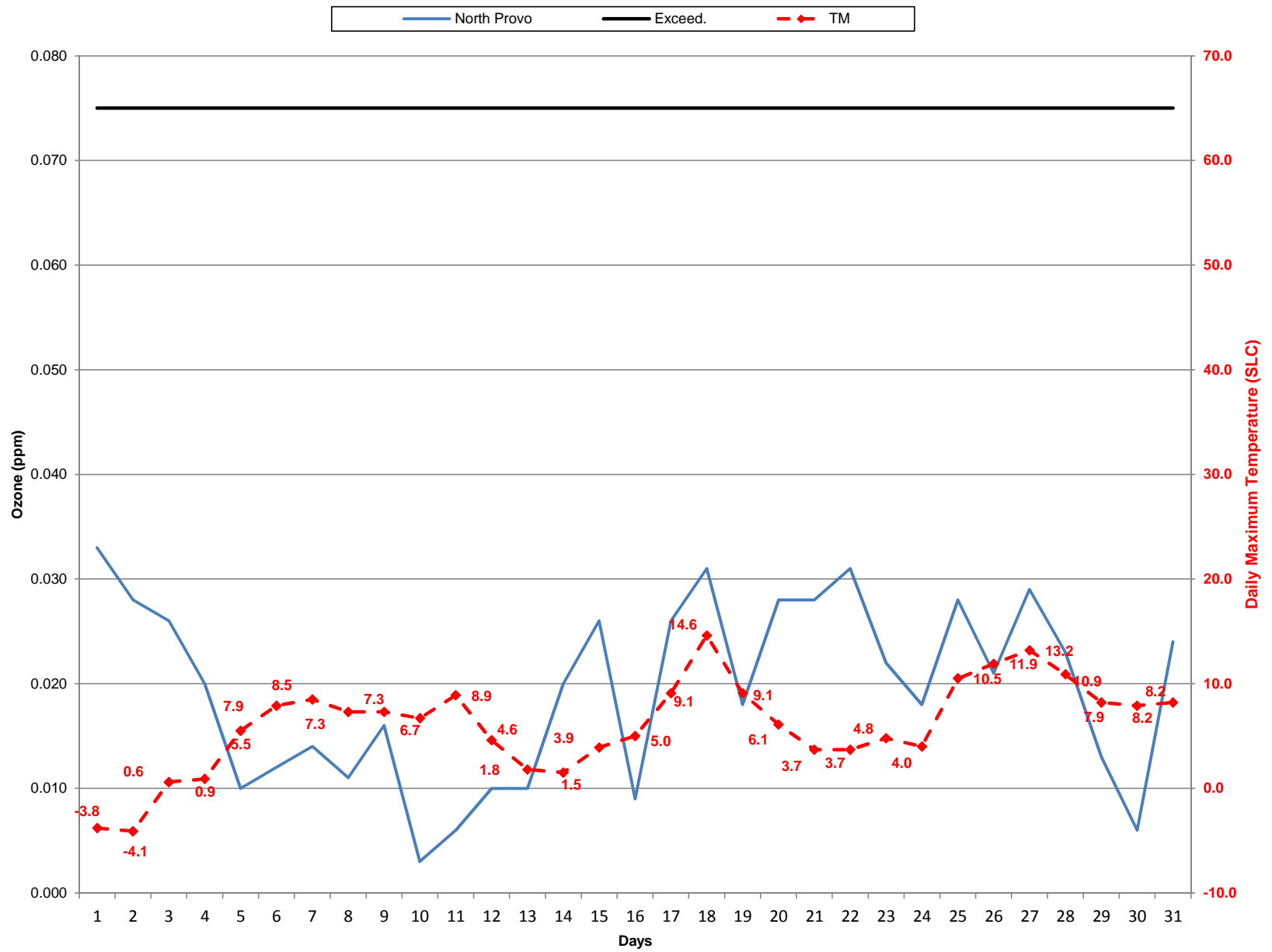
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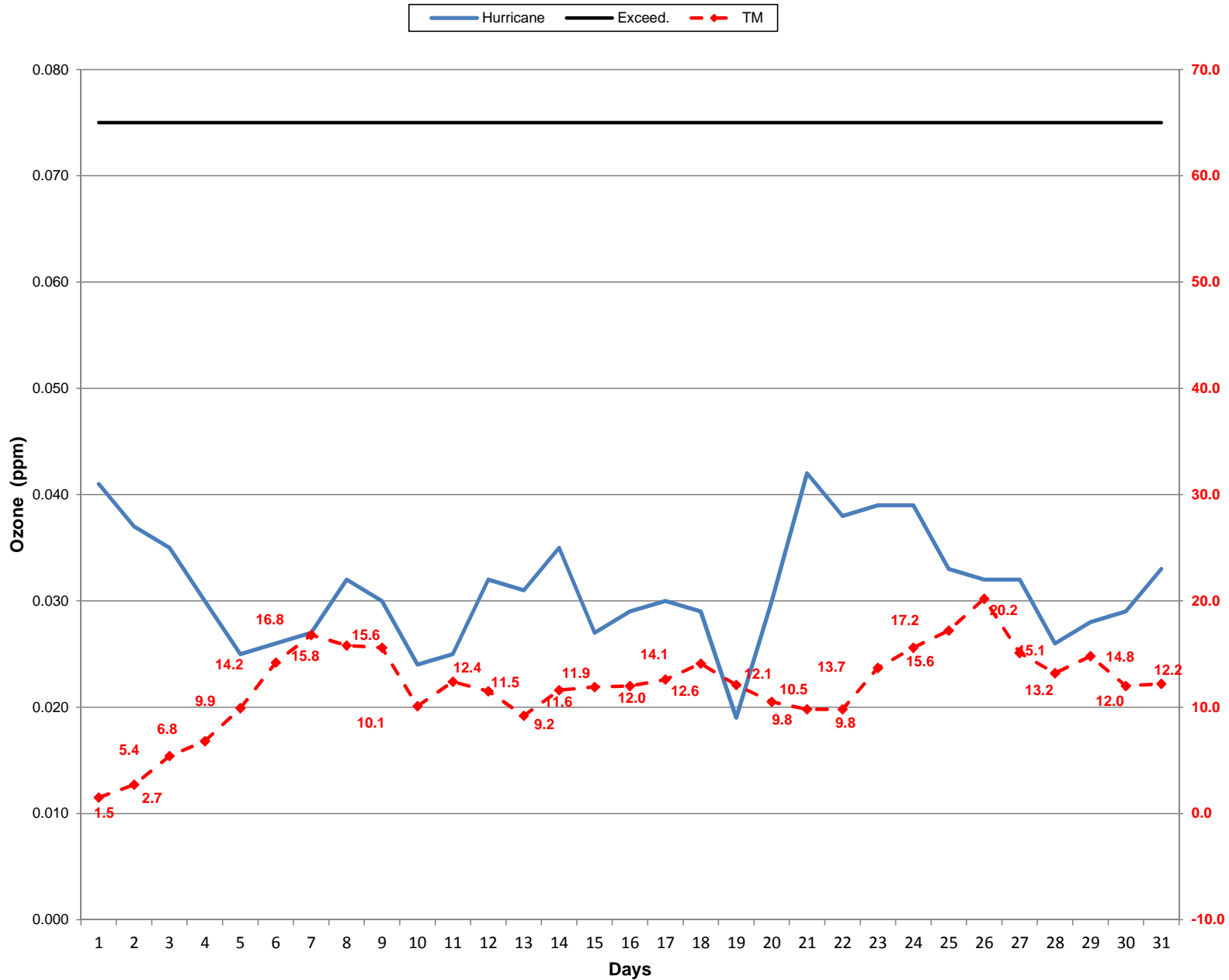
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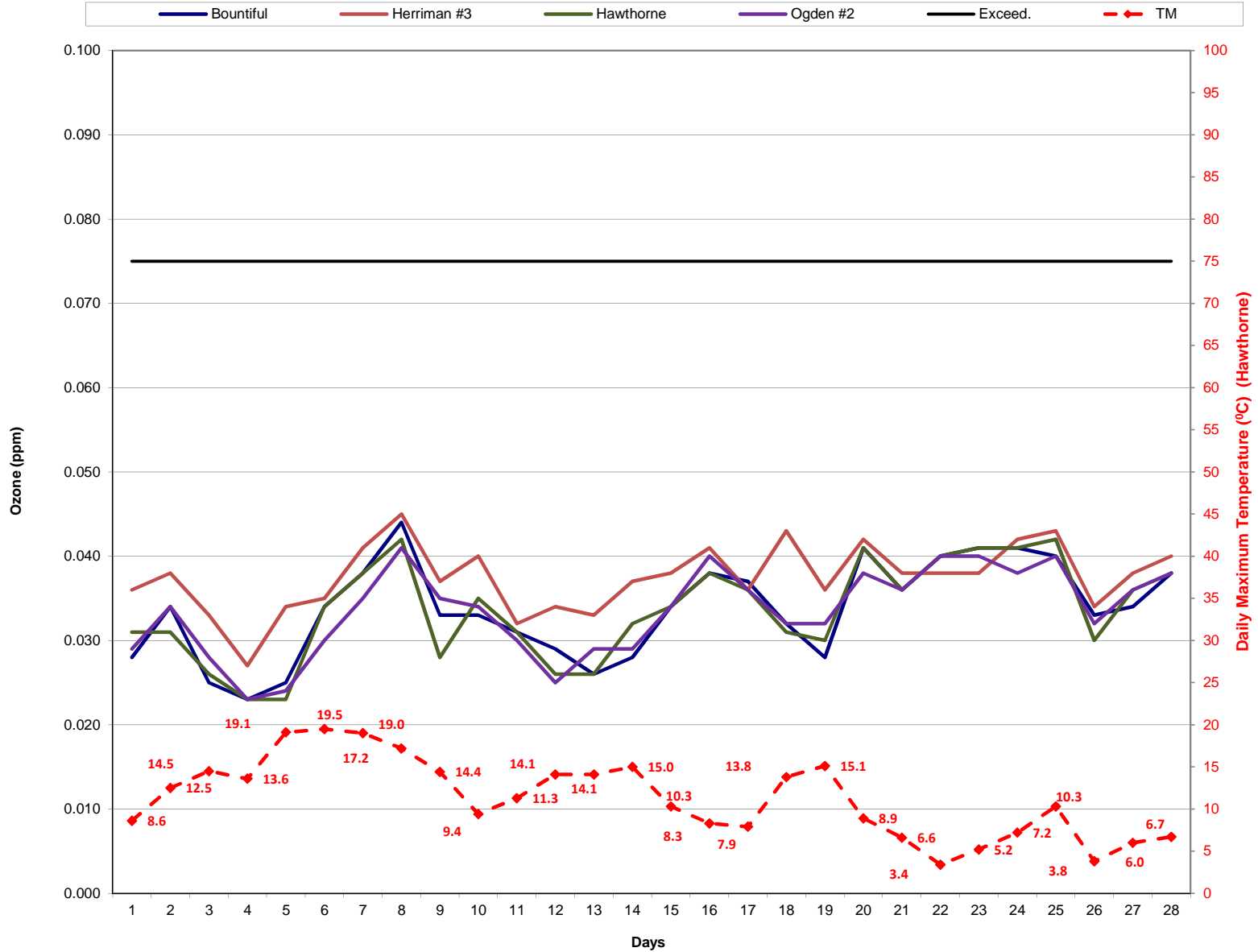
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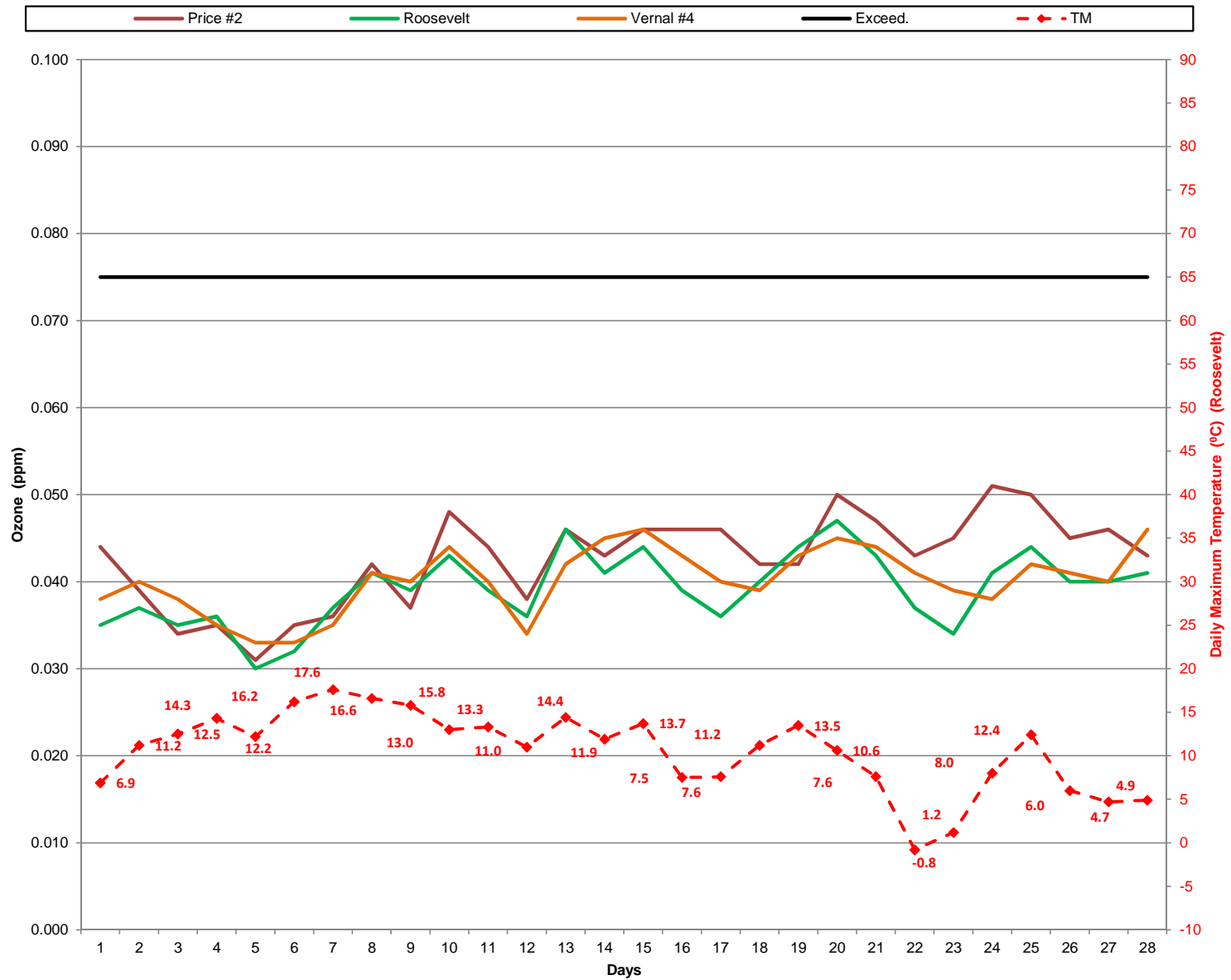
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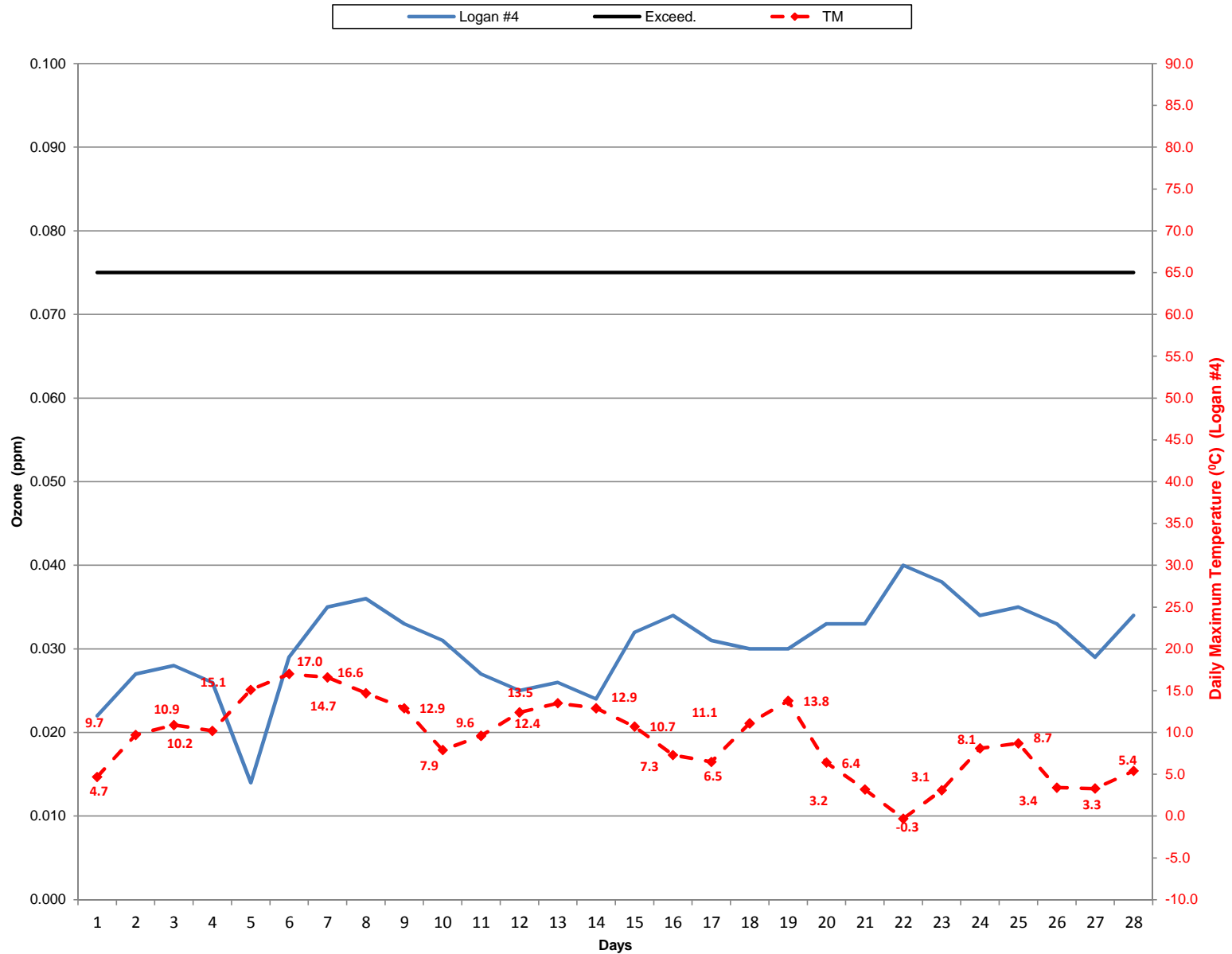
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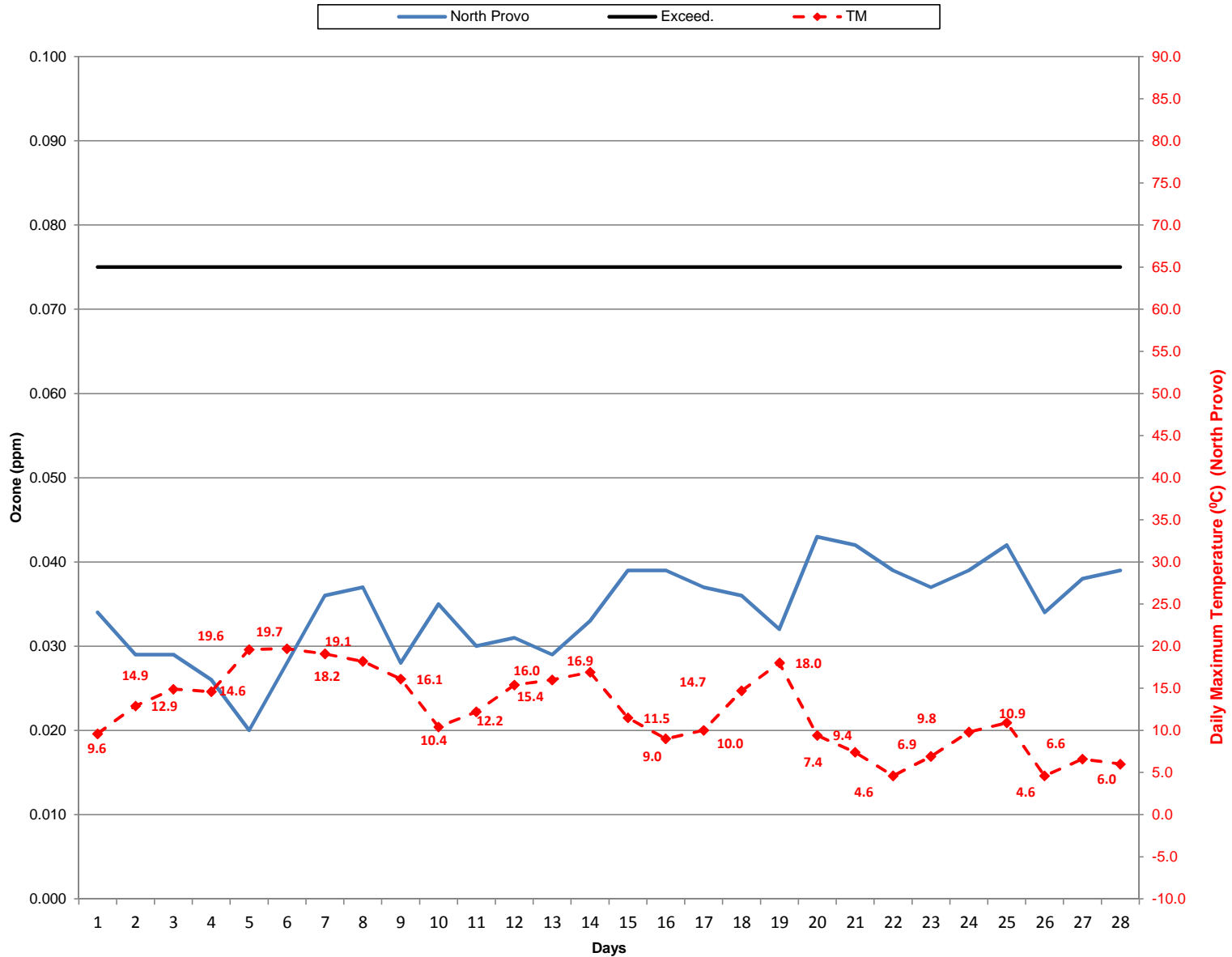
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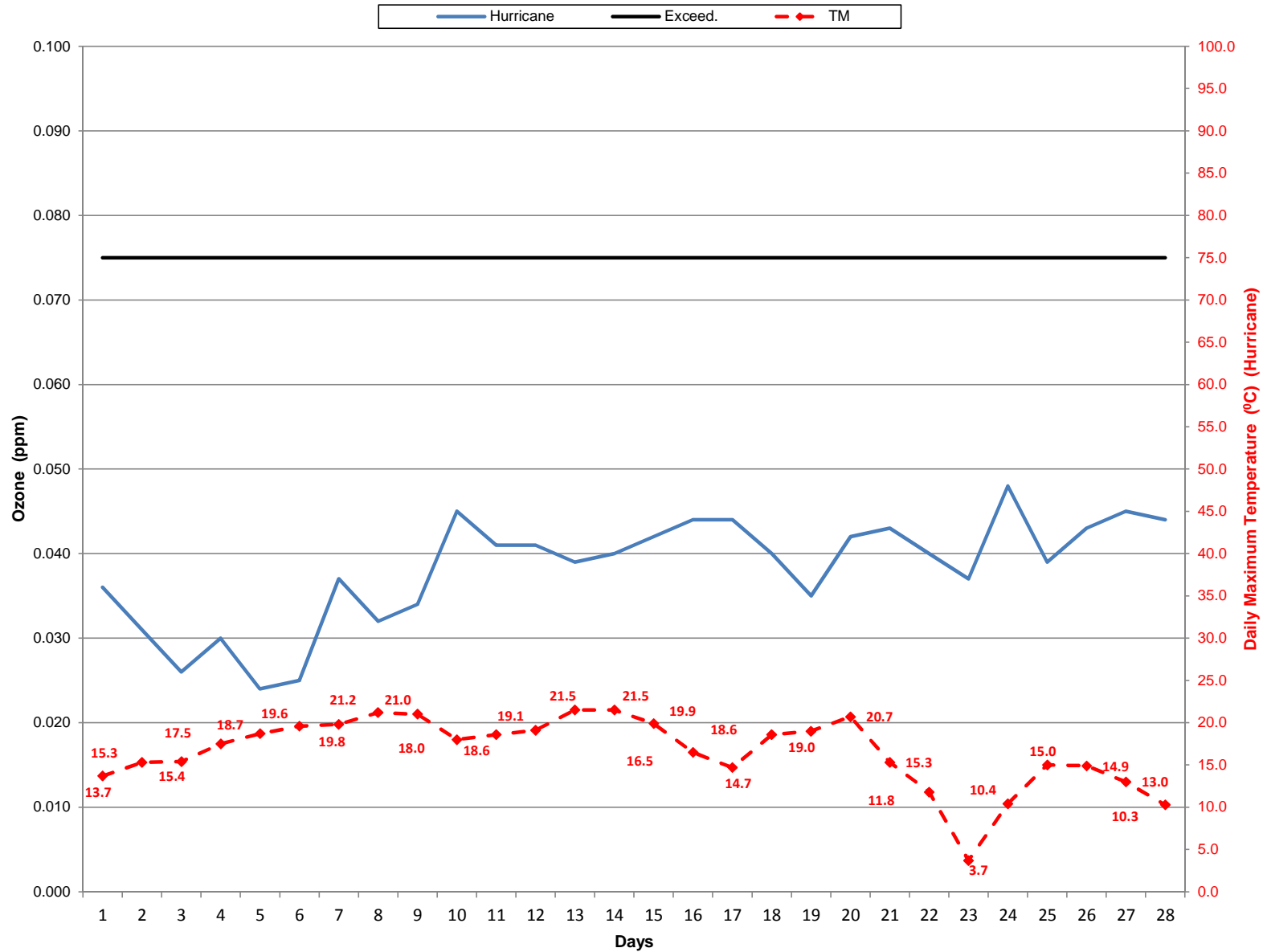
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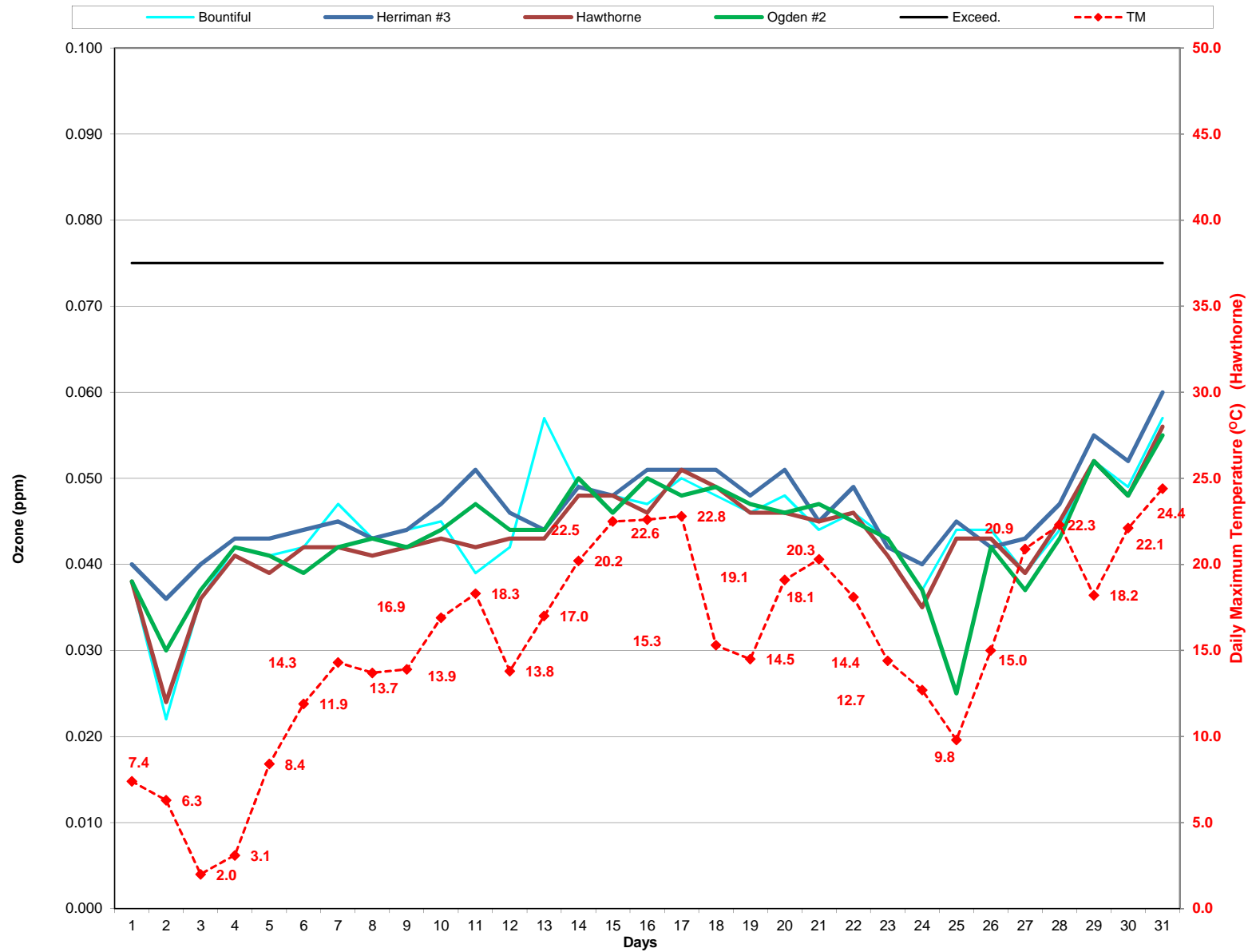
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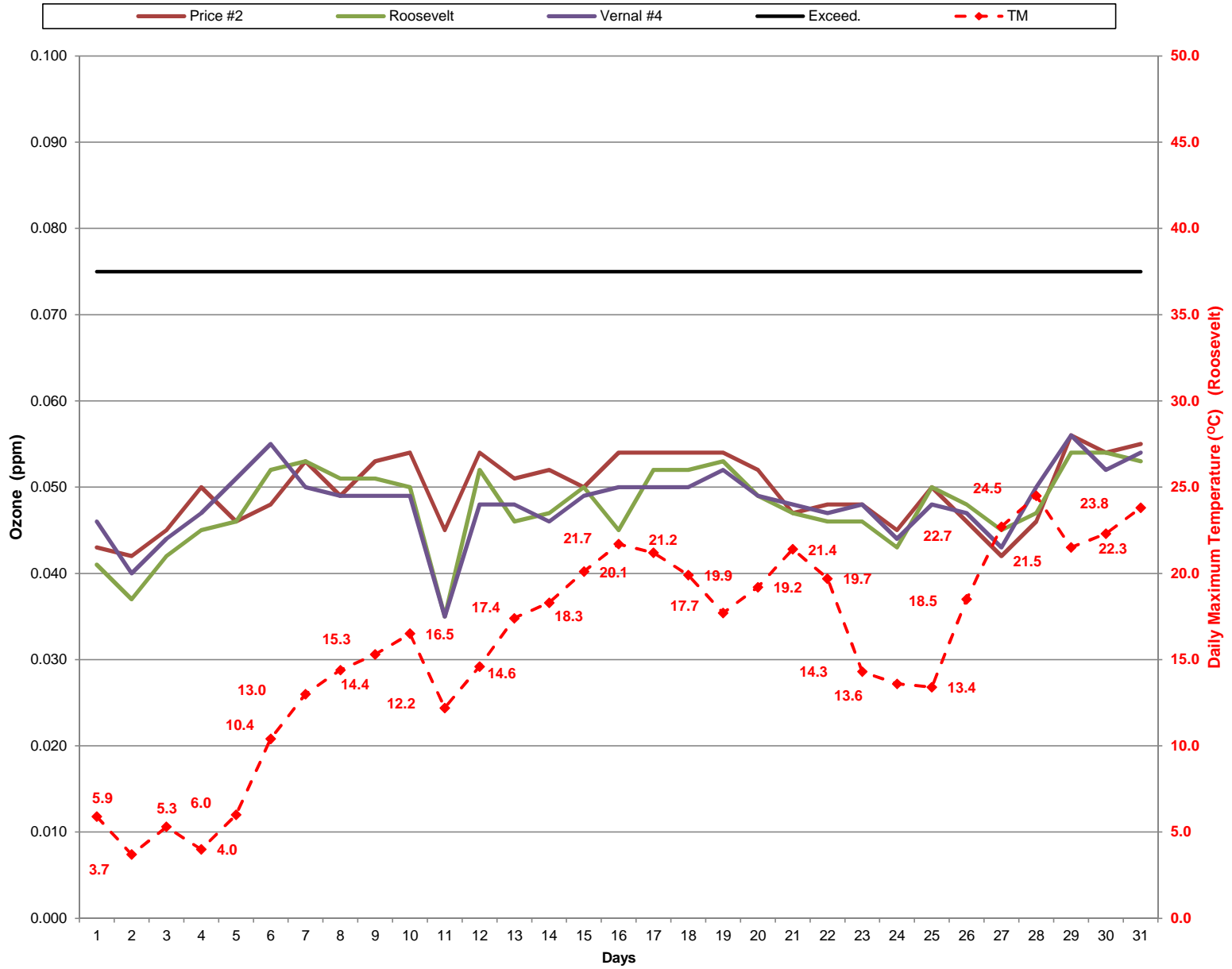
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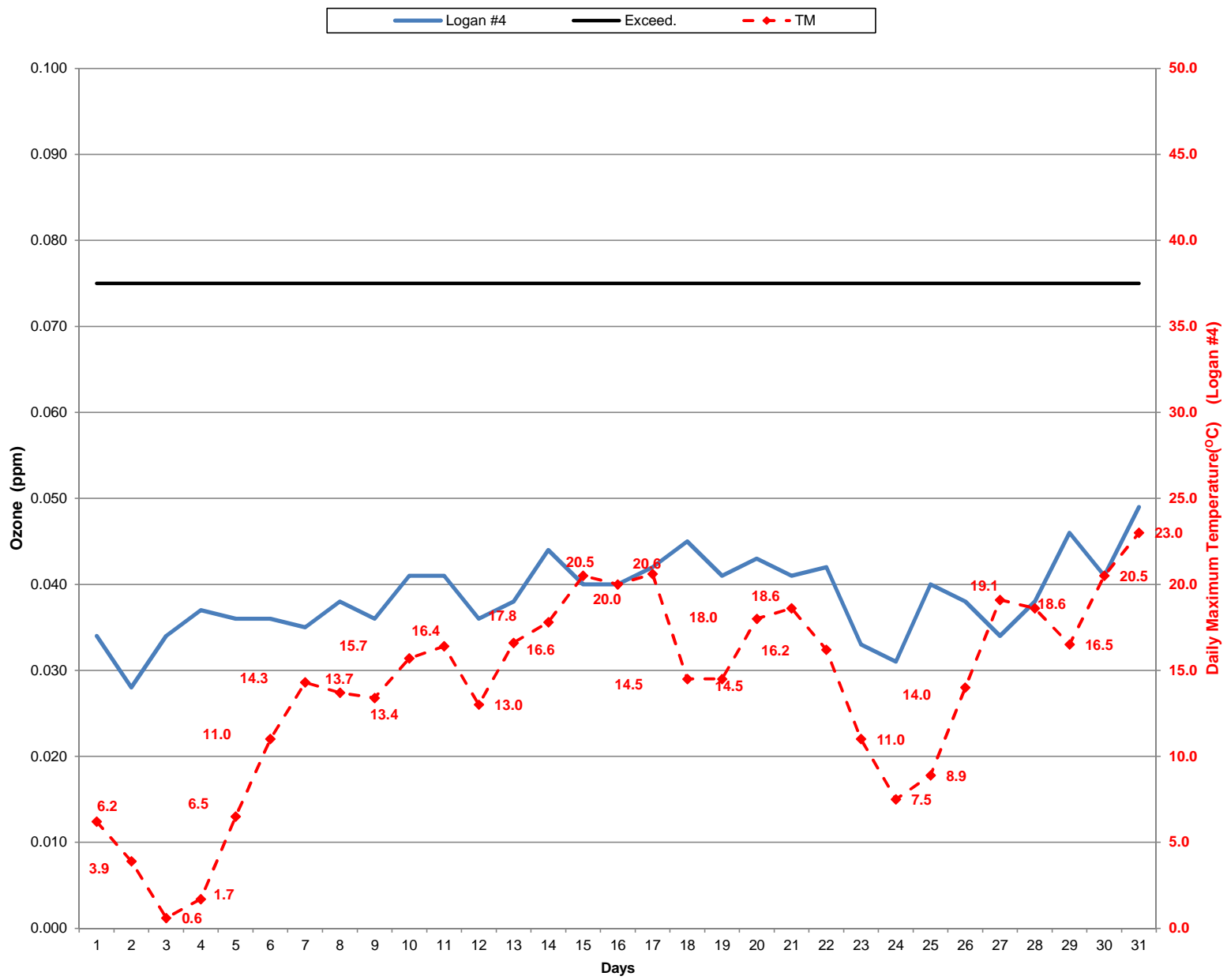
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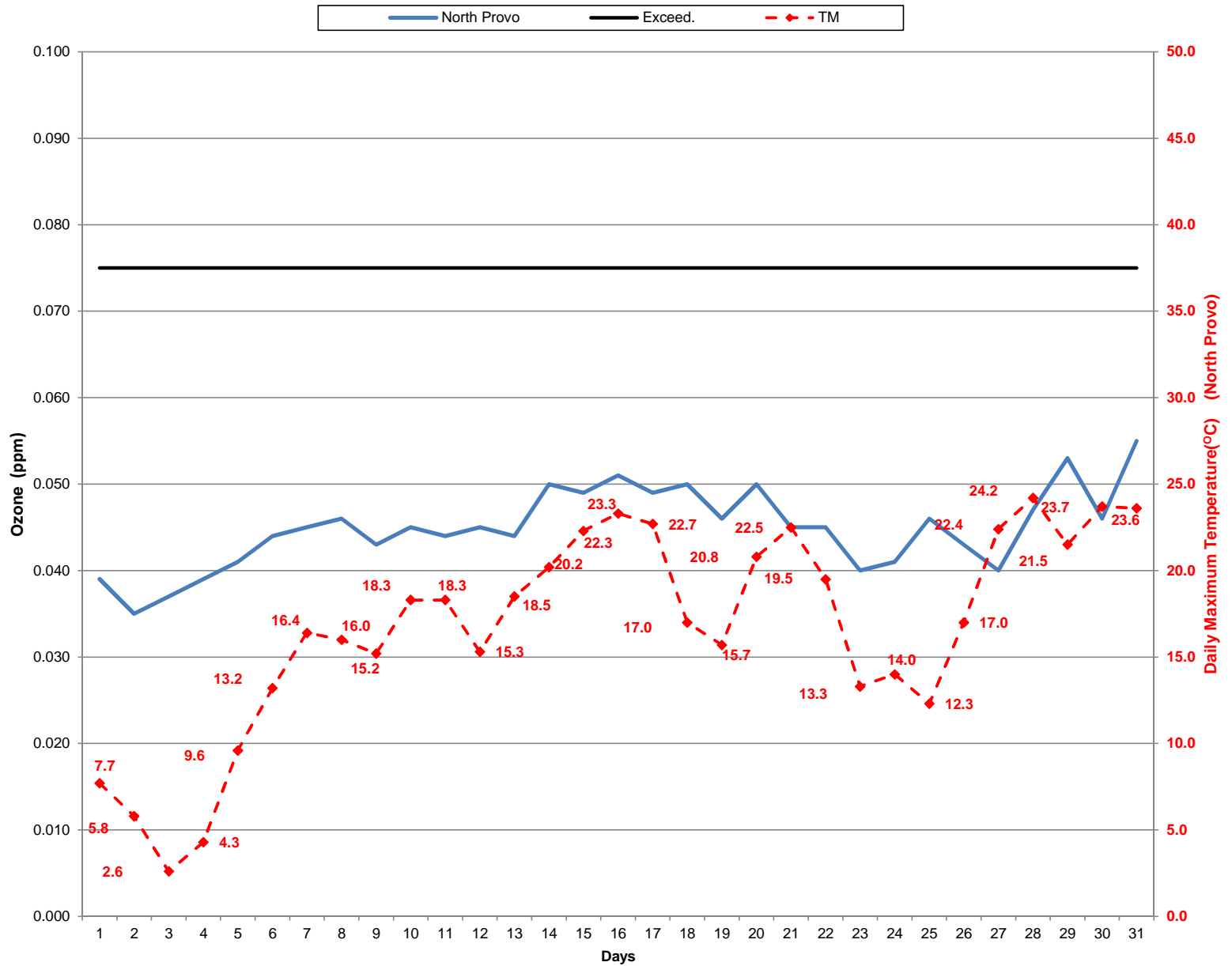
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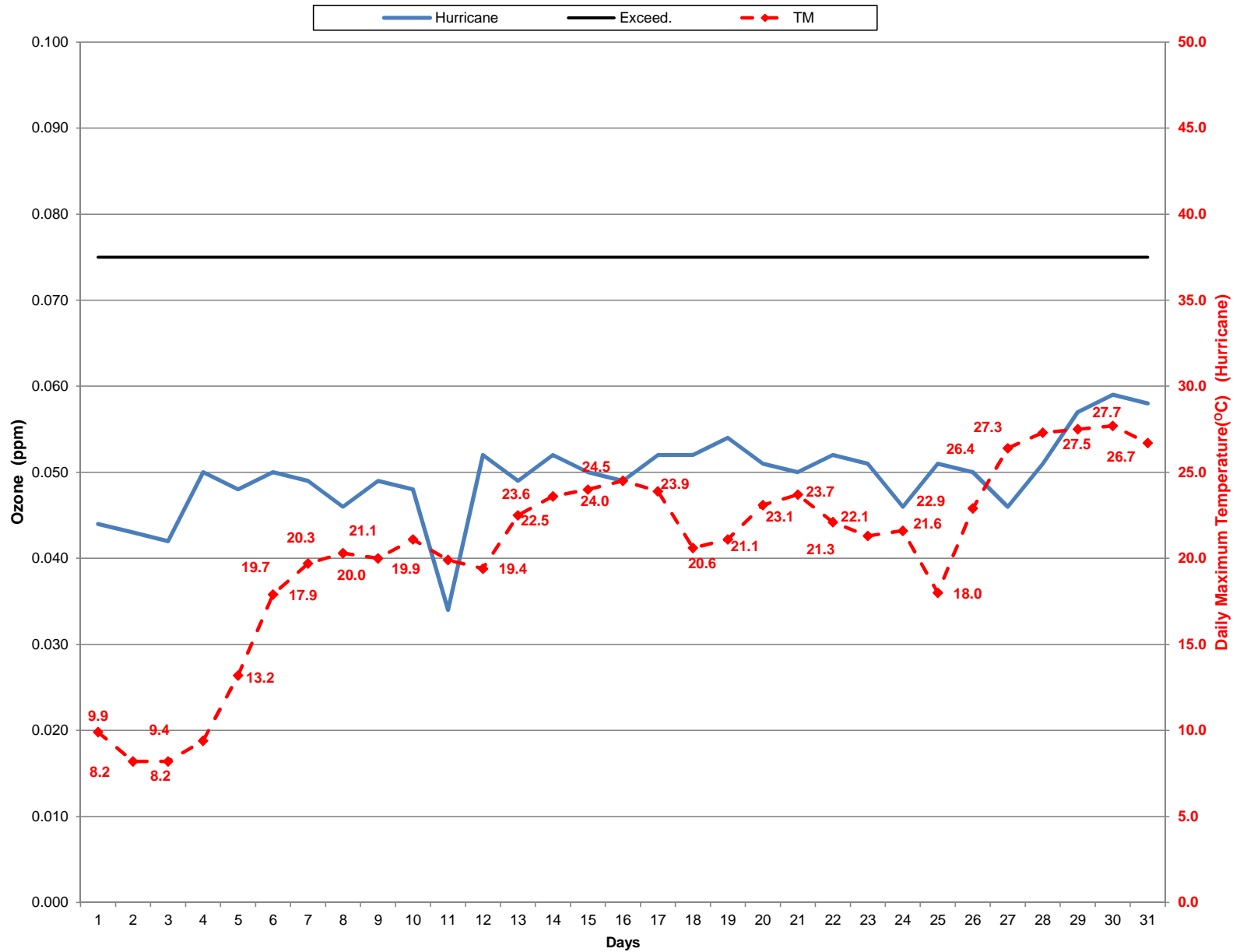
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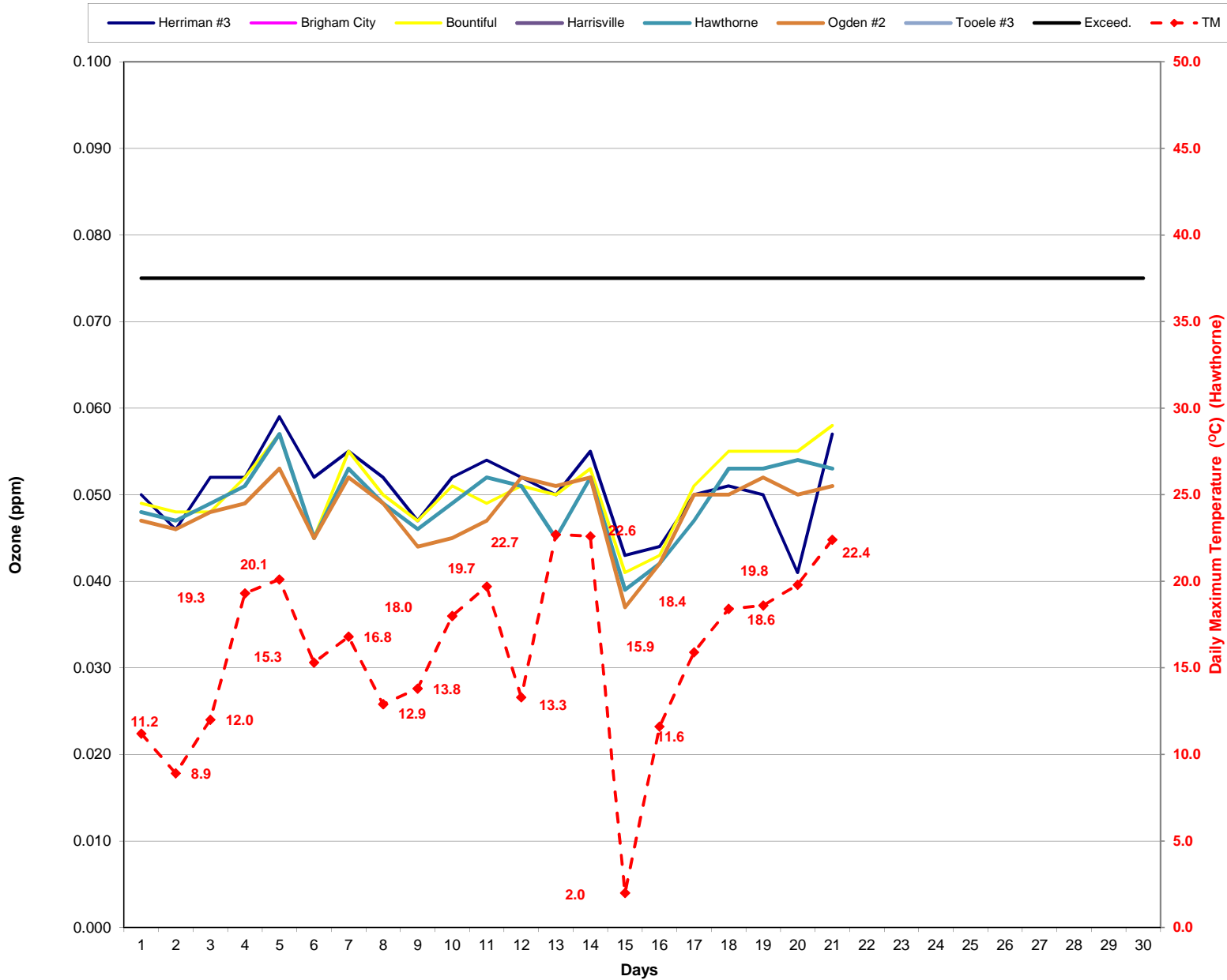
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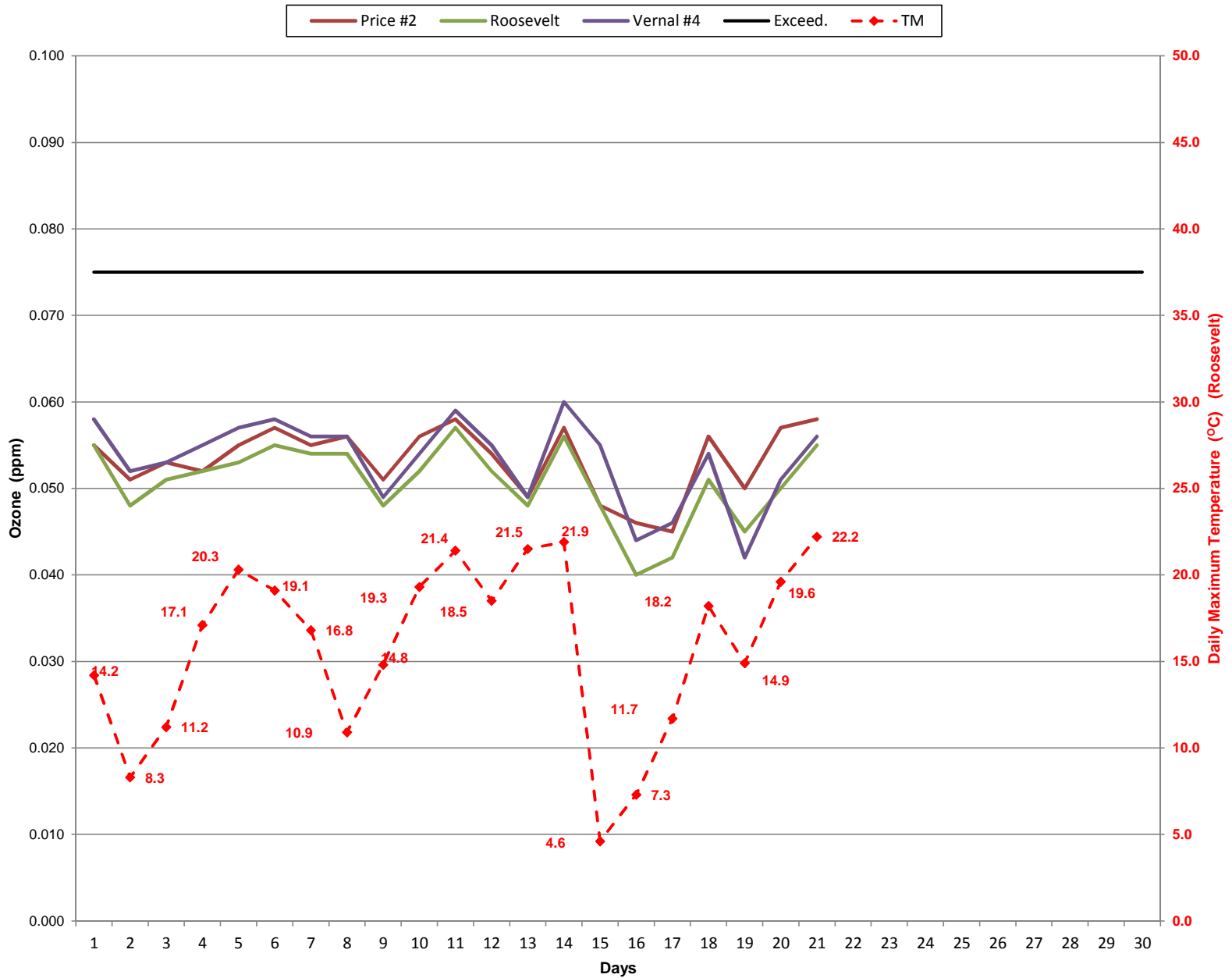
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Highest 8-hr Ozone Concentration & Daily Maximum Temperature April 2015

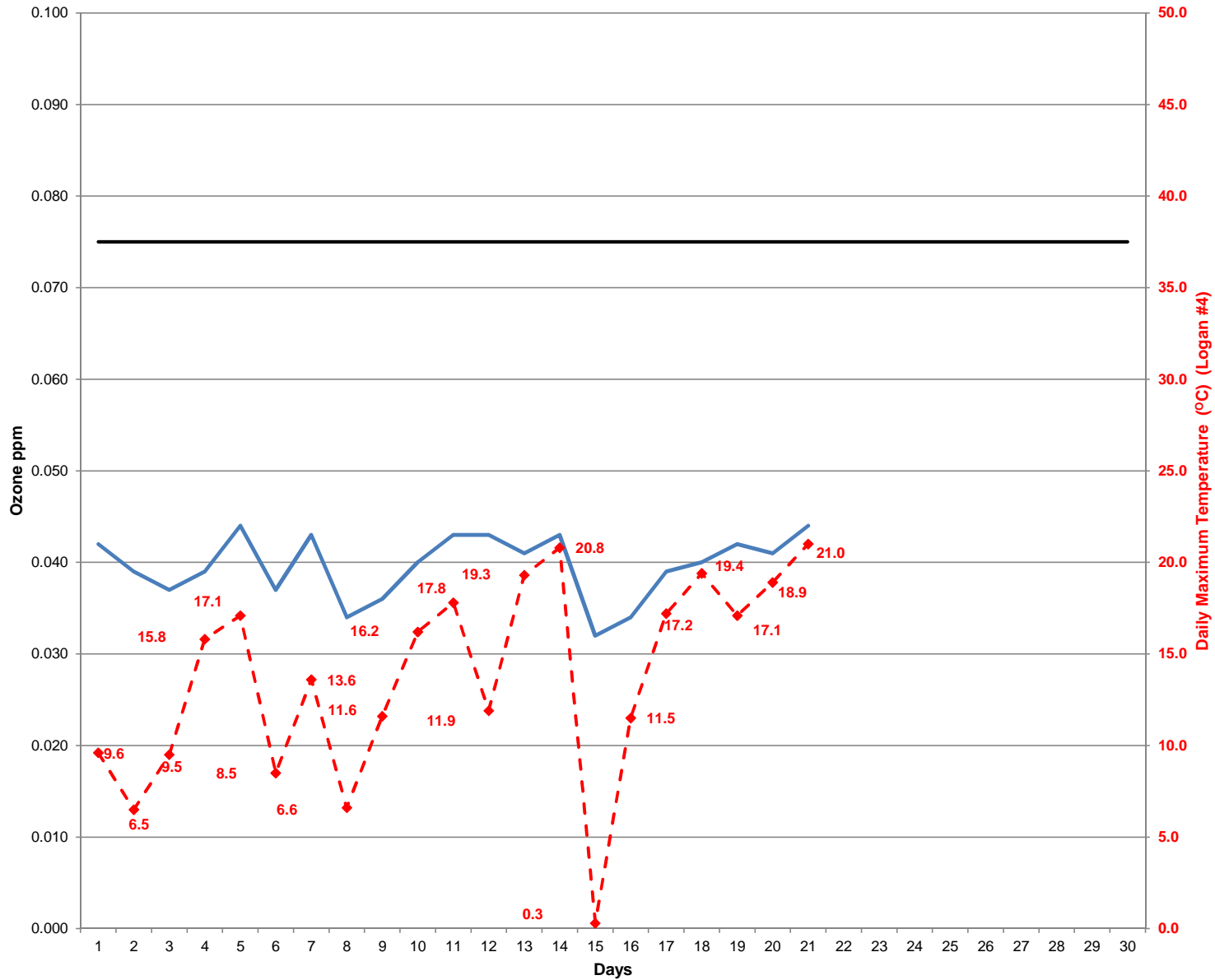


Highest 8-hr Ozone Concentration & Daily Maximum Temperature April 2015

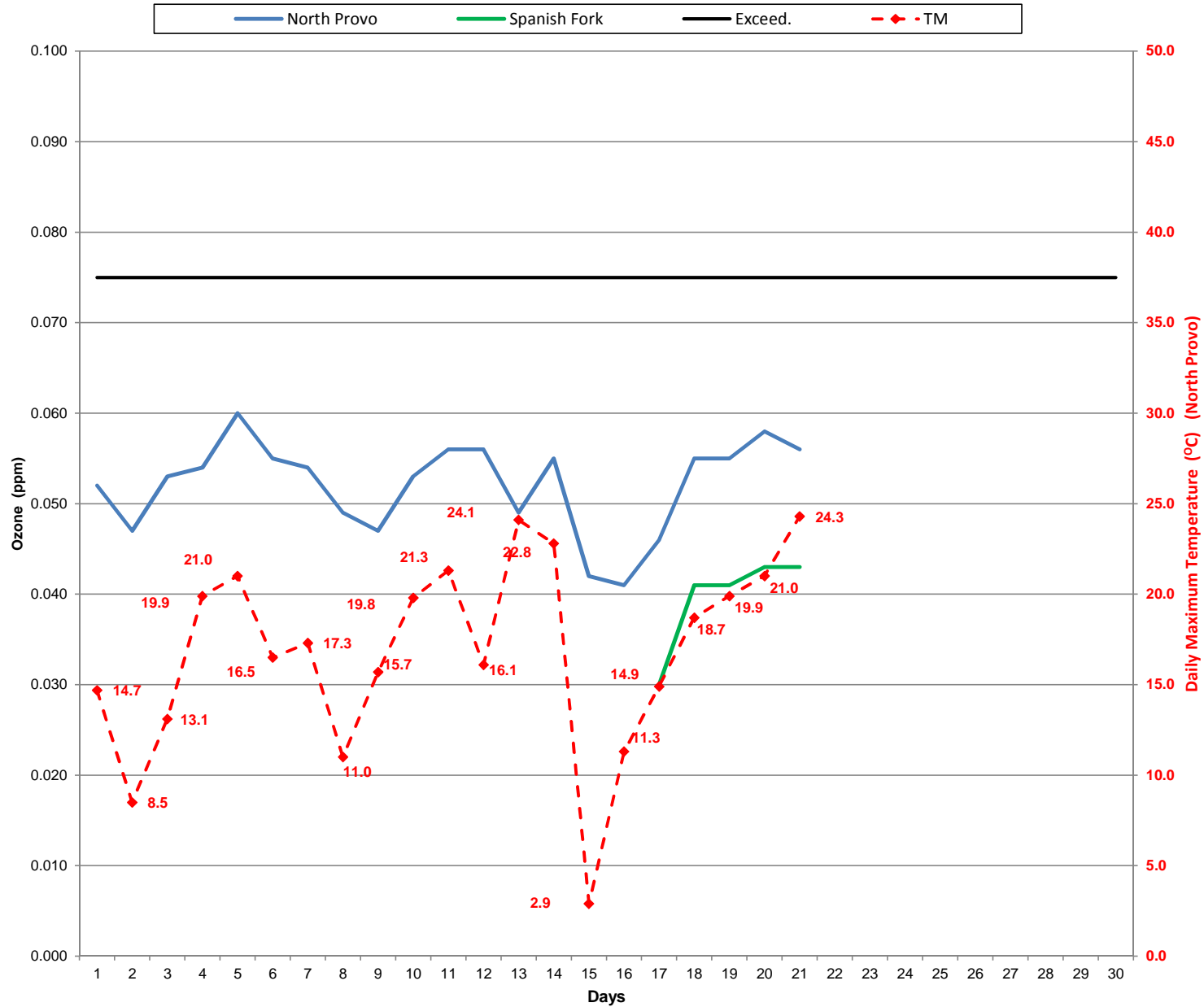


Highest 8-hr Ozone Concentration & Daily Maximum Temperature April 2015

Logan #4 Exceed. TM



Highest 8-hr Ozone Concentration & Daily Maximum Temperature April 2015



Highest 8-hr Ozone Concentration & Daily Maximum Temperature April 2015

— Hurricane — Exceed. -♦- TM

