State of Utah
SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQ-008-22

UTAH AIR QUALITY BOARD MEETING
TENTATIVE AGENDA

Wednesday, February 2, 2022 - 1:30 p.m.
195 North 1950 West, Room 1015
Salt Lake City, Utah 84116

Board members may be participating electronically. Interested persons can participate telephonically by dialing 1 732-739-7440 using access code: 607 131 266#, or via the Internet at meeting link: https: meet.google.com/aqv-qosk-vwv

I. Call-to-Order

II. Date of the Next Air Quality Board Meeting: March 2, 2022

III. Approval of the Minutes for the December 1, 2021, Board Meeting.

IV. Propose for Final Adoption: Repeal of R307-301. Utah and Weber Counties: Oxygenated Gasoline Program as a Contingency Measure. Presented by Bo Wood.

V. Informational Items.
   A. Linkages between Air Quality and the Shrinking Great Salt Lake. Presented by Dr. Kevin Perry, University of Utah.
   B. University of Utah Energy Assessments. Presented by Dr. Kerry Kelly, University of Utah.
   C. Air Toxics. Presented by Leonard Wright.
   D. Compliance. Presented by Harold Burge and Rik Ombach.
   E. Monitoring. Presented by Bo Call.
   F. Other Items to be Brought Before the Board.
   G. Board Meeting Follow-up Items.

In compliance with the Americans with Disabilities Act, individuals with special needs (including auxiliary communicative aids and services) should contact Larene Wyss, Office of Human Resources at (801) 536-4281, TDD (801) 536-4284 or by email at lwyss@utah.gov.

ITEM 3

State of Utah
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UTAH AIR QUALITY BOARD MEETING
December 1, 2021 – 1:30 p.m.
195 North 1950 West, Room 1015
Salt Lake City, Utah 84116

DRAFT MINUTES

I. Call-to-Order

Bryce Bird, Executive Secretary, called the meeting to order at 1:36 p.m.

Board members present: Michelle Bujdoso, Kevin Cromar, John Rasband, Arnold Reitze, Kimberly Shelley

Excused: Randal Martin, Cassady Kristensen, Erin Mendenhall

Executive Secretary: Bryce Bird

Due to both the Board Chair and the Vice-Chair excused absence, Mr. Bird accepted nomination for a Board member to serve as Chair pro tempore for the duration of the meeting.

- Kevin Cromar nominated Michelle Bujdoso to serve as Chair pro tempore. John Rasband seconded. The Board approved unanimously.

II. Date of the Next Air Quality Board Meeting: February 2, 2022

III. Approval of the Minutes for the November 3, 2021, Board Meeting.

Mr. Reitze made the following corrections on page 3, replace “off of” with “on” on line 27; on line 32 change the language to, “5,000 per ton control cost threshold, thus selective catalytic reduction…”; and change “have” to “send” on line 37.

- Kevin Cromar motion to approve the minutes as corrected. John Rasband seconded. The Board approved unanimously.

IV. Propose for Final Adoption: Repeal R307-121. General Requirements: Clean Air and Efficient Vehicle Tax Credit. Presented by Bo Wood.

Bo Wood, Rules Coordinator at DAQ, stated that this rule is one that the Utah Legislature had repealed the law that this rule was based on. This rule has gone out for public comment and no public hearing was requested and no comments were received. Staff recommends that the Board approve the repeal of R307-121.

- John Rasband motioned that the Board accept the proposal for final adoption to repeal R307-121. General Requirements: Clean Air and Efficient Vehicle Tax Credit. Arnold Reitze seconded. The Board approved unanimously.

V. Propose for Final Adoption: Amend R307-401-7. Public Notice; R307-401-19. General Approval Order; and R307-415-7i. Public Participation. Presented by Bo Wood.

Bo Wood, Rules Coordinator at DAQ, stated that these rules relate to changing the pubic notice requirements for notices to be published in newspapers to allow notices to be published online electronically. These rules went out for public comment from October 1 to November 1, 2021, and no public hearing was requested and no comments were received. Staff recommends that the Board adopt R307-401-7, R307-401-17, and R307-415-7i as proposed for final adoption.

- John Rasband motioned that the Board accept amended R307-401-7. Public Notice; R307-401-19. General Approval Order; and R307-415-7i. Public Participation. Arnold Reitze seconded. The Board approved unanimously.

VI. Propose for Public Comment: Repeal R307-301. Utah and Weber Counties: Oxygenated Gasoline Program as a Contingency Measure. Presented by Bo Wood.

Bo Wood, Rules Coordinator at DAQ, stated that R307-301 has to do with the requirement that if the contingency measure were triggered, that fuels would be oxygenated to a level 2.7%. However, according to the U.S. Department of Energy, more than 98% of gasoline sold in the U.S. today is already oxygenated at 10% ethanol. So, the rule is essentially ineffective. Staff recommends that the Board approve the proposal to repeal R307-301 for public comment.

Ms. Bujdoso asked if this proposal to repeal the rule is approved, will there be any conflict with the state implementation plan (SIP)? Becky Close, Air Quality Policy Section Manager at DAQ, responded that this rule is part of the CO maintenance plans. It is not part of the current ozone SIP. DAQ staff have been in discussion with EPA Region 8 and they have indicated that they are fine if DAQ goes ahead and moves to repeal this rule. In addition, EPA did not feel that the DAQ would need to amend its maintenance plan with the repeal of this rule.

In discussion, Mr. Cromar asked that staff specify that the rule will go out for a 30-day public public comment period.

- Arnold Reitze motion the repeal of R307-301, Utah and Weber Counties: Oxygenated Gasoline Program as a Contingency Measure, for a 30-day public comment period as proposed. Kevin Cromar seconded. The Board approved unanimously.

VI. Informational Items.

A. Declining Methane Emissions and Steady, High Leakage Rates Observed Over Multiple Years in a Western U.S. Oil/Gas Production Basin. Presented by Dr. John Lin, University of Utah.

Dr. Lin of the University of Utah gave an overview on an analysis which was recently published in the "S*cientific Report"* November 16, 2021, edition about observations of methane emissions in the Uinta Basin in eastern Utah. He briefly explained the significance of methane and its air quality implication as it is the main component of natural gas.

Dr. Lin briefly described three independent analyses from earlier years which pointed to high methane leak rates in the Uinta Basin. The analyses included NOAA's aircraft mass balance, and two University of Utah led studies including an atmospheric model plus surface observation study, and a study that looked at the buildup of methane during persistent cold air pool conditions.

The three Uinta Basin methane observational sites locations were at Fruitland, Castle Peak, and Horsepool. Dr. Lin then presented slides of observed daily afternoon averaged methane concentrations, noting the observed wintertime period buildup reflect inversions and lower levels through the other parts of the season. These winter time periods were excluded from the rest of the analysis due to the difficulty of accurately modeling meteorological conditions during this time. This was followed with a Stochastic Time Inverted Lagrangian Transport (STILT) trajectory model simulations. Dr. Lin then gave an overview that their observations found methane emissions declined by about half over the 2015-2020 observed period. At the same time, natural gas production also declined by about half. In summary Dr. Lin found that when emissions from oil and gas activities are standardized against production rates, the leak rates in the Uinta Basin have remained relatively steady at 6 to 8% of natural gas production while total emissions in the basin have gone down over a six-year period, and wintertime ozone appears to have declined accordingly.

Mr. Cromar asked if the trends in methane enhancement were only done based off of the non-winter months. Also, was that due to limitations in the meteorology models or were there other reasons as well? Dr. Lin responded that the meteorology models have problems capturing the strength of the inversion and he did not want to bias his results from the winter time period. So, it is correct that the emissions technically reflect the non-winter months.

Mr. Cromar asked if Dr. Lin looked at remote sensing data from satellite data to see if some of the results could be verified in a wider geographic area, particularly during the summer months when cloud cover and inversions are less of an issue. Dr. Lin responded that he has looked at some satellite data including data products from the Tropomi satellite. The problem is that U.S. generation satellites only came online in 2018 and so they only became effective tools to quantify emissions in recent years.

B. Overview and Initial Utah Division of Air Quality Response to Proposed Environmental Protection Agency Methane Rules. Presented by Sheila Vance.

Sheila Vance, Environmental Scientist at DAQ, gave an update on EPA's proposed methane rules. She stated that EPA was tasked to review or develop standards or guidelines for methane emission reductions. With new research and information coming from the oil and gas fields, a majority of the focus of these proposed rules is on leak detection and repair.

The proposed oil and gas rules do not have rule language in the proposal currently which makes it difficult to evaluate the impact of these rules without actual definitions and language. A supplemental proposal is anticipated in 2022 with the goal of having a rule in place by the end of 2022. The rules are proposed for new, modified sources, including methane detection and repair. States will be required to prepare a plan to address existing sources.

A new focus in this rule is environmental justice concerns. For instance, there is a requirement for the states to have plans in place to have meaningful engagement with communities. In addition, there will be a focus to support small businesses.

The majority of Utah's oil and natural gas processing and exploration occurs in the Uinta Basin. Ms. Vance shared a map which highlighted the different jurisdictional areas. The majority of emission sources in the nonattainment area in the Uinta Basin are not under state authority.

Ms. Vance concluded stating that the proposed VOC controls are similar to current Utah rules for oil and gas sources. Pneumatic controllers are approximately 10% of VOC emissions in the nonattainment area. Utah currently does not collect an inventory for methane; that is collected through EPA's green house gas reporting. Methane limits have potential for additional sites requiring leak detection and repair. Input on new methane detection technologies for regulatory use should help with efficiencies, both economic and ease of use.

Ms. Bujdoso asked if the state will be commenting on this proposal and are there any key issues that the division has identified which they will be commenting on. Ms. Vance responded that DAQ staff is still reviewing the proposed rules. In addition, DAQ plans on coordinating with other agencies who may also be interested on commenting on these rules. The comments are due by January 14, 2022, to EPA and staff will forward a copy of its comments to Board members.

Ms. Bujdoso asked what plans, if any, will the division pursue given that the majority of the emissions are under Tribal or Federal jurisdiction. Ms. Vance responded that sources on Tribal land are controlled under federal implementation plans (FIPs). Under this proposal tribes have the opportunity to also present plans similar to a state, but if a tribe chooses not to then EPA can propose a plan for methane emissions. The new sources will be addressed under this rule on both tribal and state lands. Ms. Vance replied that she is not sure it will work for existing sources under state jurisdiction at this time.

Mr. Cromar stated that we should be aware of the great opportunities to embrace new monitoring technologies. He also asked, what type of assistance does DAQ provide to small sources to help do a better job of controlling methane leaks. Ms. Vance responded that she is not aware of such assistance at this point but that is something that can be discussed in the coming weeks as DAQ works with other agencies on proposed rules.

C. Air Toxics. Presented by Leonard Wright.

D. Compliance. Presented by Harold Burge and Rik Ombach.

Rik Ombach, Minor Source Compliance Manager at DAQ, was asked to give an update on the listed settlement agreements. Kilgore was penalized for unlisted additional equipment onsite at its gravel pit in Benjamin. Ovintiv was penalized for leaks at one of its oil and gas sites. And Alton Coal was penalized for excess generator usage.

Chris Stephens, Assistant Attorney General, was asked to give an update on the unresolved notices of violations. The US Magnesium cases are currently in the discovery phase and will continue in a long and lengthy process. These cases will not be over a while. Staff expects that the Big West Oil issue will be resolved shortly.

E. Monitoring. Presented by Michael Yang.

Michael Yang, Environmental Scientist at DAQ, gave a brief update on the monitoring data.

F. Other Items to be Brought Before the Board.

Mr. Bird stated that the Board can expect summaries of legislation that will have air quality impacts beginning in January with the start of the 2022 General Legislative Session. There will also be a legislative tracking page on the DEQ website.

G. Board Meeting Follow-up Items.

Meeting adjourned at 2:40 p.m.

ITEM 4

State of Utah
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Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQ-007-22

M E M O R A N D U M

TO: Air Quality Board

THROUGH: Bryce C. Bryce, Executive Secretary

FROM: Bo Wood, Rules Coordinator

DATE: January 20, 2022

SUBJECT: PROPOSE FOR FINAL ADOPTION: Repeal of R307-301. Utah and Weber Counties: Oxygenated Gasoline Program as a Contingency Measure.

During the required five-year review analysis, the Division of Air Quality (DAQ) staff determined that this rule is no longer necessary. The rule was originally adopted as a contingency measure for the carbon monoxide (CO) attainment and maintenance state implementation plan (SIP) revisions for Utah and Weber counties, last approved by the Air Quality Board in 2004. The rule requires gasoline sold in Utah and Weber Counties between November 1 and the end of February to be oxygenated with a 2.7% minimum blend of ethanol, should the area violate the standard and the contingency be triggered.

According to the U.S. Department of Energy, more than 98% of gasoline sold in the United States today is oxygenated with a blend of 10% ethanol, exceeding the 2.7% required by the rule.[1] Considering this, the DAQ in consultation with the Environmental Protection Agency, have determined that this rule is no longer required to meet any SIP requirements.

Additionally, monitored data shows that neither area has exceeded the CO standard since 1993. The required maintenance period for Ogden was completed in 2021 and Provo will complete its required maintenance period in 2026. The DAQ continues to operate an air quality monitoring network in accordance with 40 CFR Part 58 to verify the continued attainment of the CO national ambient air quality standards, but as CO emissions continue to decline, it is unlikely that a violation of the 8-Hour CO standard will occur.

[1] https://afdc.energy.gov/fuels/ethanol_blends.html

A public comment period was held from December 15, 2021, to January 15, 2022. A public hearing was not requested and no comments were received during the public comment period.

Recommendation: Staff recommends that the Board approve the repeal of R307-301.

State of Utah
Administrative Rule Analysis
Revised November 2021

NOTICE OF PROPOSED RULE		
TYPE OF RULE: New ___; Amendment ___; Repeal _X__; Repeal and Reenact ___		
	Title No. - Rule No. - Section No.	
Utah Admin. Code Ref (R no.):	**R307-301**	**Filing ID (Office Use Only)**
Changed to Admin. Code Ref. (R no.):	**R**	

Agency Information

1. Department:	Utah Department of Environmental Quality	
Agency:	Utah Division of Air Quality	
Room no.:		
Building:	Multi-Agency State Office Building	
Street address:	195 North 1950 West	
City, state and zip:	Salt Lake City, Utah, 84116	
Mailing address:	P.O. Box 144820	
City, state and zip:	Salt Lake City, UT 84114-4820	
Contact person(s):		
Name:	**Phone:**	**Email:**
Bo Wood	385-499-3416	rwood@utah.gov
Please address questions regarding information on this notice to the agency.		

General Information

2. Rule or section catchline:

R307-301. Utah and Weber Counties: Oxygenated Gasoline Program as a Contingency Measure

3. Purpose of the new rule or reason for the change (Why is the agency submitting this filing?)**:**

During the required five-year review analysis, the Division of Air Quality (DAQ) staff determined that this rule is no longer necessary. The rule was originally adopted as a contingency measure for the carbon monoxide (CO) attainment and maintenance state implementation plan (SIP) revisions for Utah and Weber counties, last approved by the Air Quality Board in 2004. The rule requires gasoline sold in Utah and Weber Counties between November 1 and the end of February to be oxygenated with a 2.7% minimum blend of ethanol, should the area violate the standard and the contingency be triggered.

According to the U.S. Department of Energy, more than 98% of gasoline sold in the United States today is oxygenated with a blend of 10% ethanol, exceeding the 2.7% required by the rule.[1] Considering this, the DAQ in consultation with the Environmental Protection Agency, have determined that this rule is no longer required to meet any SIP requirements.

Additionally, monitored data shows that neither area has exceeded the CO standard since 1993. The DAQ continues to operate an air quality monitoring network in accordance with 40 CFR Part 58 to verify the continued attainment of the CO NAAQS, but as CO emissions continue to decline, it is unlikely that a violation of the 8-Hour CO standard will occur.

4. Summary of the new rule or change (What does this filing do? If this is a repeal and reenact, explain the substantive differences between the repealed rule and the reenacted rule)**:**

This rule is repealed in its entirety.

A public hearing was set for Tuesday, January 18 2022, but was cancelled when no request was received.

Fiscal Information

5. Provide an estimate and written explanation of the aggregate anticipated cost or savings to:

A) State budget:

There are no anticipated costs or savings to the state budget.

[1] https://afdc.energy.gov/fuels/ethanol_blends.html

B) Local governments:

There are no anticipated costs or savings to local governments because this rulemaking is not applicable to them.

C) Small businesses ("small business" means a business employing 1-49 persons)**:**

There are no anticipated costs or savings to small businesses.

D) Non-small businesses ("non-small business" means a business employing 50 or more persons)**:**

There are no anticipated costs or savings to non-small businesses.

E) Persons other than small businesses, non-small businesses, state, or local government entities ("person" means any individual, partnership, corporation, association, governmental entity, or public or private organization of any character other than an ***agency***)**:**

There are no anticipated costs or savings for Persons other than small businesses, and non-small businesses, state, or local government.

F) Compliance costs for affected persons (How much will it cost an impacted entity to adhere to this rule or its changes?)**:**

There are no anticipated compliance costs for affected persons.

G) Comments by the department head on the fiscal impact this rule may have on businesses (Include the name and title of the department head):

We do not expect any measurable fiscal impacts on businesses due to this rule repeal.

Kimberly D. Shelley, Executive Director of the Utah Department of Environmental Quality

6. A) Regulatory Impact Summary Table (This table only includes fiscal impacts that could be measured. If there are inestimable fiscal impacts, they will not be included in this table. Inestimable impacts will be included in narratives above.)

Regulatory Impact Table

Fiscal Cost	**FY2022**	**FY2023**	**FY2024**
State Government	$0	$0	$0
Local Governments	$0	$0	$0
Small Businesses	$0	$0	$0
Non-Small Businesses	$0	$0	$0
Other Persons	$0	$0	$0
Total Fiscal Cost	**$0**	**$0**	**$0**
Fiscal Benefits			
State Government	$0	$0	$0
Local Governments	$0	$0	$0
Small Businesses	$0	$0	$0
Non-Small Businesses	$0	$0	$0
Other Persons	$0	$0	$0
Total Fiscal Benefits	**$0**	**$0**	**$0**
Net Fiscal Benefits	**$0**	**$0**	**$0**

B) Department head approval of regulatory impact analysis:

The head of the Department of Environmental Quality, Kimberly D. Shelley, has reviewed and approved of this impact analysis.

Citation Information

7. Provide citations to the statutory authority for the rule. If there is also a federal requirement for the rule, provide a citation to that requirement:

Section 19-2-101	Section 19-2-104	

Incorporations by Reference Information

(If this rule incorporates more than two items by reference, please include additional tables.)

8. A) This rule adds, updates, or removes the following title of materials incorporated by references (a copy of materials incorporated by reference must be submitted to the Office of Administrative Rules; *if none, leave blank*)**:**	
	First Incorporation
Official Title of Materials Incorporated (from title page)	
Publisher	
Date Issued	
Issue, or version	

B) This rule adds, updates, or removes the following title of materials incorporated by references (a copy of materials incorporated by reference must be submitted to the Office of Administrative Rules; *if none, leave blank*)**:**	
	Second Incorporation
Official Title of Materials Incorporated (from title page)	
Publisher	
Date Issued	
Issue, or version	

Public Notice Information

9. The public may submit written or oral comments to the agency identified in box 1. (The public may also request a hearing by submitting a written request to the agency. See Section 63G-3-302 and Rule R15-1 for more information.)		
A) Comments will be accepted until (mm/dd/yyyy)**:**		01/14/2022
B) A public hearing (optional) will be held:		
On (mm/dd/yyyy)**:**	**At** (hh:mm AM/PM)**:**	**At** (place)**:**

10. This rule change MAY become effective on (mm/dd/yyyy)**:**	01/21/2022
NOTE: The date above is the date the agency anticipates making the rule or its changes effective. It is NOT the effective date. To make this rule effective, the agency must submit a Notice of Effective Date to the Office of Administrative Rules on or before the date designated in Box 10.	

Agency Authorization Information

To the agency: Information requested on this form is required by Sections 63G-3-301, 302, 303, and 402. Incomplete forms will be returned to the agency for completion, possibly delaying publication in the *Utah State Bulletin* and delaying the first possible effective date.			
Agency head or designee, and title:	Bryce C. Bird, Director	**Date** (mm/dd/yyyy)**:**	02/02/2022

~~**R307. Environmental Quality, Air Quality.**~~

~~**R307-301. Utah and Weber Counties: Oxygenated Gasoline Program As a Contingency Measure.**~~

~~**R307-301-1. Definitions.**~~

~~The following additional definitions apply to R307-301.~~

~~"Averaging period" is the control period and means the period of time over which all gasoline sold or dispensed for use in a control area by any control area responsible party or blender control area responsible party must comply with the average oxygen content standard.~~

~~"Blender control area responsible party (blender CAR)" means a person who owns oxygenated gasoline which is sold or dispensed from a control area oxygenate blending installation.~~

~~"Blending Allowance" means the amount of oxygen a gasoline blend is allowed above its upper oxygen content limit. Any gasoline blended under the provisions of 42 U.S.C. 7545(f)(1) addressing substantially similar fuels are permitted a blending allowance of 0.2% oxygen by weight. Blending allowances are not given to gasoline blends granted a waiver by the Administrator under 42 U.S.C.~~

7545(f)(4).

"Carrier" means any person who transports, stores or causes the transportation or storage of gasoline at any point in the gasoline distribution network, without taking title to or otherwise having ownership of the gasoline, and without altering the quality or quantity of the gasoline.

"Control area" means a geographic area in which only gasoline under the oxygenated gasoline program may be sold or dispensed during the control period.

"Control area oxygenate blending installation" means any installation or truck at which oxygenate is added to gasoline or gasoline blendstock which is intended for use in any control area, and at which the quality or quantity of the gasoline or gasoline blendstock is not otherwise altered, except through the addition of deposit control additives.

"Control area responsible party (CAR)" means a person who owns oxygenated gasoline which is sold or dispensed from a control area terminal.

"Control area terminal" means either a terminal which is capable of receiving gasoline in bulk, i.e., by pipeline, marine vessel or barge, or a terminal at which gasoline is altered either in quantity or quality, excluding the addition of deposit control additives, or both. Gasoline which is intended for use in any control area is sold or dispensed into trucks at these control area terminals.

"Control period" means November 1 through the last day of February, during which time only oxygenated gasoline may be sold and dispensed in any control area.

"Distributor" means any person who transports or stores or causes the transportation or storage of gasoline at any point between any gasoline refiner's installation and any retail outlet or wholesale purchaser-consumer's installation. A distributor is a blender CAR if the distributor alters the oxygen content of gasoline intended for use in any control area through the addition of one or more oxygenates, or lowers its oxygen content below the minimum oxygen content specified in R307-301-6.

"Gasoline" means any fuel sold for use in motor vehicles and motor vehicle engines, and commonly or commercially known or sold as gasoline.

"Gasoline blendstock" means a hydrocarbon material which by itself does not meet specifications for finished gasoline, but which can be blended with other components, including oxygenates, to produce a blended gasoline fully meeting the American Society for Testing and Materials (ASTM) or state specifications.

"Non-oxygenated gasoline" means any gasoline which does not meet the definition of oxygenated gasoline.

"Oxygen content of gasoline blends" means percentage of oxygen by weight contained in a gasoline blend, based upon the percent by volume of each type of oxygenate contained in the gasoline blend, excluding denaturants and other non-oxygen containing compounds. All measurements shall be adjusted to 60 degrees Fahrenheit.

"Oxygenate" means any substance, which when added to gasoline, increases the amount of oxygen in that gasoline blend. Lawful use of any combination of these substances requires that they be substantially similar as provided for under 42 U.S.C. 7545(f)(1), or be permitted under a waiver granted by the Administrator of the Environmental Protection Agency under the authority of 42 U.S.C. 7545(f)(4).

"Oxygenate blender" means a person who owns, leases, operates, controls, or supervises a control area oxygenate blending installation.

"Oxygenated gasoline" means any gasoline which contains at least 2.0% oxygen by weight, or 2.6% oxygen by weight if the average oxygen content standard is 3.1%, that was produced through the addition of one or more oxygenates to a gasoline and has been included in the oxygenated gasoline program accounting by a control area responsible party or blender control area responsible party and which is intended to be sold or dispensed for use in any control area. Notwithstanding the foregoing, if the Board determines that the requirement of 2.0% oxygen by weight, or 2.6% oxygen by weight if the average oxygen content standard is 3.1%, will prevent or interfere with attainment of the PM_{10} National Ambient Air Quality Standard and the State requests and is granted a waiver from the Administrator of the Environmental Protection Agency under 42 U.S.C. 7545, the waiver amount granted by the Administrator of the Environmental Protection Agency shall apply. Oxygenated gasoline containing lead is required to conform to the same waiver conditions or substantially similar ruling as unleaded gasoline as described in the definition of oxygenate.

"Refiner" means any person who owns, leases, operates, controls, or supervises a refinery which produces gasoline for use in a control area during the applicable control period.

"Refinery" means a plant at which gasoline is produced.

"Reseller" means any person who purchases gasoline and resells or transfers it to a retailer or a wholesale purchaser-consumer.

"Retail outlet" means any establishment at which gasoline is sold or offered for sale to the ultimate consumer for use in motor vehicles.

"Retailer" means any person who owns, leases, operates, controls, or supervises a retail outlet.

"Terminal" means an installation at which gasoline is sold, or dispensed into trucks for transportation to retail outlets or wholesale purchaser-consumer installations.

"Trigger date" means the date on which is triggered the Contingency Action Level specified in Section IX.C.8.h or IX.C.6.e of the state implementation plan.

"Wholesale purchaser-consumer" means any organization that:

(1) is an ultimate consumer of gasoline;

(2) purchases or obtains gasoline from a supplier for use in motor vehicles; and

(3) receives delivery of that product into a storage tank of at least 550-gallon capacity substantially under the control of that organization.

"Working day" means Monday through Friday, excluding observed federal and Utah state holidays.

R307-301-2. Applicability and Control Period Start Dates.

(1) Unless waived under authority of 42 U.S.C. 7545(m)(3) by the Administrator of the Environmental Protection Agency, R307-301 is applicable in Utah and Weber Counties.

(2) The first control period for areas for which R307-301 is applicable begins on November 1 following the trigger date for the county in which it has been triggered.

R307-301-3. Average Oxygen Content Standard.

(1) All gasoline sold or dispensed during the control period, for use in each control area, by each CAR or blender CAR as defined in R307-301-1, shall be blended for each averaging period to contain an average oxygen content of not less than 2.7% oxygen by weight.

(2) The averaging period over which all gasoline sold or dispensed in the control area is to be averaged shall be equal to the control period.

(3) All gasoline, both leaded and unleaded, shall be blended in compliance with 40 CFR Part 79 (1991) - Registration of Fuels and Fuel Additives and 40 CFR Part 80 (1991) - Regulation of Fuels and Fuel Additives.

(4) Any gasoline blended under 42 U.S.C. 7545(f)(1) dealing with substantially similar fuels must be blended in compliance with the criteria specified in the substantially similar ruling. Any extra volume of oxygenate or oxygenates added to gasoline blended under a substantially similar ruling as provided for under 42 U.S.C. 7545(f)(1) in excess of the criteria specified in 42 U.S.C. 7545(f)(1) may not be included in the compliance calculations specified in R307-301-5(2) and (3).

(5) Any gasoline blended under a waiver granted by the Environmental Protection Agency under the provisions of 42 U.S.C. 7545(f)(4) must be blended in compliance with the criteria specified in the appropriate waiver. Gasoline blends waived to oxygen content above 2.7% oxygen by weight are not permitted a blending allowance for blending tolerance purposes. Any extra volume of oxygenate in excess of the criteria specified in the appropriate waiver may not be included in the compliance calculations specified in R307-301-5(2) or (3).

(6) Oxygen content shall be determined in accordance with R307-301-4.

R307-301-4. Sampling, Testing, and Oxygen Content Calculations.

(1) For the purpose of determining compliance with the requirements of R307-301, the oxygen content of gasoline shall be determined by one or both of the two following methods.

(a) Volumetric Method. Oxygen content may be calculated by the volumetric method specified in the Environmental Protection Agency Guidelines for Oxygenated Gasoline Credit Programs under Section 211(m) of the Clean Air Act as Amended - Supplementary Information - Oxygen Content Conversions, published in the Federal Register on October 20, 1992.

(b) Chemical Analysis Method.

(i) Use the sampling methodologies detailed in 40 CFR Part 80 (1993), Appendix D, to obtain a representative sample of the gasoline to be tested;

(ii) Determine the oxygenate content of the sample by use of:

(A) the test method specified in ASTM Designation D4815-93, Testing Procedures - Method - ASTM Standard Test Method for Determination of C1 to C4 Alcohols and MTBE in Gasoline by Gas Chromatography,

(B) the test method specified in Appendix C of Environmental Protection Agency Guidelines for Oxygenated Gasoline Credit Programs under Section 211(m) of the Clean Air Act as Amended - Test Procedure Test for the Determination of Oxygenates in Gasoline as published in the Federal Register on October 20, 1992, or

(C) an alternative test method approved by the director.

(iii). Calculate the oxygen content of the gasoline sampled by multiplying the mass concentration of each oxygenate in the gasoline sampled by the oxygen molecular weight contribution of the oxygenate set forth in (3) below.

(2) All volume measurements required in R307-301-4 shall be adjusted to 60 degrees Fahrenheit.

(3) For the purposes of R307-301, the oxygen molecular weight contributions and specific gravities of oxygenates currently approved for use in the United States by the U.S. Environmental Protection Agency are the following:

TABLE

Specific Gravity and Weight Percent Oxygen of Common Oxygenates

oxygenate	weight fraction oxygen	specific gravity at 60 degrees F
ethyl alcohol	0.3473	0.7939
normal propyl alcohol	0.2662	0.8080
isopropyl alcohol	0.2662	0.7899
normal butyl alcohol	0.2158	0.8137
isobutyl alcohol	0.2158	0.8058
secondary butyl alcohol	0.2158	0.8114
tertiary butyl alcohol	0.2158	0.7922
methyl tertiary-butyl ether (MTBE)	0.1815	0.7460
tertiary amyl methyl ether (TAME)	0.1566	0.7752

ethyl tertiary-butyl ether (ETBE) 0.1566 0.7452

(4) Sampling, testing, and oxygen content calculation records shall be maintained for not less than two years after the end of each control period for which the information is required.

(5) Every refiner must determine the oxygen content of all gasoline produced for use in a control area by use of the methodology specified in (1) above. Documentation shall include the percent oxygen by weight, each type of oxygenate, the purity of each oxygenate, and the percent oxygenate by volume for each oxygenate. If a CAR or blender CAR alters the oxygen content of a gasoline intended for use within a control area during a control period, the CAR or blender CAR must determine the oxygen content of the gasoline by use of the methodology specified in (1) above.

R307-301-5. Alternative Compliance Options.

(1) Each CAR or blender CAR shall comply with the standard specified in R307-301-3 by means of the method set forth in either (2) or (3) below and shall specify which option will be used at the time of the registration required under R307-301-7.

(2) Compliance calculation on average basis.

(a) The CAR or blender CAR shall determine compliance with the standard specified in R307-301-3 for each averaging period and for each control area by:

(i) Calculating the total volume of gasoline labeled as oxygenated that is sold or dispensed, not including volume dispensed or sold to another CAR or blender CAR, for use in the control area which is the sum of:

(A) the volume of each separate batch or truckload of gasoline labeled as oxygenated that is sold or dispensed;

(B) minus the volume of each separate batch or truckload of gasoline labeled as oxygenated that is sold or dispensed for use in a different control area;

(C) minus the volume of each separate batch or truckload of gasoline labeled as oxygenated that is sold or dispensed for use in any non-control area.

(ii) Calculating the required total oxygen credit units. Multiply the total volume in gallons of gasoline labeled as oxygenated that is sold or dispensed for use in the control area, as determined by (i) above, by the oxygen content standard specified in R307-301-3(1).

(iii) Calculating the actual total oxygen credit units generated. The actual total oxygen credit units generated is the sum of the volume of each batch or truckload of gasoline labeled as oxygenated that was sold or dispensed for use in the control area as determined by (i) above, multiplied by the actual oxygen content by weight percent associated with each batch or truckload. If a batch or truckload of gasoline is blended under the substantially similar provisions of 42 U.S.C. 7545(f)(1) or under a waiver granted by the Environmental Protection Agency under the provisions of 42 U.S.C. 7545(f)(4), any extra volume of oxygenate in excess of the substantially similar criteria including the blending tolerance of 0.2% oxygen by weight, or in excess of the appropriate waiver, cannot be included in the calculation of oxygen credit units.

(iv) Calculating the adjusted actual total oxygen credit units. The adjusted actual total oxygen content units is the sum of the actual total oxygen credit units generated, as determined by (iii) above;

(A) plus the total oxygen credit units purchased, acquired through trade and received; and

(B) minus the total oxygen credit units sold,given away and provided through trade.

(v) Comparing the adjusted actual total oxygen credit units with the required total oxygen credit units. If the adjusted actual total content oxygen credit units is greater than or equal to the required total oxygen credit units, then the standard in R307-301-3 is met. If the adjusted actual total oxygen credit units is less than the required total oxygen credit units, then the purchase of oxygen credit units is required in order to achieve compliance.

(vi) In transferring oxygen credit units, the transferor shall provide the transferee with information as to how the credits were calculated, including the volume and oxygen content by weight percent of the gasoline associated with the credits.

(b) To determine the oxygen credit units associated with each batch or truck load of oxygenated gasoline sold or dispensed into the control area, use the running weighted oxygen content (RWOC) of the tank from which and at the time the batch or truckload was received (see (c) below). In the case of batches or truckloads of gasoline to which oxygenate was added outside of the terminal storage tank from which it was received, use the weighted average of the RWOC and the oxygen content added as a result of the volume of the additional oxygenate added.

(c) Running weighted oxygen content. The RWOC accounts for the volume and oxygen content of all gasoline, including transfers to or from another CAR or blender CAR, which enters or leaves a terminal storage tank, and the oxygen contribution of all oxygenates which are added to the tank. The RWOC must be calculated each time gasoline enters or leaves the tank or whenever oxygenates are added to the tank. The RWOC is calculated weighing the following:

(i) the volume and oxygen content by weight percent of the gasoline in the storage tank at the beginning of the averaging period;

(ii) the volume and oxygen content by weight percent of gasoline entering the storage tank;

(iii) the volume and oxygen content by weight percent of gasoline leaving the storage tank; and

(iv) the volume, type, purity and oxygen content by weight percent of the oxygenates added to the storage tank.

(d) Credit transfers. Credits may be used in the compliance calculation in (2)(a)(i) above, provided that:

(i) the credits are generated in the same control area as they are used, i.e., no credits may be transferred between nonattainment areas;

(ii) the credits are generated in the same averaging period as they are used;

(iii) the ownership of credits is transferred only between CARs or blender CARs registered under the averaging compliance

option specified in R307-301-7;

(iv) the credit transfer agreement is made no later than 30 working days, as defined in R307-301-1, after the final day of the averaging period in which the credits are generated; and

(v) the credits are properly created.

(c) Improperly created credits.

(i) No party may transfer any credits to the extent such a transfer would result in the transferor having a negative credit balance at the conclusion of the averaging period for which the credits were transferred. Any credits transferred in violation of this paragraph are improperly created credits.

(ii) Improperly created credits may not be used, regardless of a credit transferee's good faith belief that the transferee was receiving valid credits.

(3) Compliance calculation on a per gallon basis. Each gallon of gasoline sold or dispensed by a CAR or blender CAR for use within each control area during the averaging period as defined in R307-301-1 shall have an oxygen content of at least the average oxygen content standard specified in R307-301-3(1). The maximum oxygen content which may be used to calculate compliance is the average oxygen content standard specified in R307-301-3. In addition, the CAR or blender CAR is prohibited from selling, trading or providing oxygen credits based on gasoline for which compliance is calculated under this alternative per-gallon method.

R307-301-6. Minimum Oxygen Content.

(1) Any gasoline which is sold or dispensed by a CAR, blender CAR, carrier, distributor, or reseller for use within a control area, as defined in R307-301-1, during the control period, shall contain not less than 2.0% oxygen by weight, or 2.6% oxygen by weight if the average oxygen content standard is 3.1%, unless it is sold or dispensed to another registered CAR or blender CAR. This requirement shall begin five working days, as defined in R307-301-1, before the applicable control period and shall apply until the end of that period.

(2) This requirement shall apply to all parties downstream of the CAR or blender CAR unless the gasoline will be sold or dispensed to another CAR or blender CAR. Any gasoline which is offered for sale, sold or dispensed to an ultimate consumer within a control area during a control period, as defined in R307-301-1, shall not contain less than 2.0% oxygen by weight, or 2.6% oxygen by weight if the average oxygen content standard is 3.1%. This requirement shall apply during the entire applicable control period.

(3) Every refiner must determine the oxygen content of all gasoline produced by use of the methodologies described in R307-301-4. This determination shall include the oxygen content by weight percent, each type of oxygenate, and percent oxygenate by volume for each type of oxygenate.

(4) Any gasoline sold or dispensed by a CAR or blender CAR for use within a control area and for which compliance is demonstrated using the method specified in (3) shall contain not less than the average oxygen content standard specified in R307-301-3(1), unless the gasoline is sold or dispensed to another registered CAR or blender CAR.

R307-301-7. Registration.

(1) All persons who sell or dispense gasoline directly or indirectly to persons who sell or dispense to ultimate consumers in a control area during a control period, including CARs, blender CARs, carriers, resellers, and distributors, shall petition the director for registration not less than one calendar month in advance of such sales or transfers of gasoline into the control area during the control period.

(2) This petition for registration shall be on forms prescribed by the director and shall include the following information:

(a) the name and business address of the CAR, blender CAR, carrier, reseller, or distributor;

(b) in the case of a CAR, the address and physical location of each of the control area terminals from which the CAR operates;

(c) in the case of a blender CAR, the address and physical location of each control area oxygenate blending installation which is owned, leased, operated, or controlled, or supervised by a blender CAR;

(d) in the case of a carrier, distributor, or reseller, the names and addresses of retailers they supply;

(e) the address and physical location where documents which are required to be retained by R307-301 shall be kept; and

(f) in the case of a CAR or blender CAR, the compliance option chosen under provisions of R307-301-5 and a list of oxygenates which will be used.

(3) If the registration information previously supplied by a registered party under the provisions of (2)(a) through (e) becomes incomplete or inaccurate, that party shall submit updated registration information to the director within 15 working days as defined in R307-301-1. If the information required under (2)(f) is to change, the updated registration information must be submitted to the director before the change is made.

(4) No person shall participate in the oxygenated gasoline program as a CAR, blender CAR, carrier, reseller, or distributor until such person has been notified by the director that such person has been registered as a CAR, blender CAR, carrier, reseller, or distributor. Registration shall be valid for the time period specified by the director. The director shall issue each CAR, blender CAR, carrier, reseller, or distributor a unique identification number within one calendar month of the petition for registration.

R307-301-8. Recordkeeping.

(1) Records. All parties in the gasoline distribution network, as described below, shall maintain records containing compliance information enumerated or described below. These records shall be retained by the regulated parties for a period of two years after the end of each control period for which the information is required.

(a) Refiners. Refiners shall, for each separate quantity of gasoline produced or imported for use in a control area during a control period, maintain records containing the following information:

(i) results of the tests utilized to determine the types of oxygenates and percent by volume;
(ii) percent oxygenate content by volume of each oxygenate;
(iii) oxygen content by weight percent;
(iv) purity of each oxygenate;
(v) total volume of gasoline; and
(vi) the name and address of the party to whom each separate quantity of oxygenated gasoline was sold or transferred.
(b) Control area terminal operators. Persons who own, lease, operate or control gasoline terminals which serve control areas, or any truck or terminal lessee who subleases any portion of a leased tank or terminal to other persons, shall maintain a copy of the transfer document for each batch or truckload of gasoline received, purchased, sold or dispensed, and shall maintain records containing the following information:
(i) the owner of each batch of gasoline handled by each regulated installation if known, or the storage customer of record;
(ii) volume of each batch or truckload of gasoline going into or out of the terminal;
(iii) for all batches or truckloads of gasoline leaving the terminal, the RWOC of the batch or truckload;
(iv) for each oxygenate, the type of oxygenate, purity if available, and percent oxygenate by volume;
(v) oxygen content by weight percent of all batches or truckloads received at the terminal;
(vi) destination county of each tank truck sale or batch of gasoline as declared by the purchaser of the gasoline, if the destination is within Utah or Weber County;
(vii) the name and address of the party to whom the gasoline was sold or transferred and the date of the sale or transfer, and
(viii) the results of the tests for oxygenates, if performed, of each sale or transfer, and who performed the tests.
(c) CARs and blender CARs. Each CAR must maintain records containing the information listed in (b) above. Each CAR and blender CAR must maintain a copy of the transfer document for each shipment of gasoline received, purchased, sold or dispensed, as well as the records containing the following information:
(i) CAR or blender CAR identification number;
(ii) the name and address of the person from whom each shipment of gasoline was received, and the date when it was received;
(iii) data on each shipment of gasoline received, including:
(A) the volume of each shipment;
(B) type of oxygenate or oxygenates, and percentage by volume; and
(C) oxygen content by weight percent;
(iv) the volume of each receipt of bulk oxygenates;
(v) the name and address of the parties from whom bulk oxygenate was received;
(vi) the date and destination county of each sale of gasoline, if the destination is within Utah or Weber County;
(vii) data on each shipment of gasoline sold or dispensed including:
(A) the volume of each shipment;
(B) type of each oxygenate, and percent by volume for each oxygenate, and
(C) oxygen content by weight percent;
(viii) documentation of the results of all tests done regarding the oxygen content of gasoline;
(ix) the names, addresses and CAR or blender CAR identification numbers of the parties to whom any gasoline was sold or dispensed, and the dates of these transactions; and
(x) in the case of CARs or blender CARs that elect to comply with the average oxygen content standard specified in R307-301-3 by means of the compliance option specified in R307-301-5(2) must also maintain records containing the following information:
(A) records supporting and demonstrating compliance with the averaging standard specified in R307-301-3; and
(B) for any credits bought, sold, traded, or transferred, the dates of the transactions, the names, addresses and CAR or blender CAR identification numbers of the CARs and blender CARs involved in the individual transactions, and the amount of credits transferred. Any credits transferred must be accompanied by a demonstration of how those credits were calculated. Adequate documentation that both parties have agreed to all credit transfers within 30 working days, as defined in R307-301-1, following the close of the averaging period must be included.
(d) Retailers and wholesale purchaser-consumers within a control area must maintain the following records:
(i) the names, addresses and CAR, blender CAR, carrier, distributor, or reseller identification numbers of the parties from whom all shipments of gasoline were purchased or received, and the dates when they were received and for each shipment of gasoline bought, sold or transported:
(A) the transfer document as specified in R307-301-8(3) and
(B) a copy of each contract for delivery of oxygenated gasoline and
(ii) data on every shipment of gasoline bought, sold or transported, including:
(A) volume of each shipment;
(B) for each oxygenate, the type, percent by volume and purity (if available);
(C) oxygen content by weight percent; and
(D) destination county of each sale or shipment of gasoline, if the destination is within Utah or Weber County; and
(iii) the name and telephone number of the person responsible for maintaining the records and the address where the records are located, if the location of the records is different from the station or outlet location.
(e) Carriers, distributors, resellers, terminal operators, and oxygenate blenders must keep a copy of the transfer document for each truckload or shipment of gasoline received, obtained, purchased, sold or dispensed.

R307-301-9. Reports.

(1) Each CAR or blender CAR that elects to comply with the average oxygen content standard specified in R307-301-3 by the compliance option specified in R307-301-5(2) shall submit a report to the director for each control period for each control area as defined in R307-301-1 reflecting the compliance information detailed in R307-301-5(2).

(2) Each CAR or blender CAR that elects to comply with the average oxygen content standard specified in R307-301-3 shall submit a report to the director for each control period for each control area as defined in R307-301-1 reflecting the compliance information detailed in R307-301-5(3), including the volume of oxygenated gasoline sold or dispensed into each control area during the control period.

(3) The report is due 30 working days, as defined in R307-301-1, after the last day of the control period for which the information is required. The report shall be filed using forms provided by the director.

R307-301-10. Transfer Documents.

Each time that physical custody or title of gasoline destined for a control area changes hands other than when gasoline is sold or dispensed for use in motor vehicles at a retail outlet or wholesale purchaser-consumer installation, the transferor shall provide to the transferee, in addition to, or as part of, normal bills of lading, invoices, etc., a document containing information regarding that shipment. This document shall accompany every shipment of gasoline to a control area after it has been dispensed by a terminal, or the information shall be included in the normal paperwork which accompanies every shipment of gasoline. The information shall legibly and conspicuously contain the following information:

(1) the date of the transfer;

(2) the name, address, and CAR, blender CAR, carrier, distributor, or reseller identification number, if applicable, of the transferor;

(3) the name, address, and CAR, blender CAR, carrier, distributor, or reseller identification number, if applicable, of the transferee;

(4) the volume of gasoline which is being transferred;

(5) identification of the gasoline as oxygenated or, if non-oxygenated, with a statement labeling it as "Non-oxygenated gasoline, not for sale to ultimate consumer in a control area during a control period";

(6) the location of the gasoline at the time of the transfer;

(7) type of each oxygenate and percentage by volume for each oxygenate;

(8) oxygen content by weight percent; and

(9) for gasoline which is in the gasoline distribution network between the refinery or import installation and the control area terminal, for each oxygenate used, the type of oxygenate, its purity and percentage by volume and the oxygen content by weight percent.

R307-301-11. Prohibited Activities.

(1) During the control period, no refiner, oxygenate blender, CAR, blender CAR, control area terminal operator, carrier, distributor or reseller may manufacturer, sell, offer for sale, dispense, supply, offer for supply, store, transport, or cause the transport of:

(a) gasoline which contains less than 2.0% oxygen by weight, or 2.6% oxygen by weight if the average oxygen content standard is 3.1% oxygen, for use during the control period, in a control area unless clearly marked documents accompany the gasoline labeling it as "Non-oxygenated gasoline, not for sale to ultimate consumer in a control area during a control period"; or

(b) gasoline represented as oxygenated which has an oxygen content which is improperly stated in the documents which accompany such gasoline.

(2) No retailer or wholesale purchaser-consumer may dispense, offer for sale, sell or store, for use during the control period, gasoline which contains less than 2.0% oxygen by weight, or 2.6% oxygen by weight if the average oxygen content standard is 3.1% in a control area.

(3) No person may operate as a CAR or blender CAR or hold themselves out as such unless they have been properly registered by the director. No CAR or blender CAR may offer for sale or store, sell, or dispense gasoline, to any person not registered as a CAR or blender CAR for use in a control area, unless:

(a) the average oxygen content of the gasoline during the averaging period meets the standard established in R307-301-3; and

(b) the gasoline contains at least 2.0% oxygen by weight, or 2.6% oxygen by weight if the average oxygen content standard is 3.1% on a per-gallon basis.

(4) For terminals which sell or dispense gasoline intended for use in a control area during a control period, the terminal owner or operator may not accept gasoline into the terminal unless:

(a) transfer documentation containing the information specified in R307-301-8(3) accompanies the gasoline and

(b) the terminal owner or operator conducts a quality assurance program to verify the accuracy of this information.

(5) No person may sell or dispense non-oxygenated gasoline for use in any control area during the control period, unless:

(a) the non-oxygenated gasoline is segregated from oxygenated gasoline;

(b) clearly marked documents accompany the non-oxygenated gasoline labeling it as "non-oxygenated gasoline, not for sale to ultimate consumer in a control area during a control period," and

(c) the non-oxygenated gasoline is in fact not sold or dispensed to ultimate consumers during the control period in the control area.

(6) No named person may fail to comply with the recordkeeping and reporting requirements contained in R307-301-8 through 10.

(7) No person may sell, dispense or transfer oxygenated gasoline, except for use by the ultimate consumer at a retail outlet or

wholesale purchaser-consumer installation, without transfer documents which accurately contain the information required by R307-301-10).

(8) Liability for violations of the prohibited activities.

(a) Where the gasoline contained in any storage tank at any installation owned, leased, operated, controlled or supervised by any retailer, wholesale purchaser-consumer, distributor, reseller, carrier, refiner, or oxygenate blender is found in violation of the prohibitions described in (1)(a) or (2) above, the following persons shall be in violation:

(i) the retailer, wholesale purchaser-consumer, distributor, reseller, carrier, refiner, or oxygenate blender who owns, leases, operates, controls or supervises the installation where the violation is found; and

(ii) each oxygenate blender, distributor, reseller, and carrier who, downstream of the control area terminal, sold, offered for sale, dispensed, supplied, offered for supply, stored, transported, or caused the transportation of any gasoline which is in the storage tank containing gasoline found to be in violation.

(b) Where the gasoline contained in any storage tank at any installation owned, leased, operated, controlled or supervised by any retailer, wholesale purchaser-consumer, distributor, reseller, carrier, refiner, or oxygenate blender is found in violation of the prohibitions described in (1)(b) or (2) above, the following persons shall be in violation:

(i) the retailer, wholesale purchaser-consumer, distributor, reseller, carrier, refiner, or oxygenate blender who owns, leases, operates, controls or supervises the installation where the violation is found; and

(ii) each refiner, oxygenate blender, distributor, reseller, and carrier who manufactured, imported, sold, offered for sale, dispensed, supplied, offered for supply, stored, transported, or caused the transportation of any gasoline which is in the storage tank containing gasoline found to be in violation.

(9) Defenses for prohibited activities.

(a) In any case in which a refiner, oxygenate blender, distributor, reseller or carrier would be in violation under (1) above, that person shall not be in violation if they can demonstrate that they meet all of the following:

(i) that the violation was not caused by the regulated party or its employee or agent;

(ii) that refiner, oxygenate blender, distributor, reseller or carrier possesses documents which should accompany the gasoline, which contain the information required by R307-301-8; and

(iii) that refiner, oxygenate blender, distributor, reseller or carrier conducts a quality assurance sampling and testing program as described in (10) below.

(b) In any case in which a retailer or wholesale purchaser-consumer would be in violation under (2) above, the retailer or wholesale purchaser-consumer shall not be in violation if it can demonstrate that they meet all of the following:

(i) that the violation was not caused by the regulated party or its employee or agent; and

(ii) that the retailer or wholesale purchaser-consumer possess documents which should accompany the gasoline, which contain the information required by R307-301-8 through 10.

(c) Where a violation is found at an installation which is operating under the corporate, trade or brand name of a refiner, that refiner must show, in addition to the defense elements required by (a) above, that the violation was caused by any of the following:

(i) an act in violation of law (other than the Clean Air Act or R307-301), or an act of sabotage or vandalism, or

(ii) the action of a reseller, distributor, oxygenate blender, carrier, or a retailer, or wholesale purchaser-consumer which is supplied by any of the persons listed in (a) above, in violation of a contractual undertaking imposed by the refiner designed to prevent such action, and despite periodic sampling and testing by the refiner to ensure compliance with such contractual obligation; or

(iii) the action of any carrier or other distributor not subject to a contract with the refiner but engaged by the refiner for transportation of gasoline, despite specification or inspection of procedures and equipment by the refiner or periodic sampling and testing which are reasonably calculated to prevent such action.

(d) In R307-301-8 through 11, the term "was caused" means that the party must demonstrate by specific showings or by direct evidence, that the violation was caused or must have been caused by another.

(10) Quality Assurance Program. In order to demonstrate an acceptable quality assurance program, a party must conduct periodic sampling and testing to determine if the oxygenated gasoline has oxygen content which is consistent with the product transfer documentation.

R307-301-12. Labeling of Pumps.

(1) Any person selling or dispensing oxygenated gasoline pursuant to R307-301 is required to label the fuel dispensing system with one of the following notices.

(a) "The gasoline dispensed from this pump is oxygenated and will reduce carbon monoxide pollution from motor vehicles. This fuel contains up to (specify maximum percent by volume) (specific oxygenate or specific combination of oxygenates in concentrations of at least one percent)."

(b) "The gasoline dispensed from this pump is oxygenated and will reduce carbon monoxide pollution from motor vehicles. This fuel contains up to (specify maximum percent by volume) (specific oxygenate or combination of oxygenates present in concentrations of at least one percent) from November 1 through February 29."

(2) The label letters shall be block letters of no less than 20-point type, at least 1/16-inch stroke (width of type), and of a color that contrasts with the label background color. The label letters that specify maximum percent oxygenate by volume and that disclose the specific oxygenate shall be at least 1/2-inch in height, 1/16-inch stroke (width of type).

(3) The label must be affixed to the upper one-half of the vertical surface of the pump on each side with gallonage and dollar amount meters from which gasoline can be dispensed and must be clearly readable to the public.

(4) The retailer or wholesale purchaser-consumer shall be responsible for compliance with R307-301-12.

~~**R307-301-13. Inspections.**~~

~~Inspections of registered parties, control area retailers, refineries, control area terminals, oxygenate blenders and control area wholesale purchaser-consumers may include the following:~~

~~(1) physical sampling, testing, and calculation of oxygen content of the gasoline as specified in R307-301-4;~~

~~(2) review of documentation relating to the oxygenated gasoline program, including but not limited to records specified in R307-301-8; and~~

~~(3) in the case of control area retailers and wholesale purchaser-consumers, verification that gasoline dispensing pumps are labeled in accordance with R307-301-12.~~

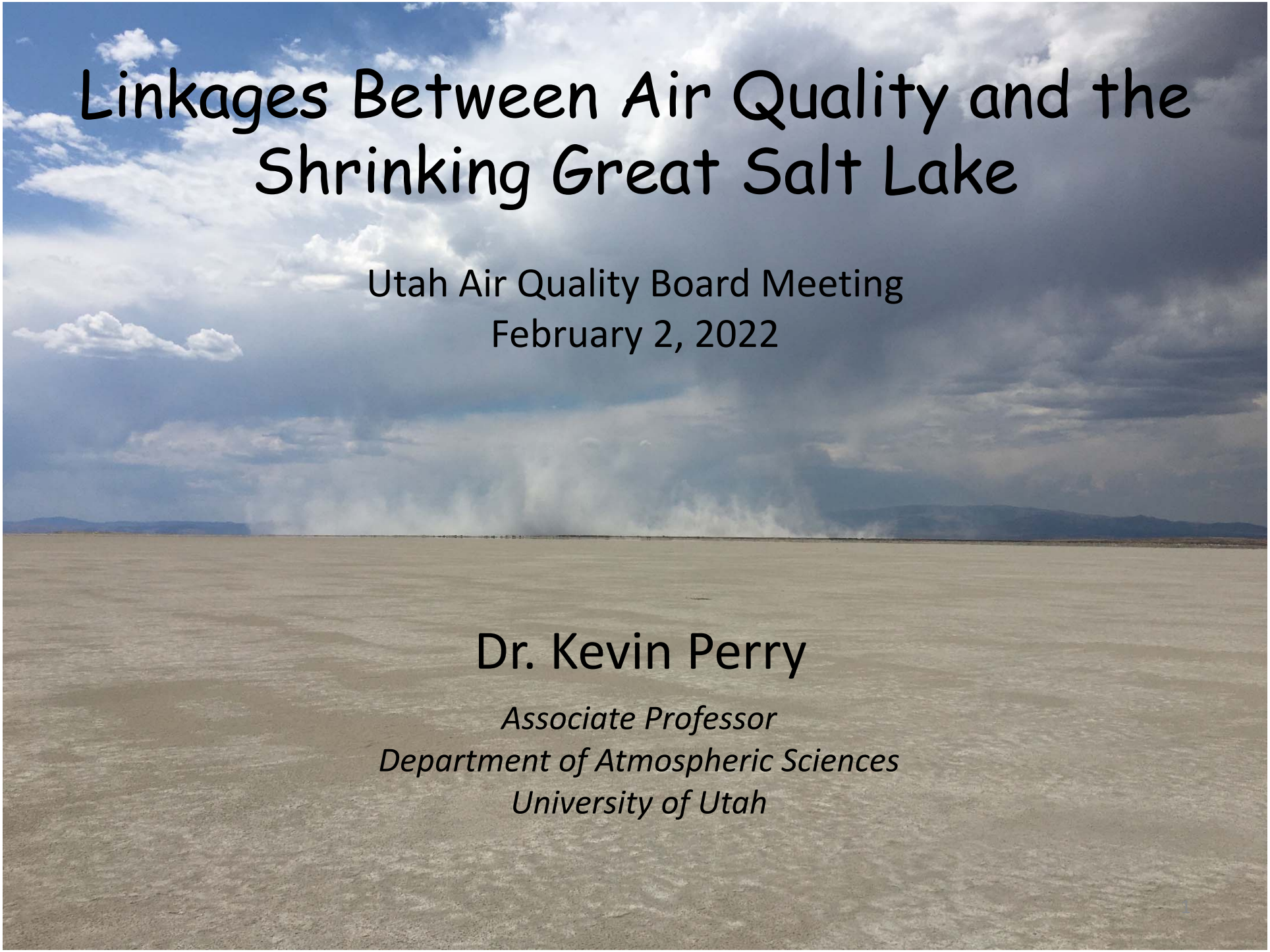
~~**R307-301-14. Public and Industry Education Program.**~~

~~The director shall provide to the affected public, mechanics, and industry information regarding the benefits of the program and other issues related to oxygenated gasoline.~~

~~**KEY: air pollution control, motor vehicles, gasoline, petroleum**~~
~~**Date of Enactment or Last Substantive Amendment: May 18, 2004**~~
~~**Notice of Continuation: January 27, 2017**~~
~~**Authorizing, and Implemented or Interpreted Law: 19-2-101; 19-2-104**~~

ITEM 5

Linkages Between Air Quality and the Shrinking Great Salt Lake

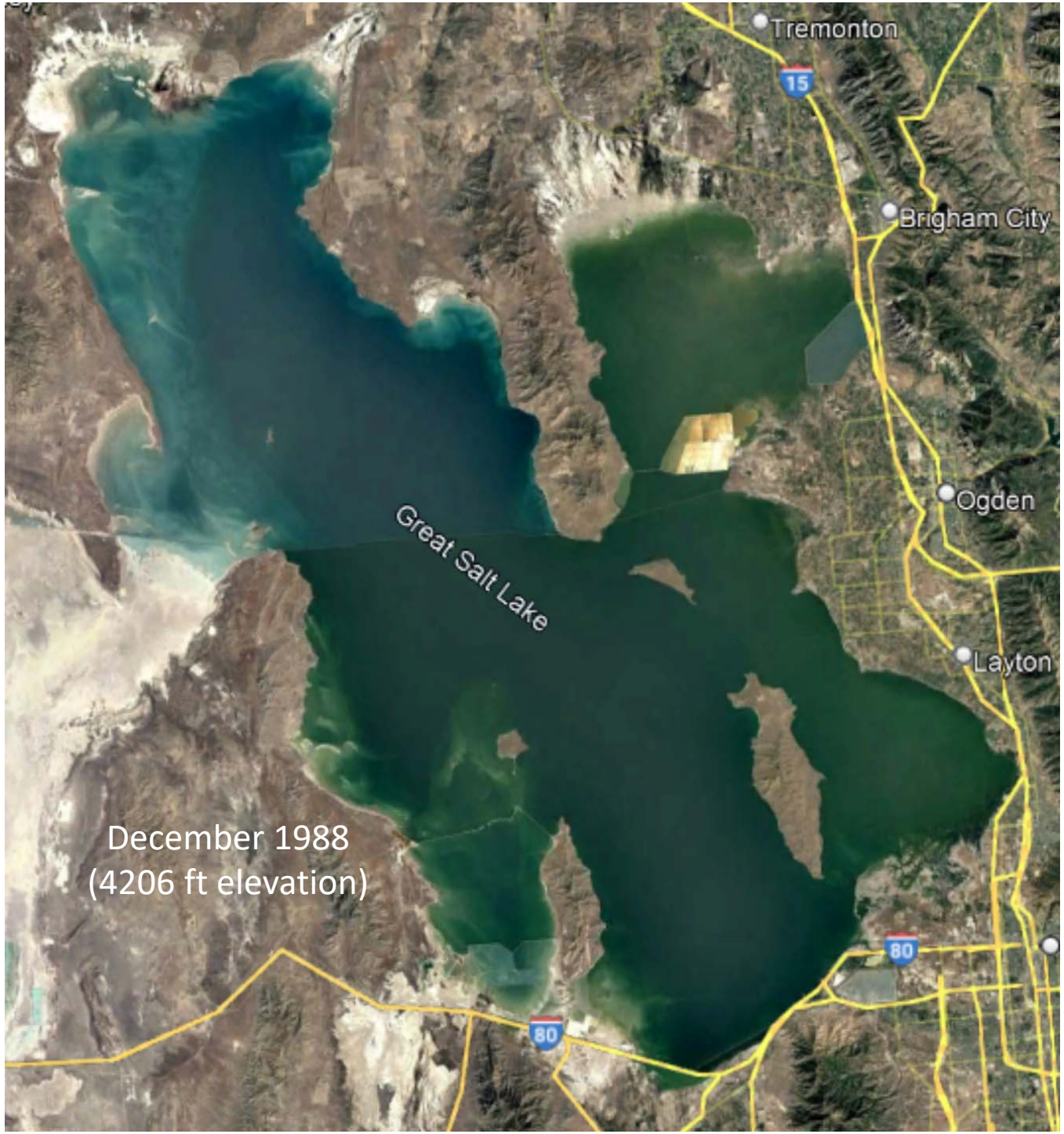


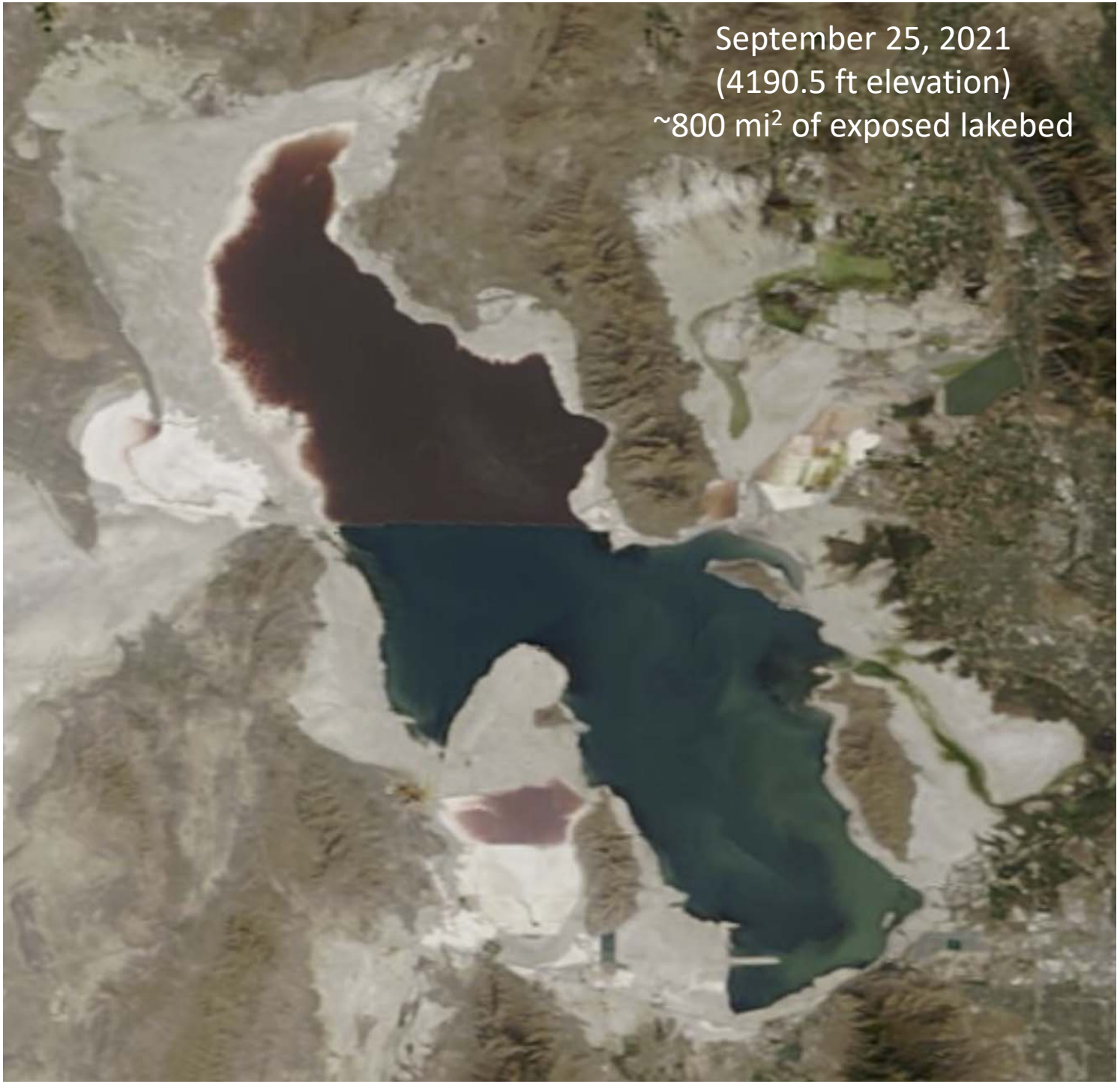
Linkages Between Air Quality and the Shrinking Great Salt Lake

Utah Air Quality Board Meeting
February 2, 2022

Dr. Kevin Perry

Associate Professor
Department of Atmospheric Sciences
University of Utah


Tremonton
15
Brigham City
Ogden
Great Salt Lake
Layton
80
80
December 1988
(4206 ft elevation)

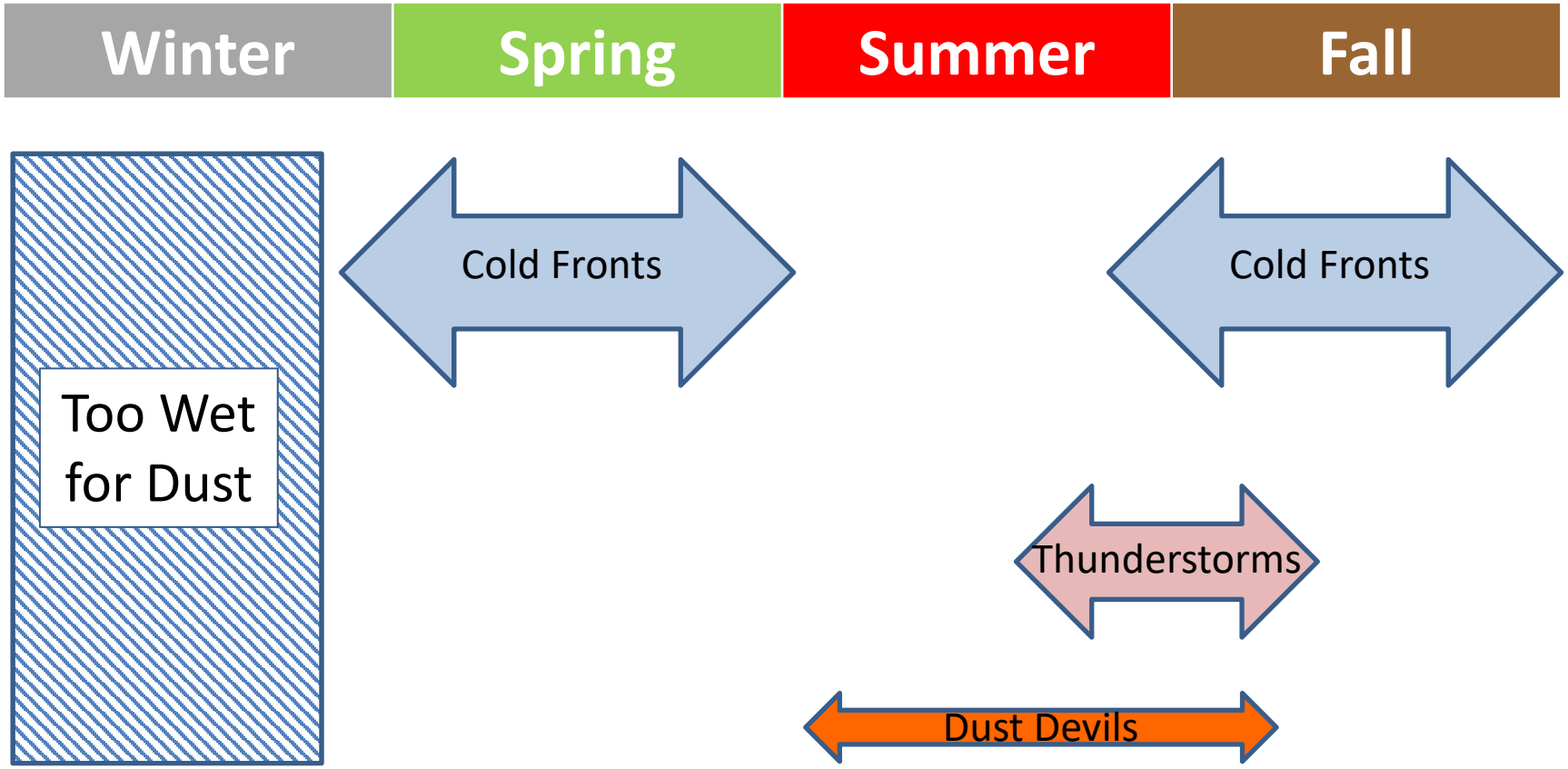

September 25, 2021
(4190.5 ft elevation)
~800 mi2 of exposed lakebed

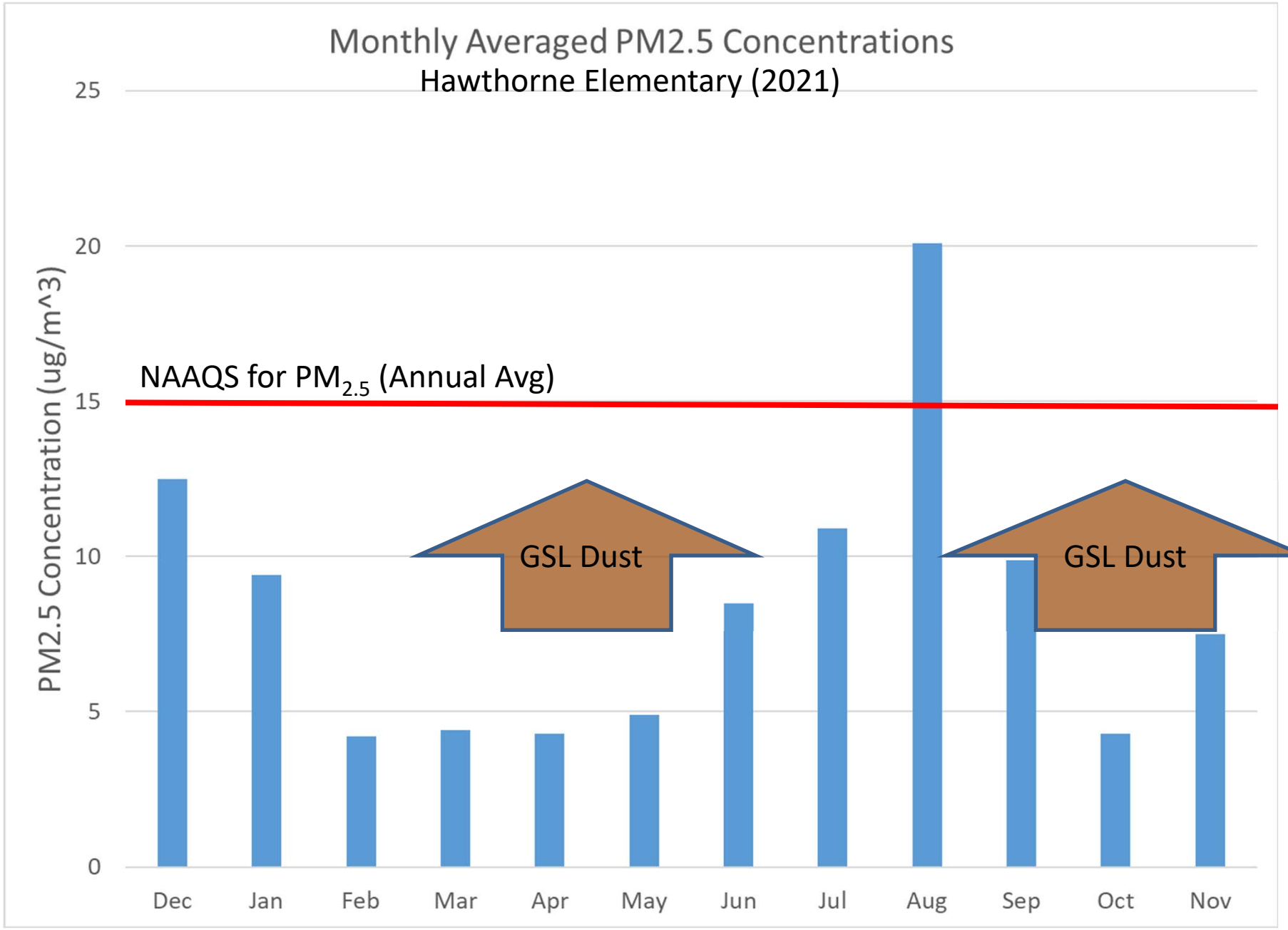
Potential AQ Impacts

1) Exposed playa is a known source of PM_{10} and $PM_{2.5}$
   - Visibility reductions
   - Potential acute health impacts


WBB West 2016-11-16 14:39:59
Dust Generated from the GSL by a Cold-Frontal Passage
(11/16/2016)

Seasonality of GSL Dust Emission




Monthly Averaged PM2.5 Concentrations
Hawthorne Elementary (2021)
PM2.5 Concentration (ug/m^3)
25
20
15
10
5
0
NAAQS for PM2.5 (Annual Avg)
GSL Dust
GSL Dust
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov

GSL Dust Study Goals
(2016-2018)

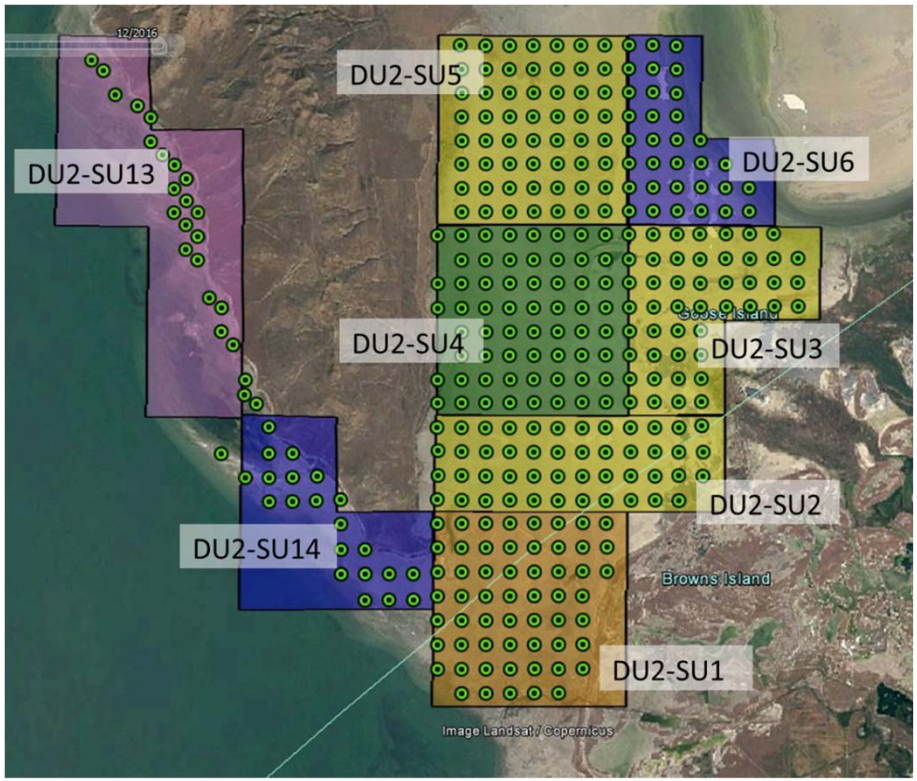
- Identify GSL dust source regions (i.e., hot spots)
- Estimate how fluctuating lake levels might impact future dust production from the GSL
- Determine if the PM_{10} dust from the GSL contains heavy metals which might pose a threat to human health

"hot topics"

Utah Division of Facilities Construction and Management

Soil Sampling Methodology

- Pre-planned, gridded patterns were used for the entire lakebed
- Grid spacing was nominally 500 m
- Surface crust characteristics were documented at > 5000 locations
- Surface soil samples from all grid points within a subunit were composited into a single bag



Field Work Summary
(June 2016 – August 2018)

- 142 days of soil sampling
- 2,300 miles bicycled
- 757 mi^2 of exposed lakebed sampled
- 5,245 soil samples/surface crust observations

Surface Crust Types

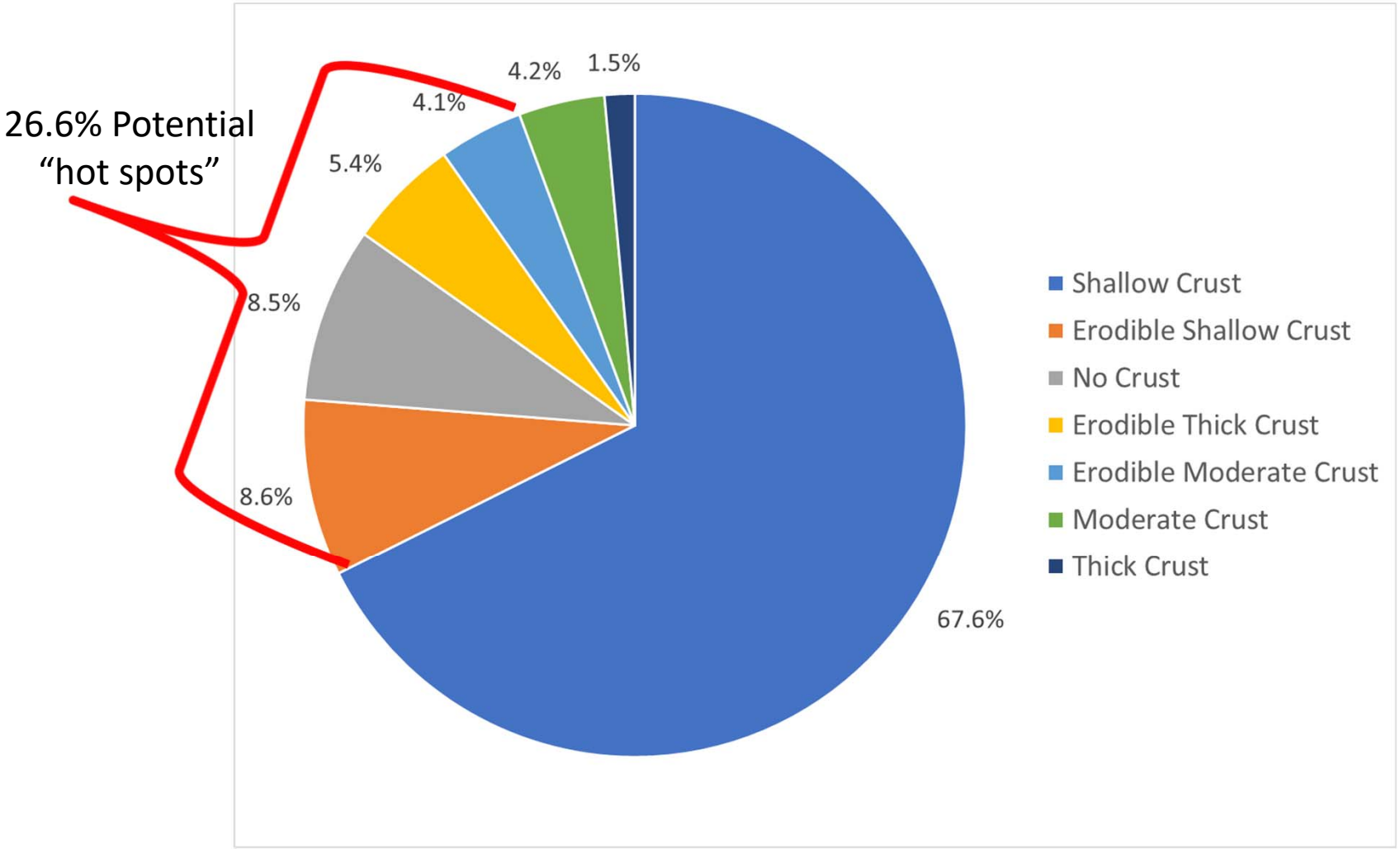
Thick (> 1cm) – 7%

Moderate (0.5 – 1.0 cm) – 8%

Shallow (< 0.5 cm) – 76%

No Crust – 9%

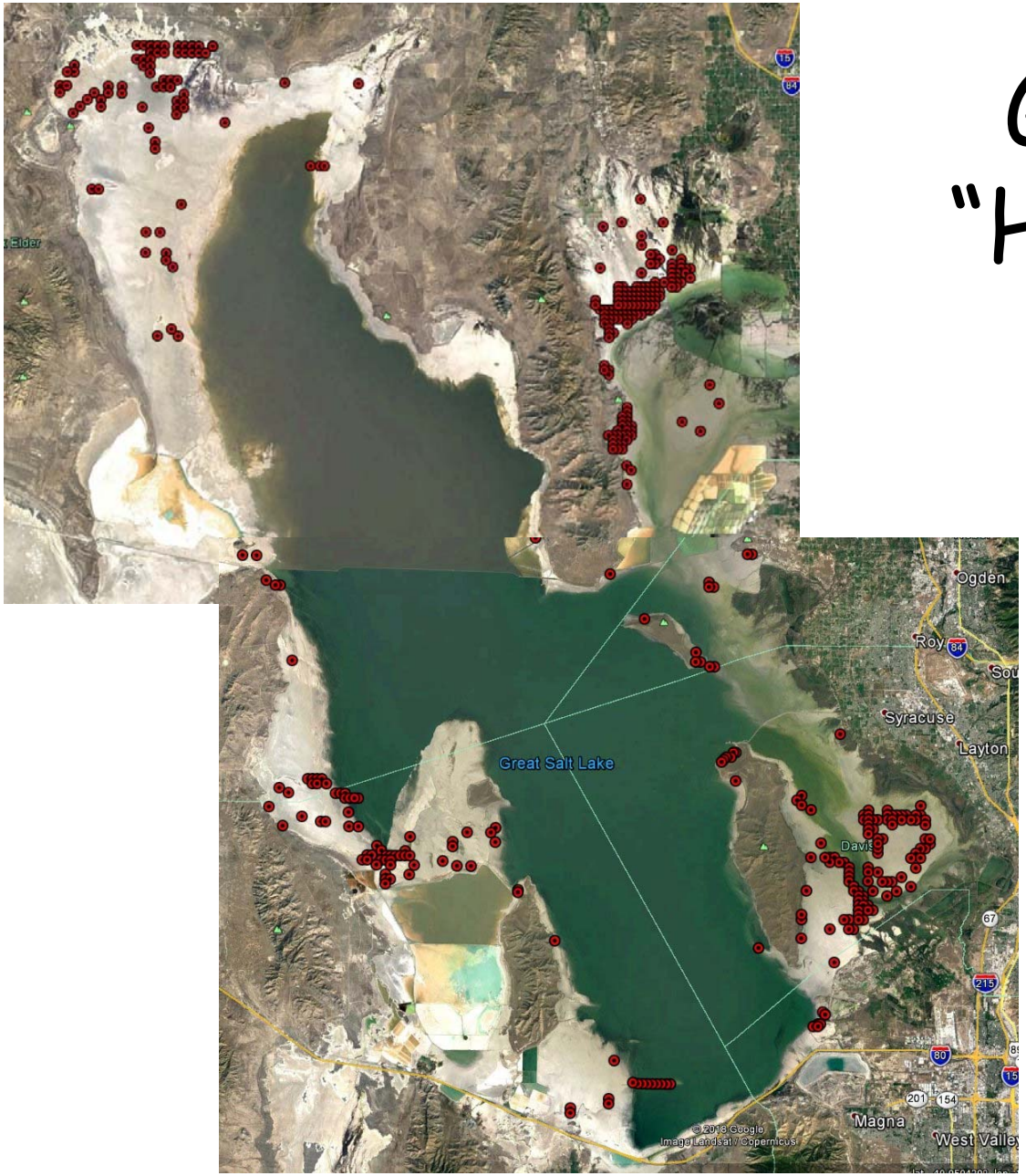
Surface Crust Summary



Dust "Hot Spot" Criteria

- Erodible crust or no crust
- Little or no vegetation
- Presence of silt and clay (small particles)

GSL Dust "Hot Spots"



Dust "Hot Spot" Summary

- Dust "hot spots" have been located and exist in all four quadrants of the lake
- Only 9% of the exposed GSL lakebed currently generates dust plumes
- Erosion of the surface crust will eventually lead to more dust production

It is very important to protect the fragile surface crust on the GSL lakebed

Project Goals

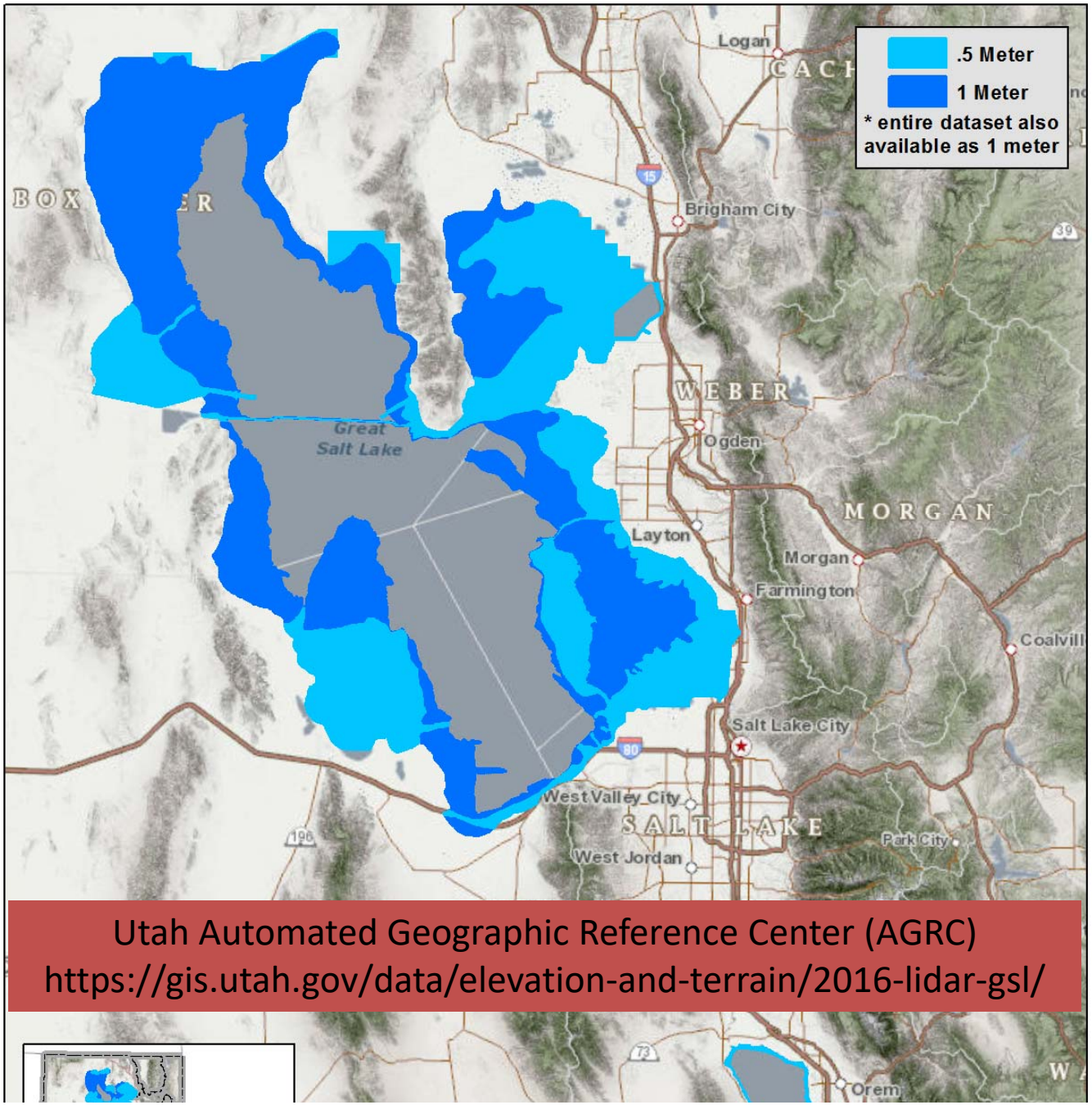
- Identify GSL dust source regions (i.e., hot spots)
- Estimate how fluctuating lake levels might impact future dust production from the GSL
- Determine if the PM_{10} dust from the GSL contains heavy metals which might pose a threat to human health

UTAH DNR NATURAL RESOURCES

"hot topics"

Utah Division of Facilities Construction and Management

Great Salt Lake & Utah Lake LiDAR 2016

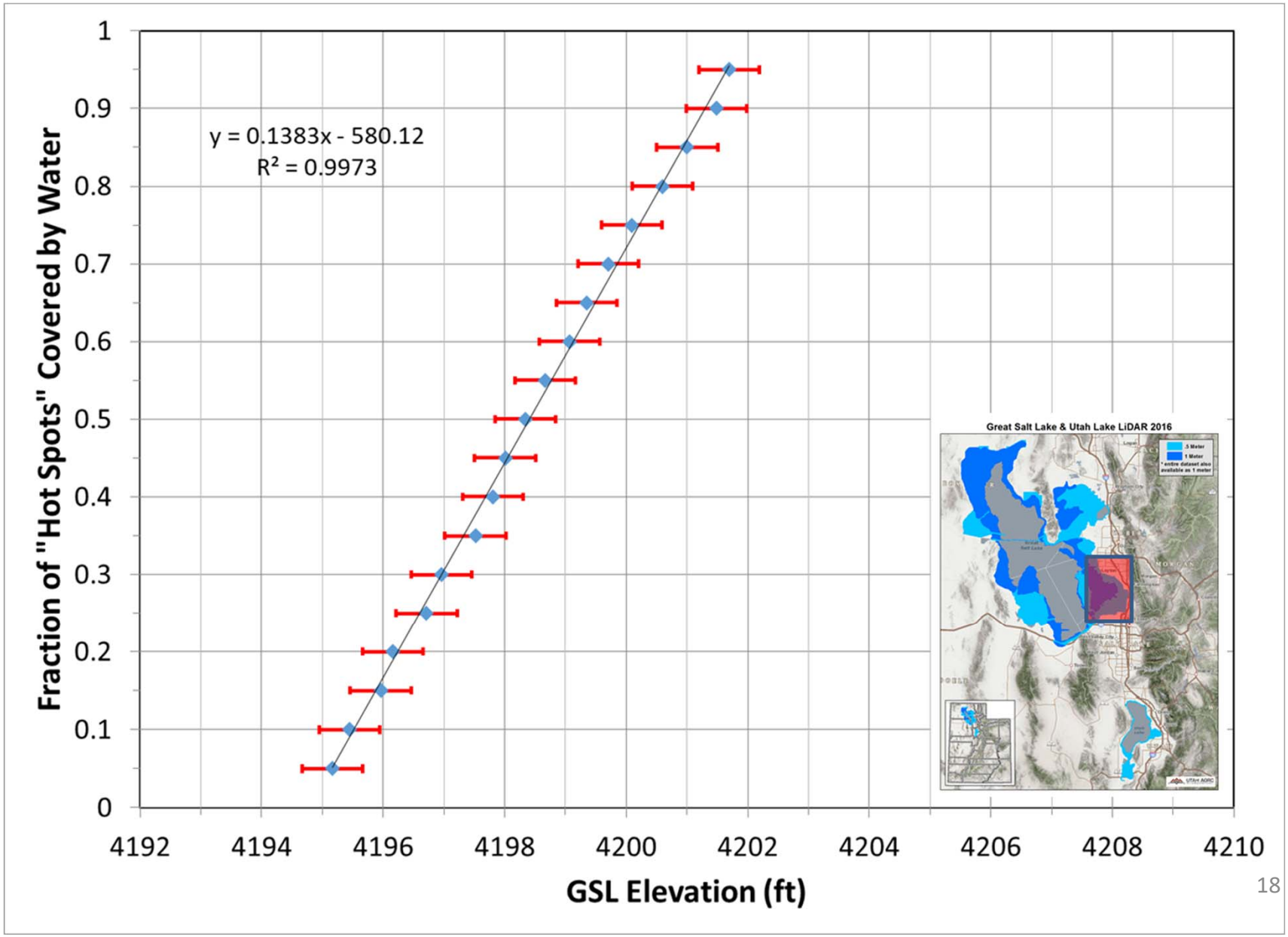


Utah Automated Geographic Reference Center (AGRC)
https://gis.utah.gov/data/elevation-and-terrain/2016-lidar-gsl/

A LiDAR Digital Elevation Model (DEM) was used to determine how lake elevation changes will impact the number of exposed "hot spots"

Data acquired by the Utah Geological Survey and the Utah Division of Forestry, Fire, and State Lands

Farmington Bay Dust "Hot Spots"



Impact of Lake Level on Dust Production

- The number of dust "hot spots" varies linearly with lake elevation
- The number of dust "hot spots" will increase in Gilbert Bay if lake elevation continues to decline
- Farmington Bay is the easiest area to mitigate

Quadrant	50% Mitigation Lake Level (feet)	80% Mitigation Lake Level (feet)	Slope (%/foot)
Farmington Bay	4198	4200	13.5
Bear River Bay	4204	4206.5	12.1
Gilbert Bay	4200	4202.5	12.5
Gunnison Bay	4203	4207.5	6.4

Unknowns (PM_{10} and $PM_{2.5}$)

- How frequent are the dust events?
- How often do the dust events exceed the NAAQS?
- How do dust exposures vary along the Wasatch Front?
- What are the soil moisture and wind velocity thresholds for dust production?
- Which dust “hot spots” are most emissive and why?

Potential AQ Impacts

1) Exposed playa is a known source of PM_{10} and $PM_{2.5}$
   - Reduced visibility
   - Potential acute health impacts

2) Exposed playa is also a potential source of hazardous air pollutants including:
   - Heavy metals
   - Biological hazards
   - Dioxins
   - Hexachlorobenzene (HCB)
   - Polychlorinated biphenyls

EPA Superfund Site (US Magnesium)

Project Goals

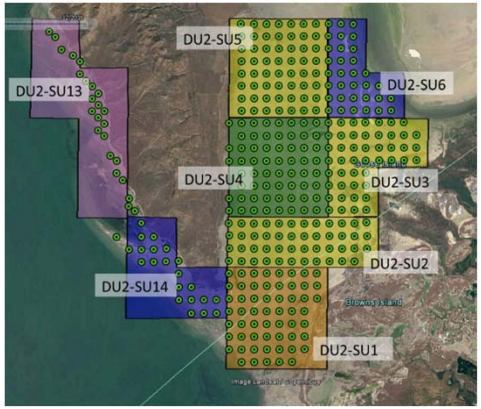
- Identify GSL dust source regions (i.e., hot spots)
- Estimate how fluctuating lake levels might impact future dust production from the GSL
- Determine if the PM_{10} dust from the GSL contains heavy metals which might pose a threat to human health

UTAH DNR NATURAL RESOURCES

"hot topics"

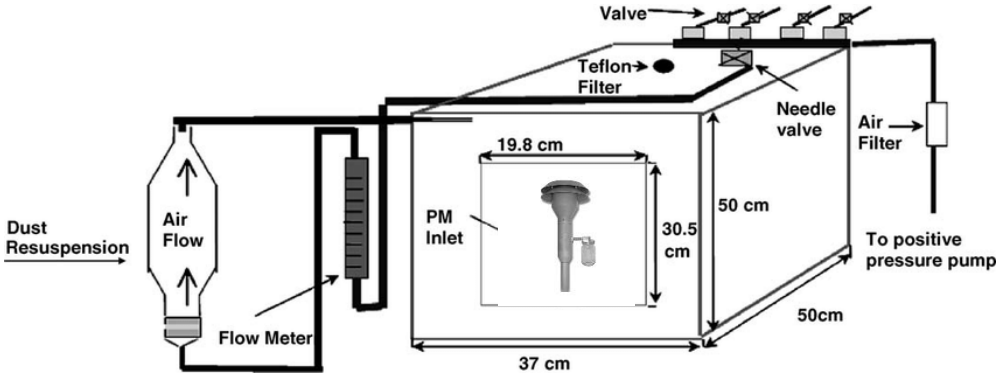
Utah Division of Facilities Construction and Management

Soil Sampling/Analysis Methodology

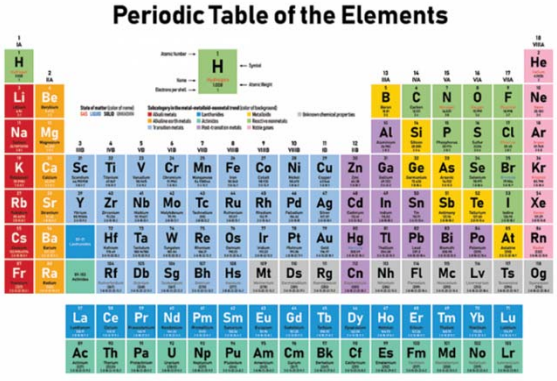


Incremental Sampling Methodology

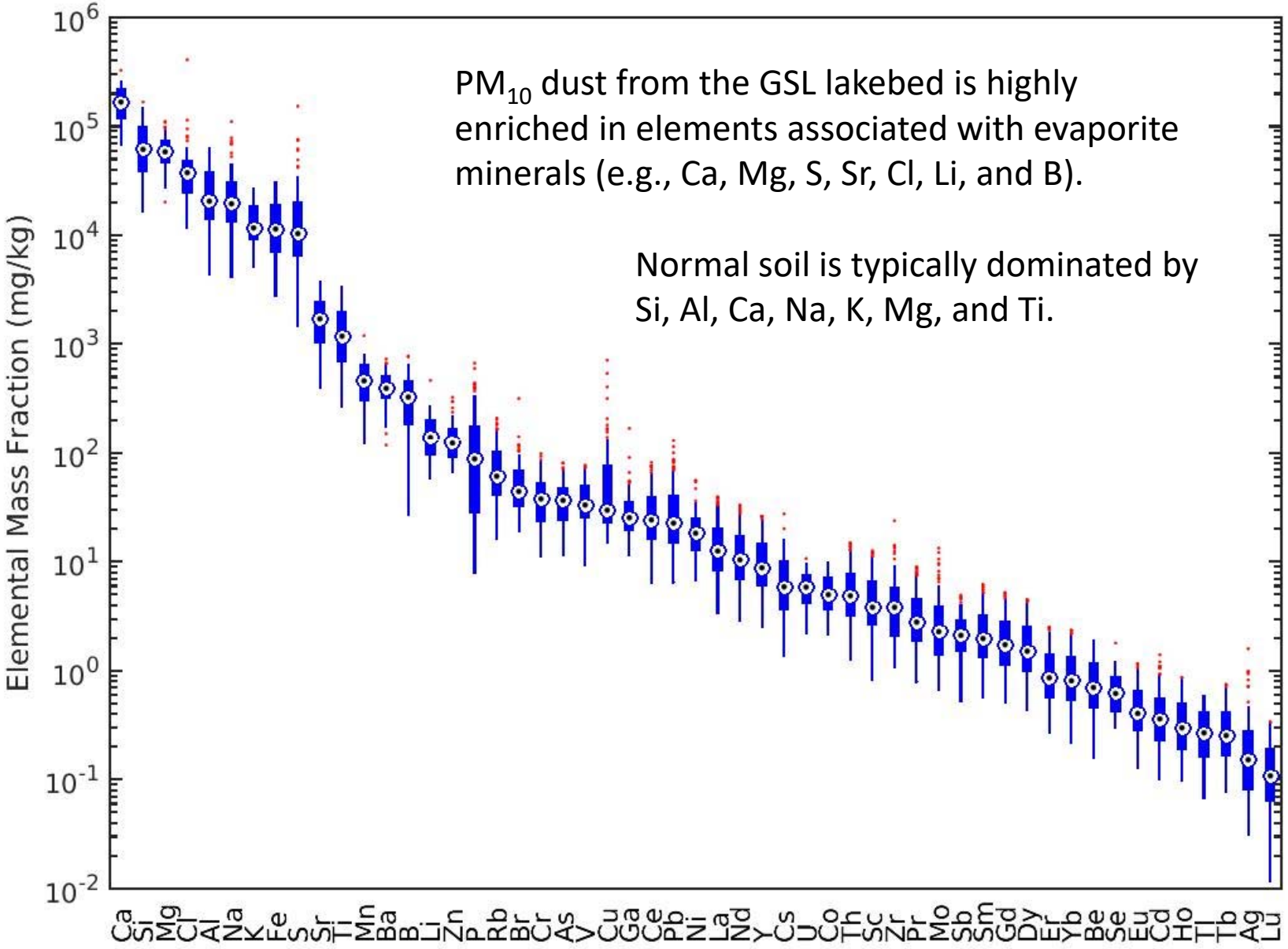
Drying/Sieving



Dust Resuspension/Filtration

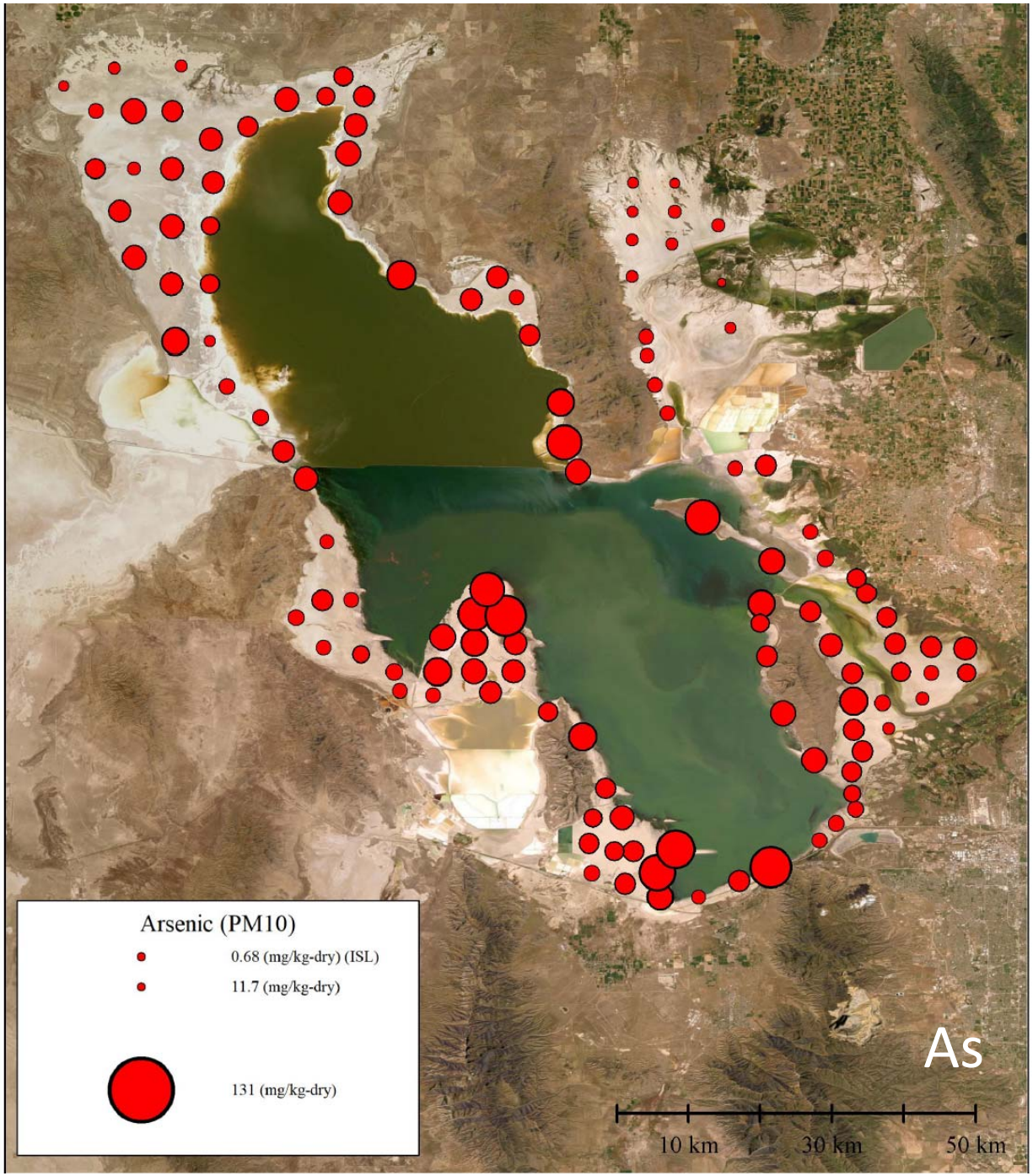


ICP-MS and S-XRF Analysis (53 elements)


PM10 dust from the GSL lakebed is highly enriched in elements associated with evaporite minerals (e.g., Ca, Mg, S, Sr, Cl, Li, and B).
Normal soil is typically dominated by Si, Al, Ca, Na, K, Mg, and Ti.
Elemental Mass Fraction (mg/kg)
10^6
10^5
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
Ca Si Mg Cl Al Na K Fe S Sr Ti Mn Ba B Li Zn P Rb Br Cr As Y Cu Ga Ce Pb Ni La Nd Y Cs U Co Th Sc Zr Pr Mo Sb Sm Gd Dy Er Yb Be Se Eu Cd Ho Tl Tb Ag Lu

Regional Screening Levels

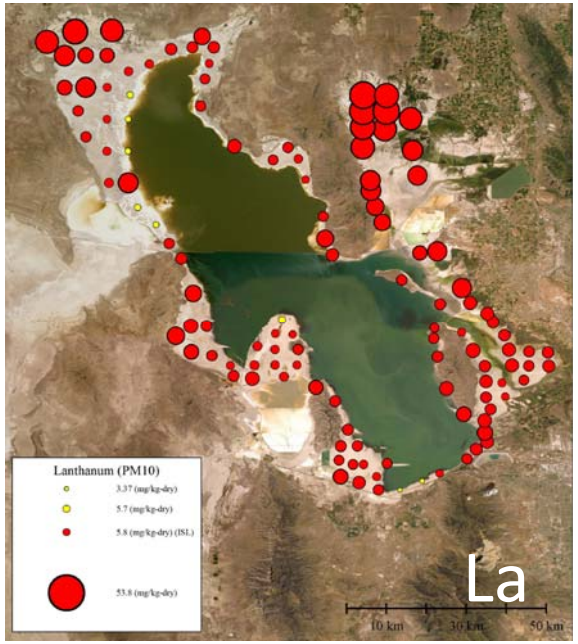
- The EPA uses **Regional Screening Levels (RSLs)** to determine whether observed concentrations of Air Toxics could pose potential harm in industrial or residential settings
- Toxicity data and assumed exposure patterns are used to establish the RSLs
  - Concentrations < RSLs are considered safe
  - Concentrations > RSLs are potentially unsafe

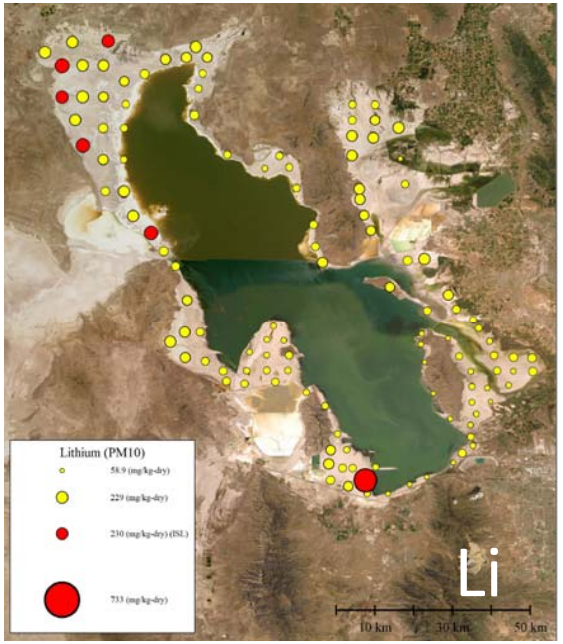


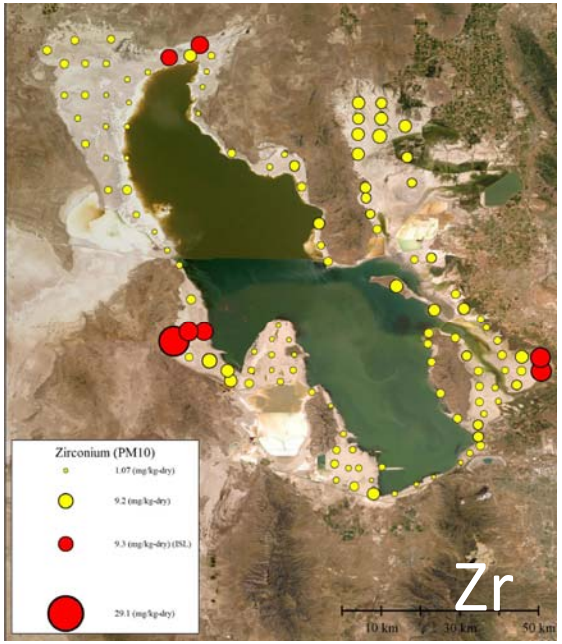
Every **Arsenic** measurement was greater than the RSLs established by the EPA for residential **and** industrial exposures.

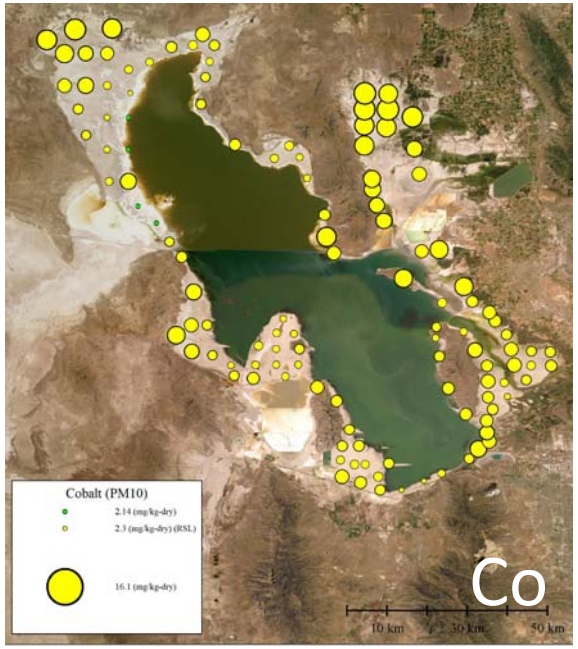
Thus, chronic exposure to GSL dust could lead to increased risk of:

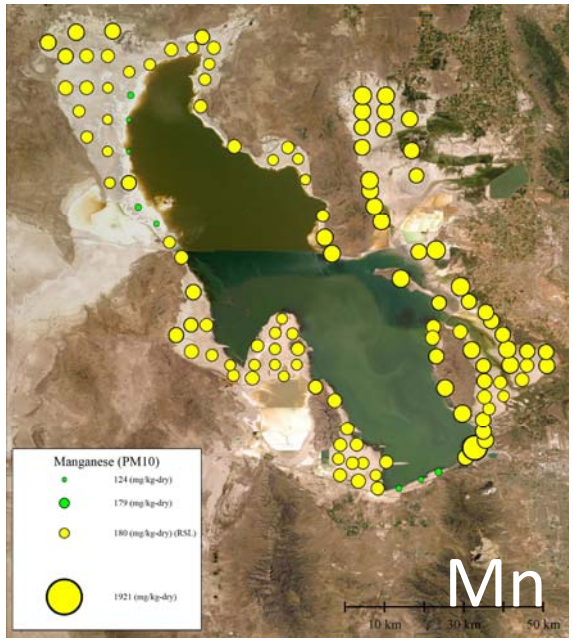
- Lung cancer
- Skin cancer
- Bladder cancer
- Cardiovascular disease
- Diabetes

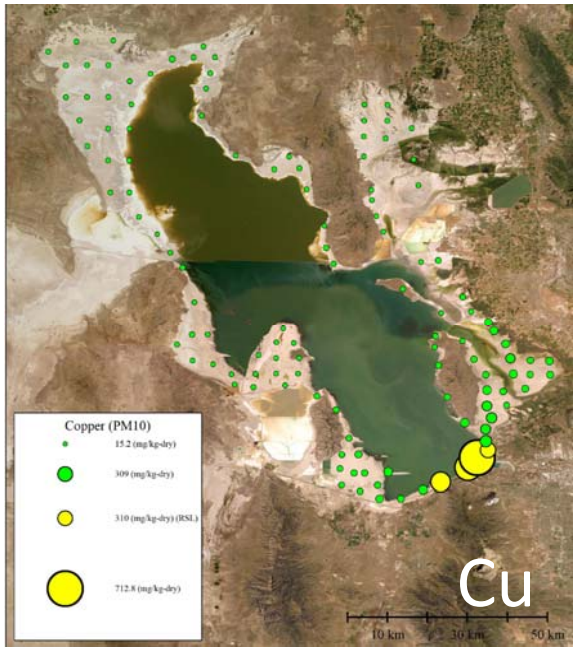

Lanthanum (PM10)
3.37 (mg/kg-dry)
5.7 (mg/kg-dry)
5.8 (mg/kg-dry) (ISL)
53.8 (mg/kg-dry)
La
10 km
30 km
50 km


Lithium (PM10)
58.9 (mg/kg-dry)
229 (mg/kg-dry)
230 (mg/kg-dry) (ISL)
733 (mg/kg-dry)
Li
10 km
30 km
50 km


Zirconium (PM10)
1.07 (mg/kg-dry)
9.2 (mg/kg-dry)
9.3 (mg/kg-dry) (ISL)
29.1 (mg/kg-dry)
Zr
10 km
30 km
50 km


Cobalt (PM10)
2.14 (mg/kg-dry)
2.3 (mg/kg-dry) (RSL)
16.1 (mg/kg-dry)
Co
10 km
30 km
50 km


Manganese (PM10)
124 (mg/kg-dry)
179 (mg/kg-dry)
180 (mg/kg-dry) (RSL)
1921 (mg/kg-dry)
Mn
10 km
30 km
50 km


Copper (PM10)
15.2 (mg/kg-dry)
309 (mg/kg-dry)
310 (mg/kg-dry) (RSL)
712.8 (mg/kg-dry)
Cu
10 km
30 km
50 km

Potential Health Impacts of GSL Dust

- Dust from the GSL poses both acute and chronic health risks
  - Acute health risks due to PM_{10} (and possibly $PM_{2.5}$) exposure
  - Chronic health risks due to exposure to some heavy metals
- All residents of northern Utah are likely to be exposed to GSL dust

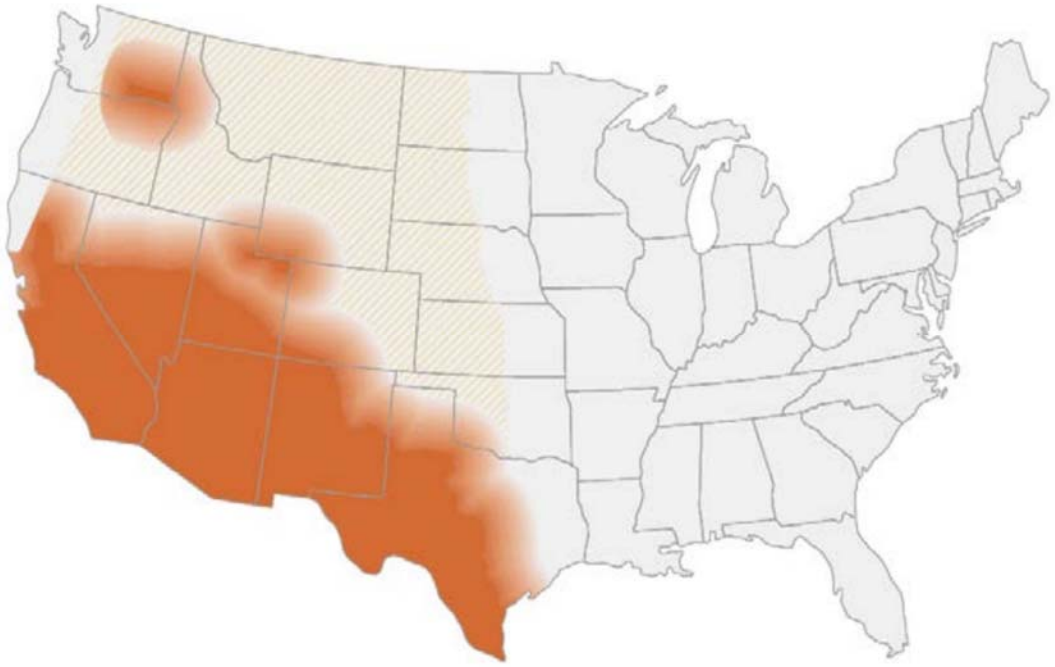
Potential AQ Impacts

1) Exposed playa is a known source of PM_{10} and $PM_{2.5}$
   - Reduced visibility
   - Potential acute health impacts
2) Exposed playa is also a potential source of hazardous air pollutants including:
   - Heavy metals
   - Biological hazards
   - Dioxins
   - Hexachlorobenzene (HCB)
   - Polychlorinated biphenyls

EPA Superfund Site (US Magnesium)

Potential Biological Hazards

- Risks are mostly unknown and unquantified
- Valley Fever (dust borne fungus) infections are increasing in Utah and could soon expand to northern Utah



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EPA Superfund Site (US Magnesium)

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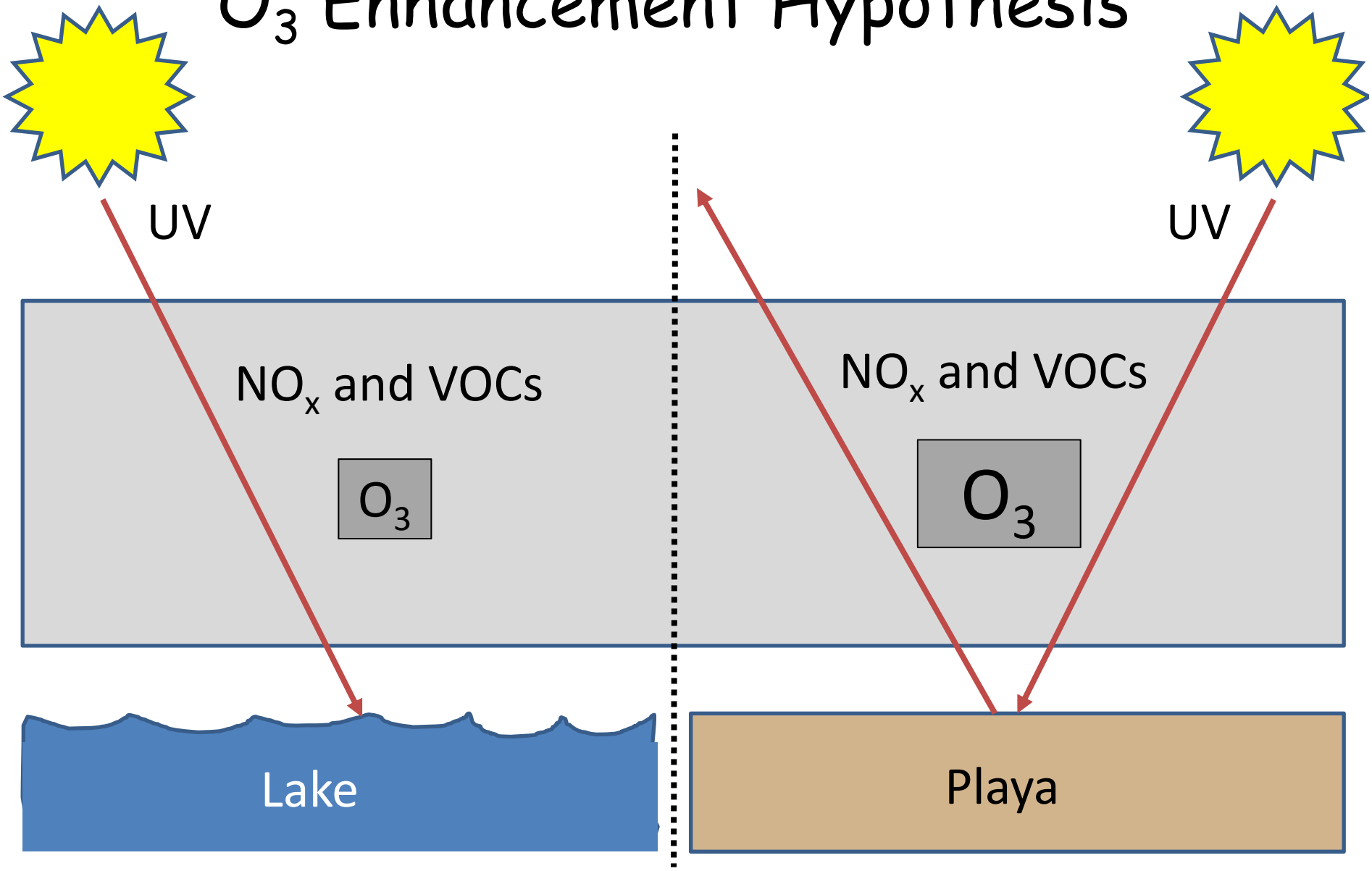
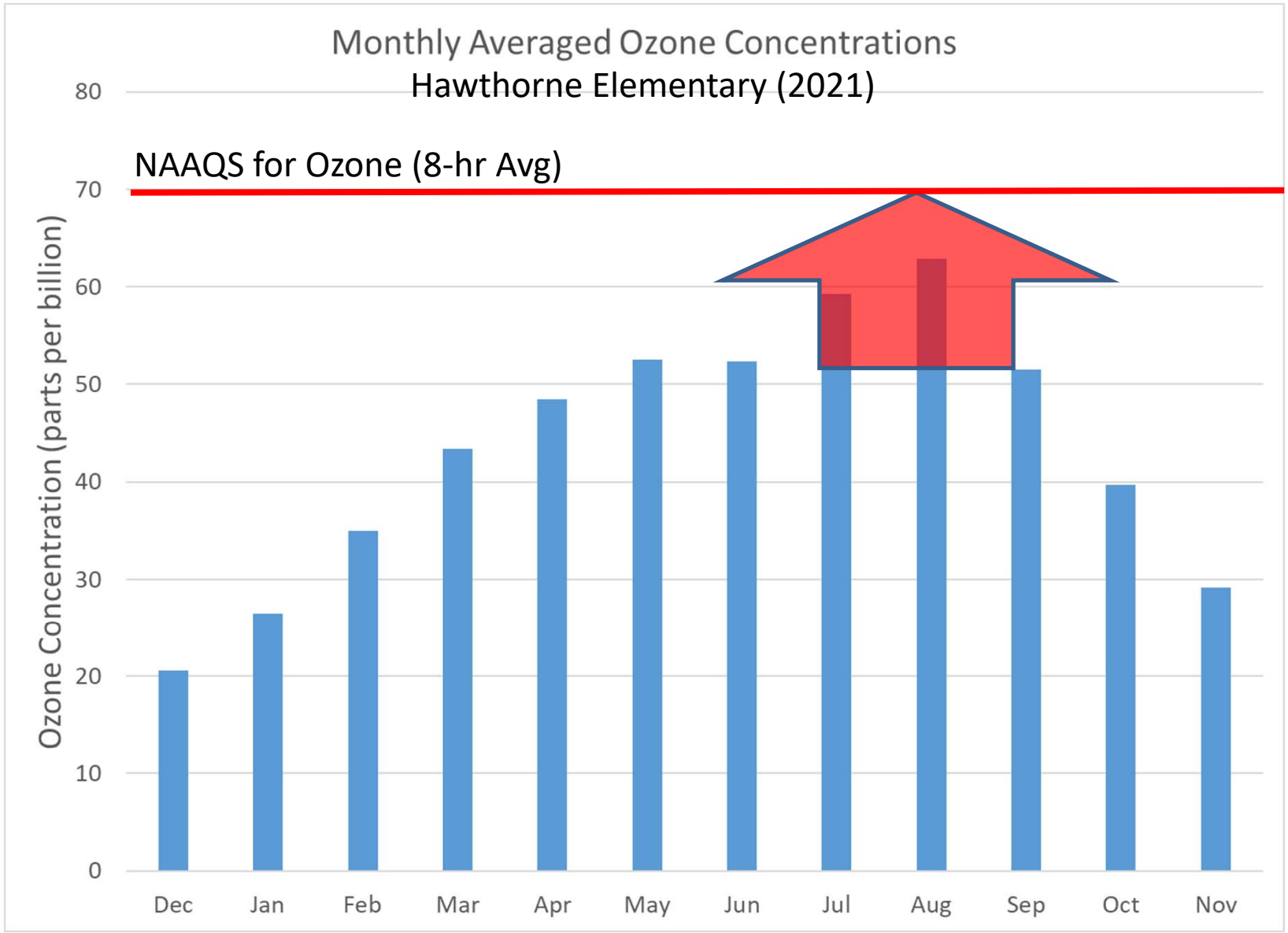
   - Dioxins
   - Hexachlorobenzene (HCB)
   - Polychlorinated biphenyls (PCBs)

   } EPA Superfund Site (US Magnesium)

3) Exposed playa is hypothesized to increase O_3 production due to increased actinic flux

O_3 Enhancement Hypothesis




Monthly Averaged Ozone Concentrations
Hawthorne Elementary (2021)
NAAQS for Ozone (8-hr Avg)
Ozone Concentration (parts per billion)
80
70
60
50
40
30
20
10
0
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov

Potential Air-Quality-Related Economic Impacts

- UT Division of Air Quality has made significant progress in working with stakeholders to reduce criteria air pollutant concentrations
- Current state implementation plan does not address air quality impacts of a shrinking GSL

Failure to address the future of the GSL could threaten our hard-earned air quality improvements for PM_{10}, $PM_{2.5}$, and Ozone **resulting in costly, federally-mandated, mitigation**

A Special Thanks

To all the public and private land owners/managers who granted permission to cross their property to access the lakebed

- 388th Fighter Wing Hill Air Force Base
- Antelope Island State Park
- Compass Minerals
- Deseret Land and Livestock Promontory Ranch
- Morton Salt
- National Audubon Society
- Rio Tinto Kennecott Utah Copper LLC
- Union Pacific Railroad
- U.S. Fish and Wildlife Service Bear River Migratory Bird Refuge
- U.S. Magnesium LLC.
- Utah Department of Natural Resources
- Utah Division of Wildlife Resources

University of Utah Energy Assessments - Stepwise Program Overview

stepwise

Program Overview

Air Quality Board

February 2, 2022

stepwise

Our mission: help Dominion Energy Utah natural gas customers adopt energy-efficient strategies that are better for them, their employees, and Utah's air quality.

Supported by:
HB 107 Sustainable Transportation & Energy Plan

Our Professional Team

Kody Powell, Ph.D.
Assistant Professor and Director of the IIAC

Kerry Kelly, Ph.D.
Associate Professor, Chemical Engineering

Julie Sieving, P.E., C.E.M.
Co-Director of the IIAC and Director of StepWise

Moriah Henning
StepWise Program Engineer

David Pershing, Ph.D.
Distinguished Professor, Chemical Engineering

StepWise and Air Quality

Maps Source: Utah DEQ Non-Attainment Area Locator Tool (link)

STEP Funding Aligns with State Priorities

Improving energy efficiency generally leads to reduced air emissions.

"Encourage energy efficiency audits for small industrial and commercial facilities."

"Foremost is to defend Utah's commerce and industry, .. by encouraging investment in efforts and technologies that cut emissions, raise energy efficiency… convert waste to renewable natural gas."

StepWise Overview

- NO-COST energy and air quality assessments
- Identification of high impact projects
- Professional and student involvement from the Industrial Assessment Center

Expanding Customer Base

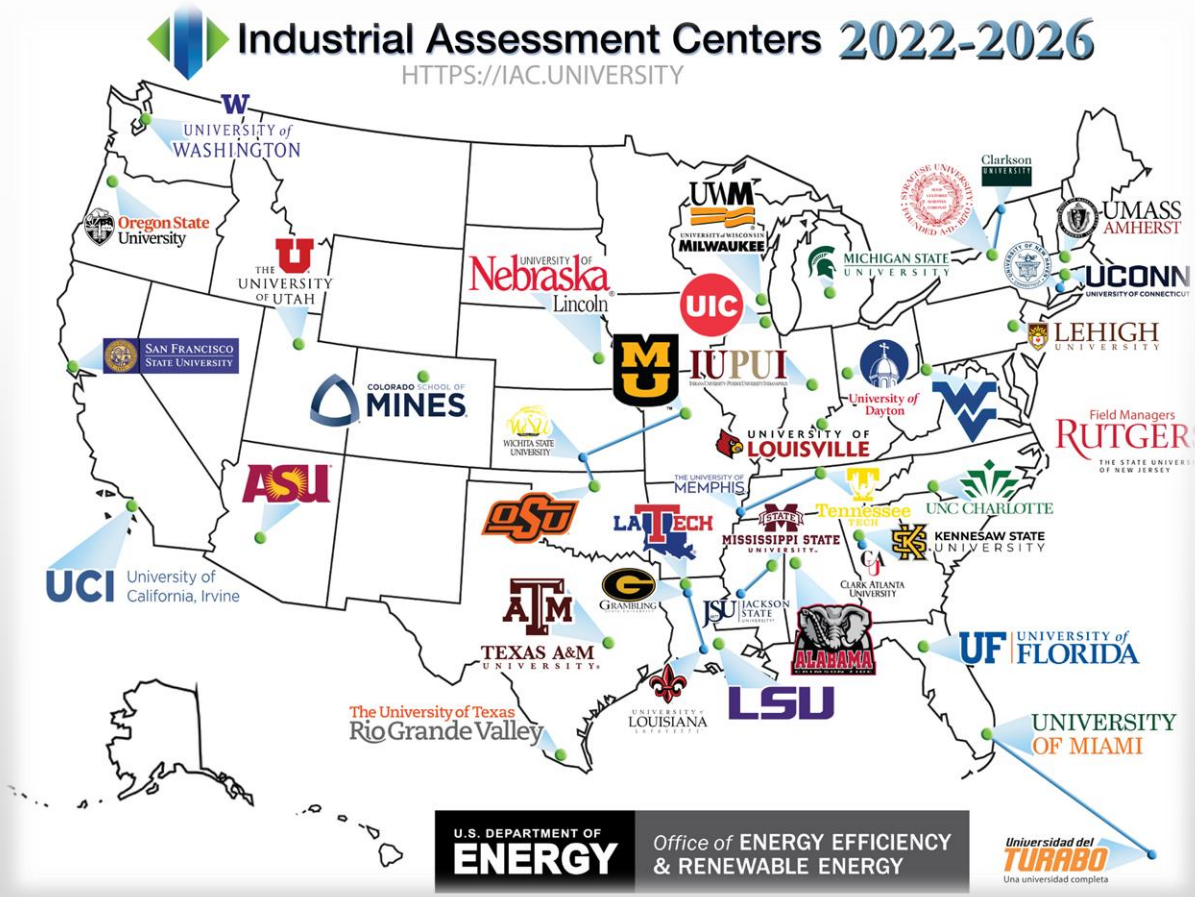
Who we serve

- Manufacturers
- Municipalities
- Commercial – institutions, hospitals, offices
- School districts

StepWise Leverages Existing Resources and Expertise

INTERMOUNTAIN INDUSTRIAL ASSESSMENT CENTER

- Intermountain Industrial Assessment Center (IIAC) is hosted by the University of Utah
- DOE-funded program
- IIAC services only available to manufacturing sector
- StepWise expands services to additional customer types



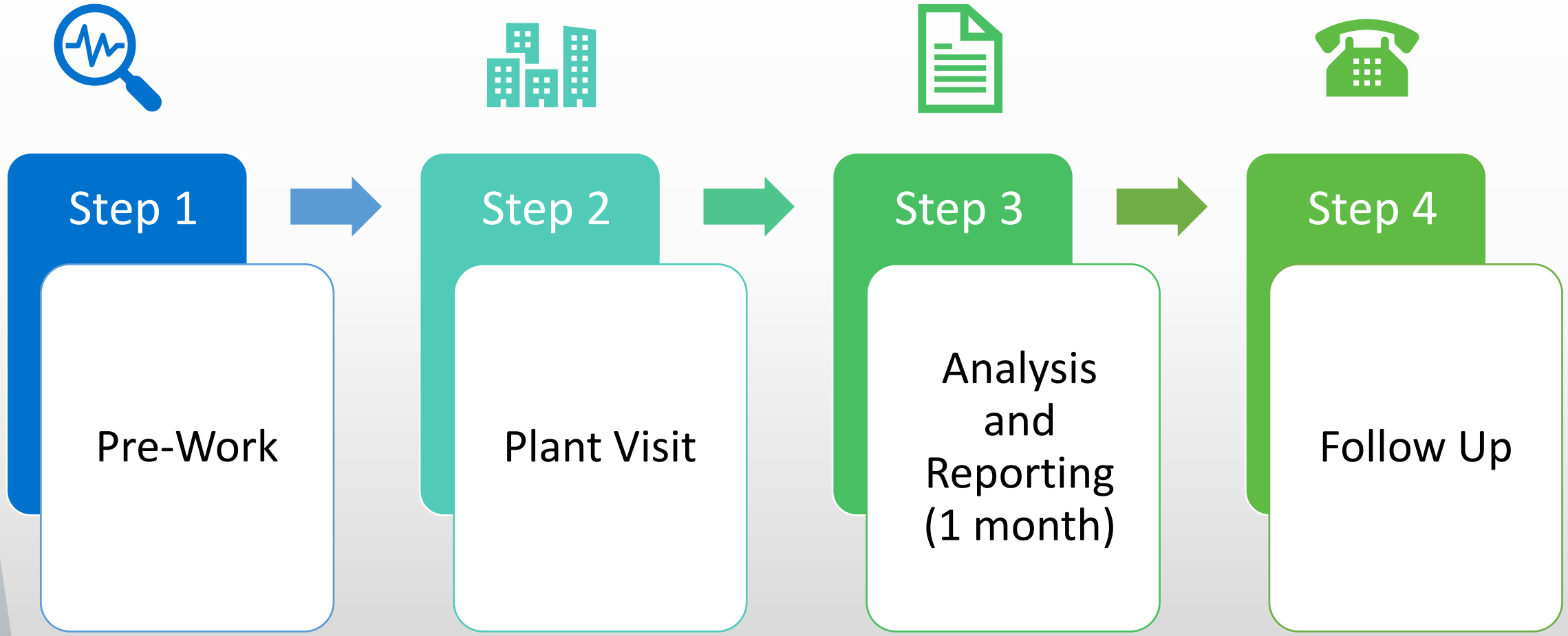
Student Involvement:

- 21 undergraduate students and 7 PhD students
- Paid position
- On the job training and in-class instruction (steam, electricity, energy management, etc)

Student Benefits:

- Resume builder
- Real life engineering job experience
- StepWise/IIAC students make 10% more than peers post-graduation

Assessment Process



Emission Estimates

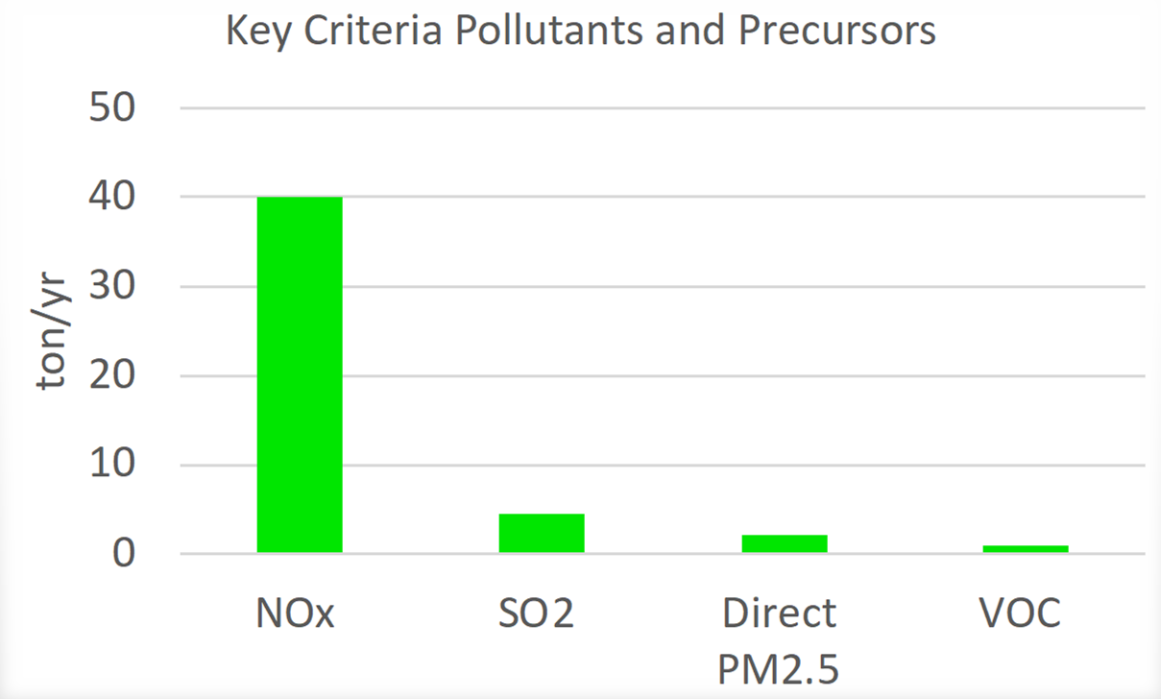
Electricity

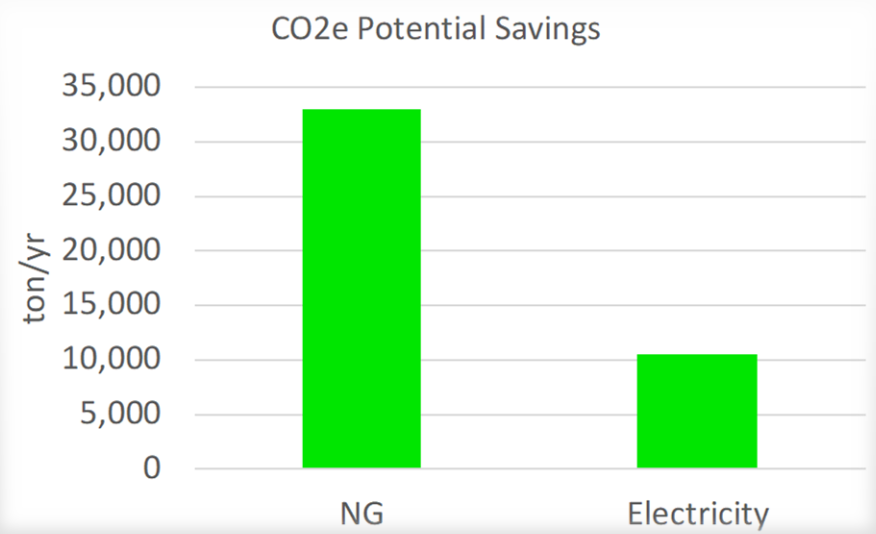
- E-grid northwest region
- AVERT northwest
- VOC and NH_3 from NEI

Natural gas

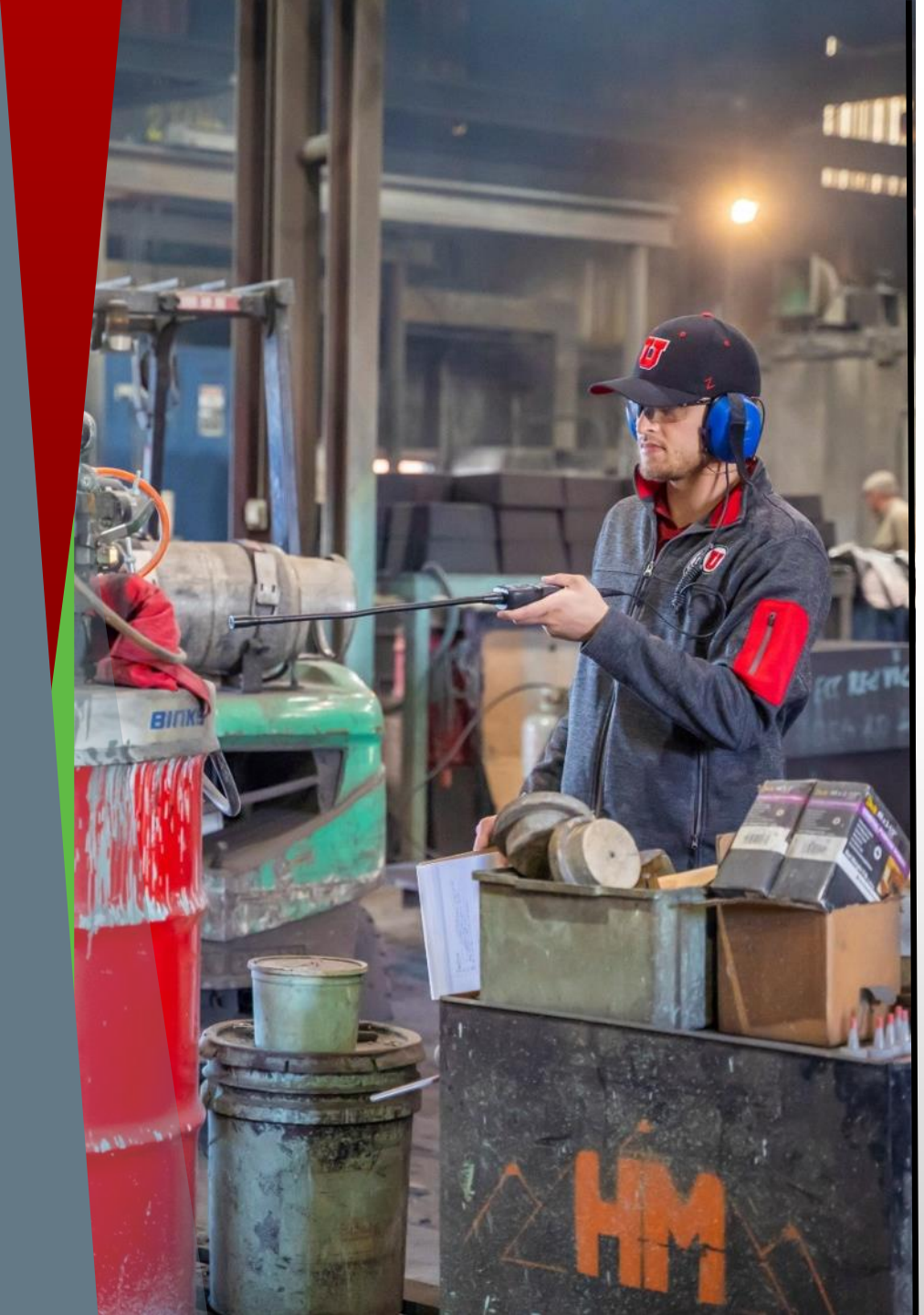
- AP-42 emission factors for combustion
- Published emission factors for other sources (i.e., biogas flares)

Potential Emission Savings





For 16 assessments completed in non-attainment areas 2021



Energy Savings Results

Potential savings identified in 2021

- Total cost savings identified- $2,900,000
- Average 15% of facility natural gas savings
- Projects average 6-year simple payback

Equivalent to **7,460** Utah homes' NG

Equivalent to **1,236** Utah homes' electricity

stepwise

Contact us today to learn more about the program:

801-581-4847
moriah.henning@utah.edu
kerry.kelly@utah.edu

Air Toxics

State of Utah
SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQA-524-21

M E M O R A N D U M

TO: Air Quality Board

FROM: Bryce C. Bird, Executive Secretary

DATE: December 6, 2021

SUBJECT: Air Toxics, Lead-Based Paint, and Asbestos (ATLAS) Section Compliance Activities – November 2021

Asbestos Demolition/Renovation NESHAP Inspections	15
Asbestos AHERA Inspections	14
Asbestos State Rules Only Inspections	1
Asbestos Notification Forms Accepted	151
Asbestos Telephone Calls	298
Asbestos Individuals Certifications Approved	88
Asbestos Company Certifications/Re-Certifications	3/10
Asbestos Alternate Work Practices Approved	5
Lead-Based Paint (LBP) Inspections	0
LBP Notification Forms Approved	0
LBP Telephone Calls	43
LBP Letters Prepared and Mailed	1
LBP Courses Reviewed/Approved	0
LBP Course Audits	0
LBP Individual Certifications Approved	15

LBP Firm Certifications	11
Notices of Violation Sent	0
Compliance Advisories Sent	5
Warning Letters Sent	6
Settlement Agreements Finalized	1
Penalties Agreed to:	
AbateX Environmental Services	$1,125.00

State of Utah
SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQA-006-22

M E M O R A N D U M

TO: Air Quality Board

FROM: Bryce C. Bird, Executive Secretary

DATE: January 4, 2022

SUBJECT: Air Toxics, Lead-Based Paint, and Asbestos (ATLAS) Section Compliance Activities – December 2021

Asbestos Demolition/Renovation NESHAP Inspections	10
Asbestos AHERA Inspections	8
Asbestos State Rules Only Inspections	1
Asbestos Notification Forms Accepted	114
Asbestos Telephone Calls	220
Asbestos Individuals Certifications Approved	81
Asbestos Company Certifications/Re-Certifications	2/9
Asbestos Alternate Work Practices Approved	1
Lead-Based Paint (LBP) Inspections	0
LBP Notification Forms Approved	0
LBP Telephone Calls	44
LBP Letters Prepared and Mailed	0
LBP Courses Reviewed/Approved	0
LBP Course Audits	0
LBP Individual Certifications Approved	11

LBP Firm Certifications	15
Notices of Violation Sent	0
Compliance Advisories Sent	0
Warning Letters Sent	5
Settlement Agreements Finalized	0
Penalties Agreed to:	

Compliance

State of Utah
SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQC-1559-21

M E M O R A N D U M

TO: Air Quality Board

FROM: Bryce C. Bird, Executive Secretary

DATE: December 13, 2021

SUBJECT: Compliance Activities – November 2021

ACTIVITIES:

Activity	Monthly Total	36-Month Average
Inspections	32	52
On-Site Stack Test & CEM Audits	5	3
Stack Test & RATA Report Reviews	37	31
Emission Report Reviews	14	13
Temporary Relocation Request Reviews	5	7
Fugitive Dust Control Plan Reviews	120	144
Soil Remediation Report Reviews	0	2
Open Burn Permits Issued	7	139
Miscellaneous Inspections[1]	22	20
Complaints Received	8	14
Wood Burning Complaints Received	2	0
Breakdown Reports Received	0	1
Compliance Actions Resulting from a Breakdown	0	0
VOC Inspections	0	0
Warning Letters Issued	1	1
Notices of Violation Issued	2	0
Compliance Advisories Issued	5	5
No Further Action Letters Issued	2	2
Settlement Agreements Reached	0	2
Penalties Assessed	0	$25,874.34

[1]Miscellaneous inspections include, e.g., surveillance, complaint, on-site training, dust patrol, smoke patrol, open burning, etc.

UNRESOLVED NOTICES OF VIOLATION:

Party	Date Issued
US Magnesium (in litigation)	08/27/2015
US Magnesium (in litigation)	03/02/2018
EP Energy	03/20/2020
Ovintiv	07/14/2020
CH4 Finley et all	07/24/2020
Crescent Point	07/24/2020
Big West Oil	10/22/2021
Paradox Resources/Four Corners Pipeline	11/05/2021
US Magnesium	11/16/2021

State of Utah
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Lieutenant Governor

Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQC-046-22

M E M O R A N D U M

TO: Air Quality Board

FROM: Bryce C. Bird, Executive Secretary

DATE: January 11, 2022

SUBJECT: Compliance Activities – December 2021

ACTIVITIES:

Activity	Monthly Total	36-Month Average
Inspections	39	52
On-Site Stack Test & CEM Audits	3	4
Stack Test & RATA Report Reviews	43	31
Emission Report Reviews	3	13
Temporary Relocation Request Reviews	1	7
Fugitive Dust Control Plan Reviews	124	144
Soil Remediation Report Reviews	1	2
Open Burn Permits Issued	0	132
Miscellaneous Inspections1	17	20
Complaints Received	7	13
Wood Burning Complaints Received	4	0
Breakdown Reports Received	0	1
Compliance Actions Resulting from a Breakdown	0	0
VOC Inspections	0	0
Warning Letters Issued	1	1
Notices of Violation Issued	0	0
Compliance Advisories Issued	1	5
No Further Action Letters Issued	3	2
Settlement Agreements Reached	1	2
Penalties Assessed	$50,000	$25,816.57

1Miscellaneous inspections include, e.g., surveillance, complaint, on-site training, dust patrol, smoke patrol, open burning, etc.

SETTLEMENT AGREEMENTS:

Party	Amount
EP Energy	$50,000

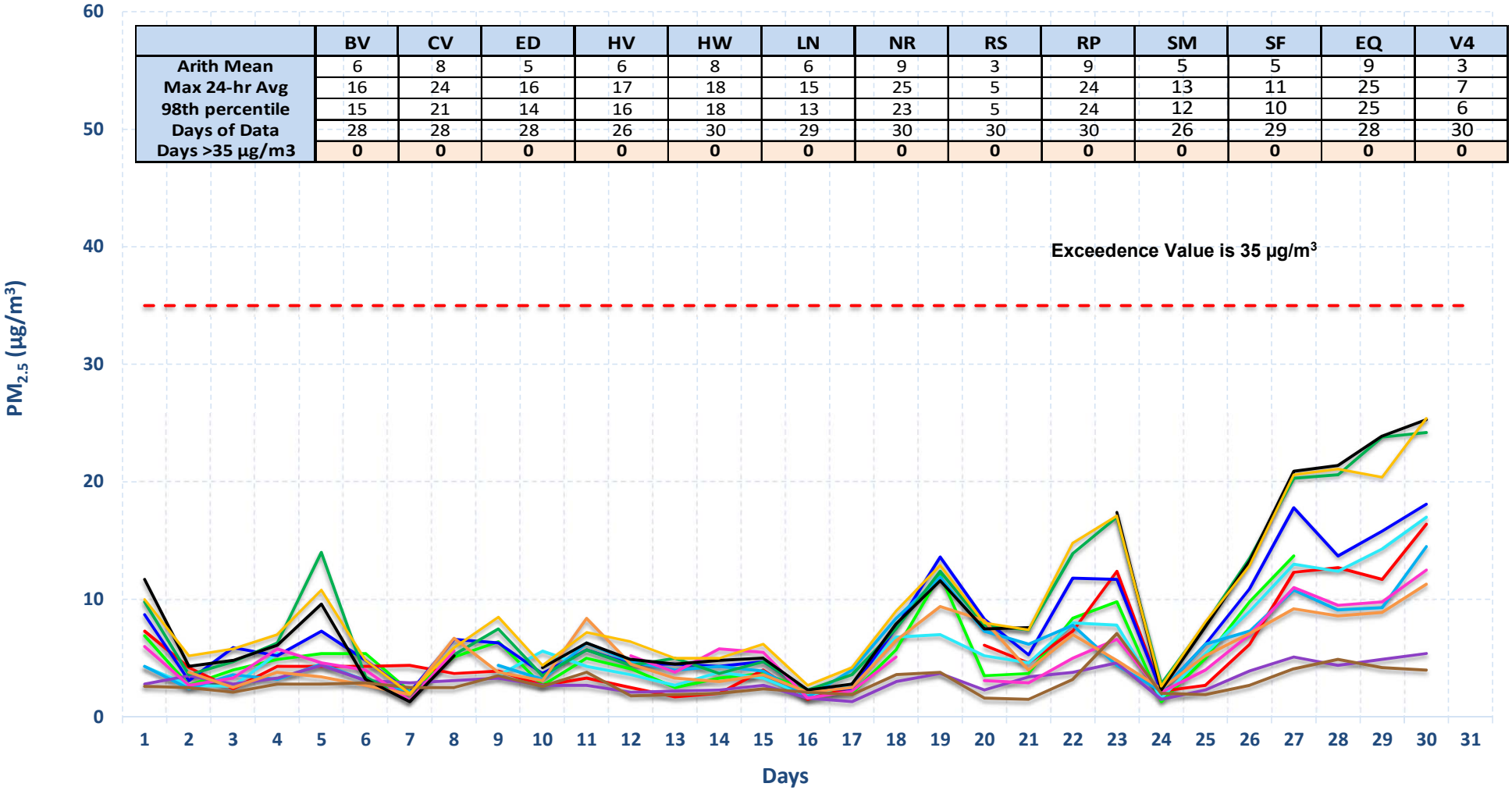
UNRESOLVED NOTICES OF VIOLATION:

Party	Date Issued
US Magnesium (in litigation)	08/27/2015
US Magnesium (in litigation)	03/02/2018
Crescent Point	07/24/2020
CH4 Finley	07/24/2020
Ovintiv	07/14/2020
EP Energy	03/20/2020
Big West Oil	10/22/2021
Paradox Resources/Four Corners Pipeline	11/05/2021
US Magnesium	11/16/2021

Air Monitoring

Utah 24-Hr $PM_{2.5}$ Data November 2021

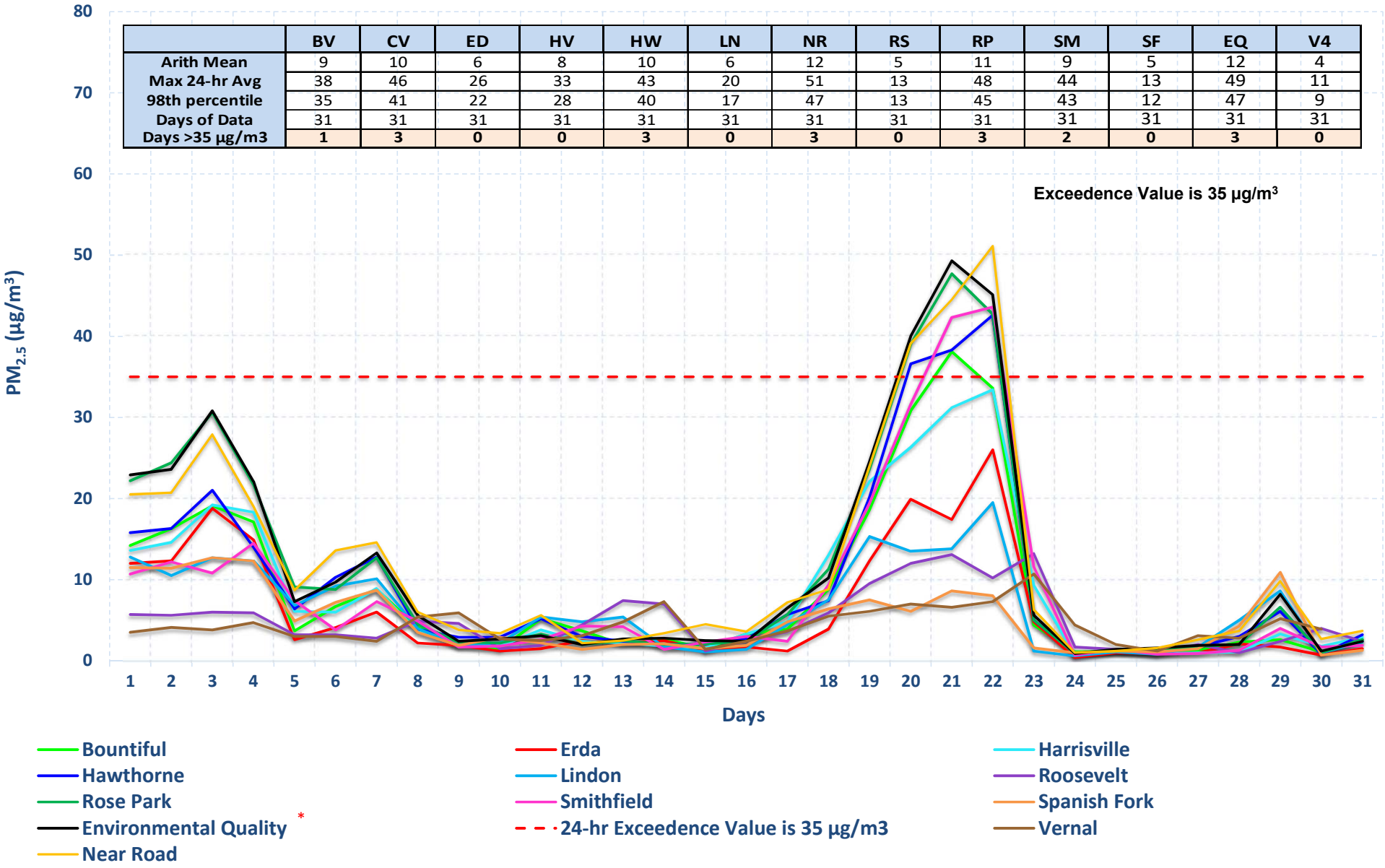
	BV	CV	ED	HV	HW	LN	NR	RS	RP	SM	SF	EQ	V4
Arith Mean	6	8	5	6	8	6	9	3	9	5	5	9	3
Max 24-hr Avg	16	24	16	17	18	15	25	5	24	13	11	25	7
98th percentile	15	21	14	16	18	13	23	5	24	12	10	25	6
Days of Data	28	28	28	26	30	29	30	30	30	26	29	28	30
Days >35 µg/m3	0	0	0	0	0	0	0	0	0	0	0	0	0



* Environmental Quality (**EQ**) previously named Technical Support Center (**TSC**)

Utah 24-Hr $PM_{2.5}$ Data December 2021

	BV	CV	ED	HV	HW	LN	NR	RS	RP	SM	SF	EQ	V4
Arith Mean	9	10	6	8	10	6	12	5	11	9	5	12	4
Max 24-hr Avg	38	46	26	33	43	20	51	13	48	44	13	49	11
98th percentile	35	41	22	28	40	17	47	13	45	43	12	47	9
Days of Data	31	31	31	31	31	31	31	31	31	31	31	31	31
Days >35 µg/m3	1	3	0	0	3	0	3	0	3	2	0	3	0



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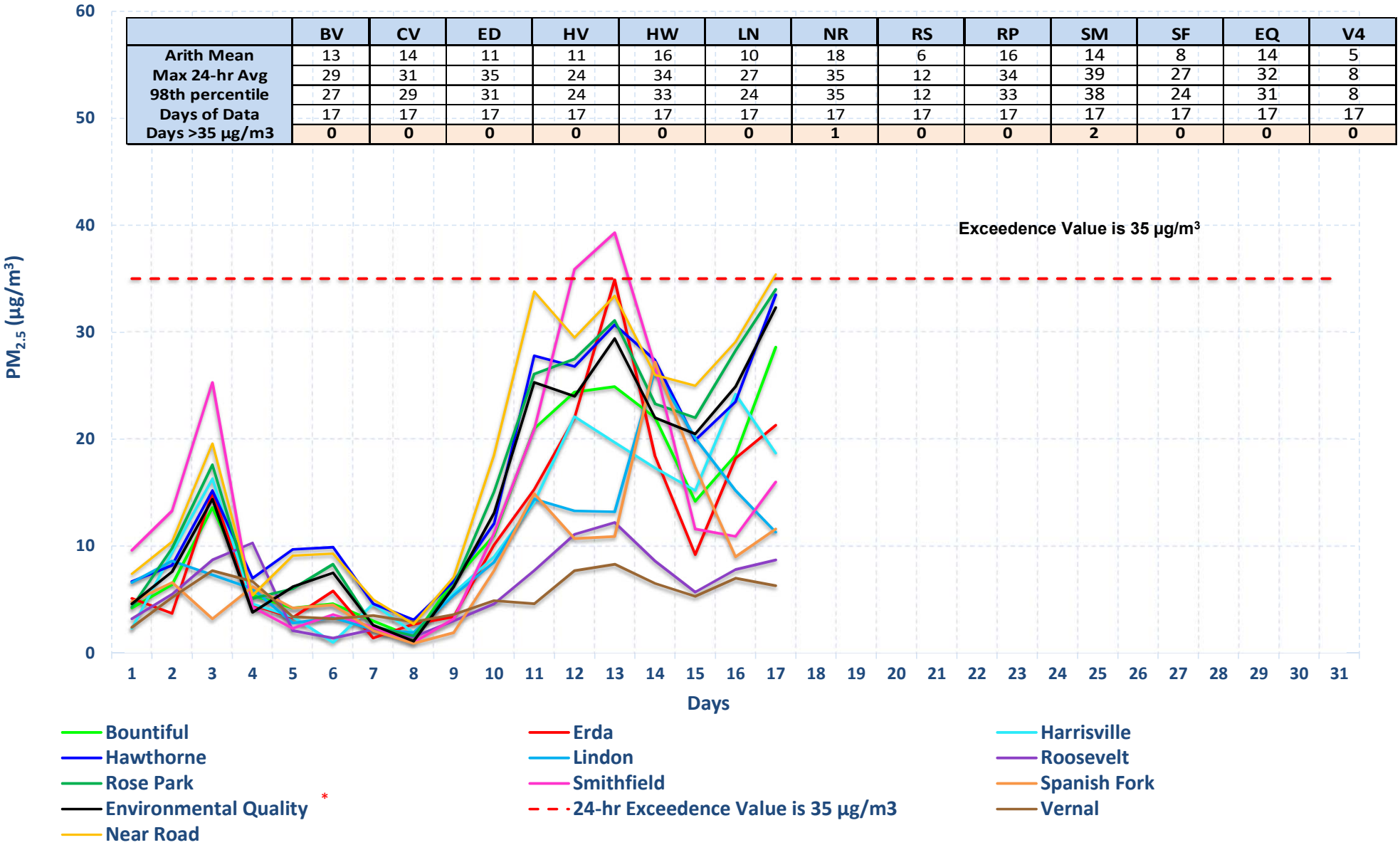
Utah 24-Hr $PM_{2.5}$ Data January 2022

	BV	CV	ED	HV	HW	LN	NR	RS	RP	SM	SF	EQ	V4
Arith Mean	13	14	11	11	16	10	18	6	16	14	8	14	5
Max 24-hr Avg	29	31	35	24	34	27	35	12	34	39	27	32	8
98th percentile	27	29	31	24	33	24	35	12	33	38	24	31	8
Days of Data	17	17	17	17	17	17	17	17	17	17	17	17	17
Days >35 µg/m3	0	0	0	0	0	0	1	0	0	2	0	0	0



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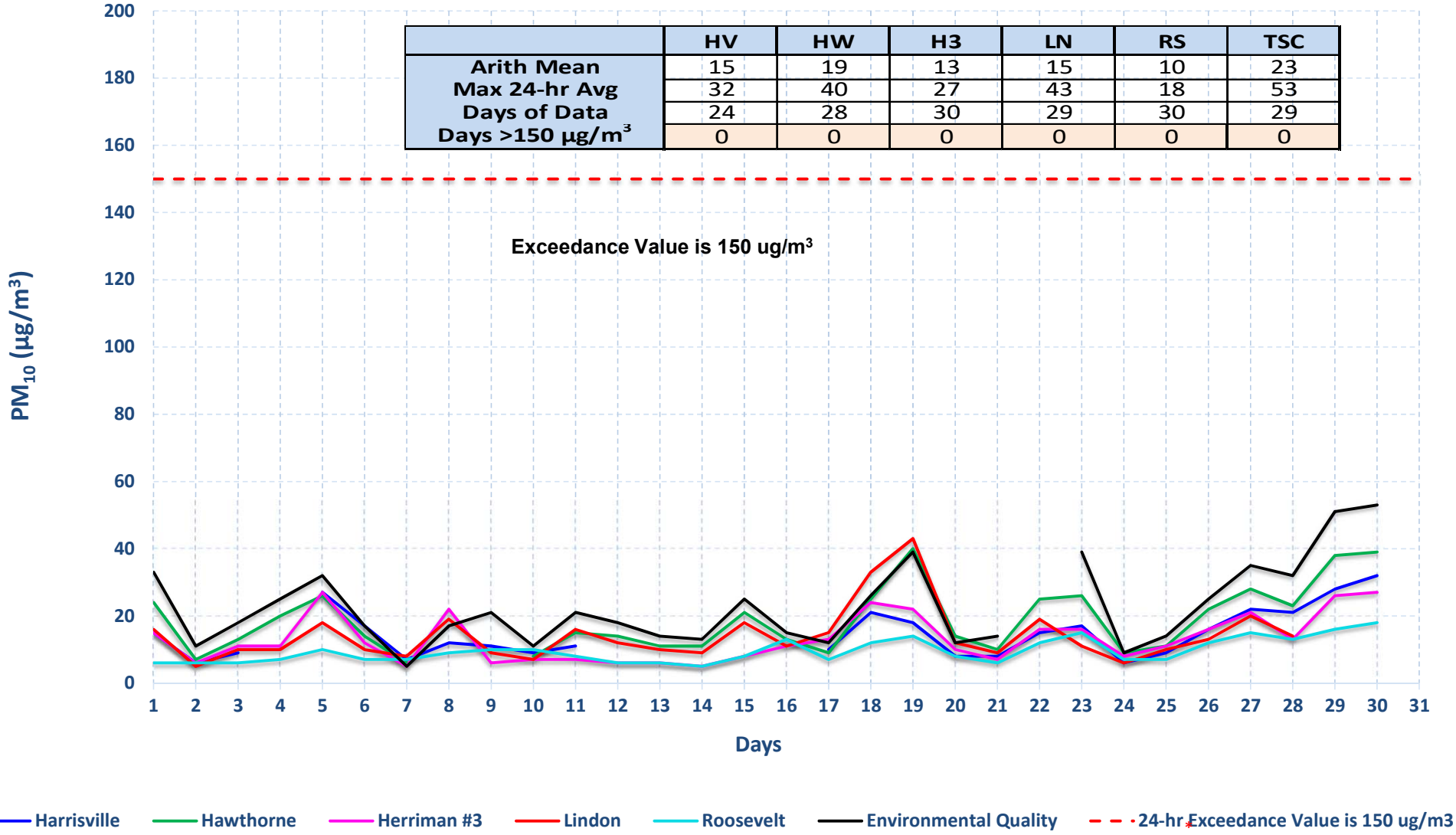
Utah 24-hr PM_{10} Data November 2021

	HV	HW	H3	LN	RS	TSC
Arith Mean	15	19	13	15	10	23
Max 24-hr Avg	32	40	27	43	18	53
Days of Data	24	28	30	29	30	29
Days >150 µg/m³	0	0	0	0	0	0



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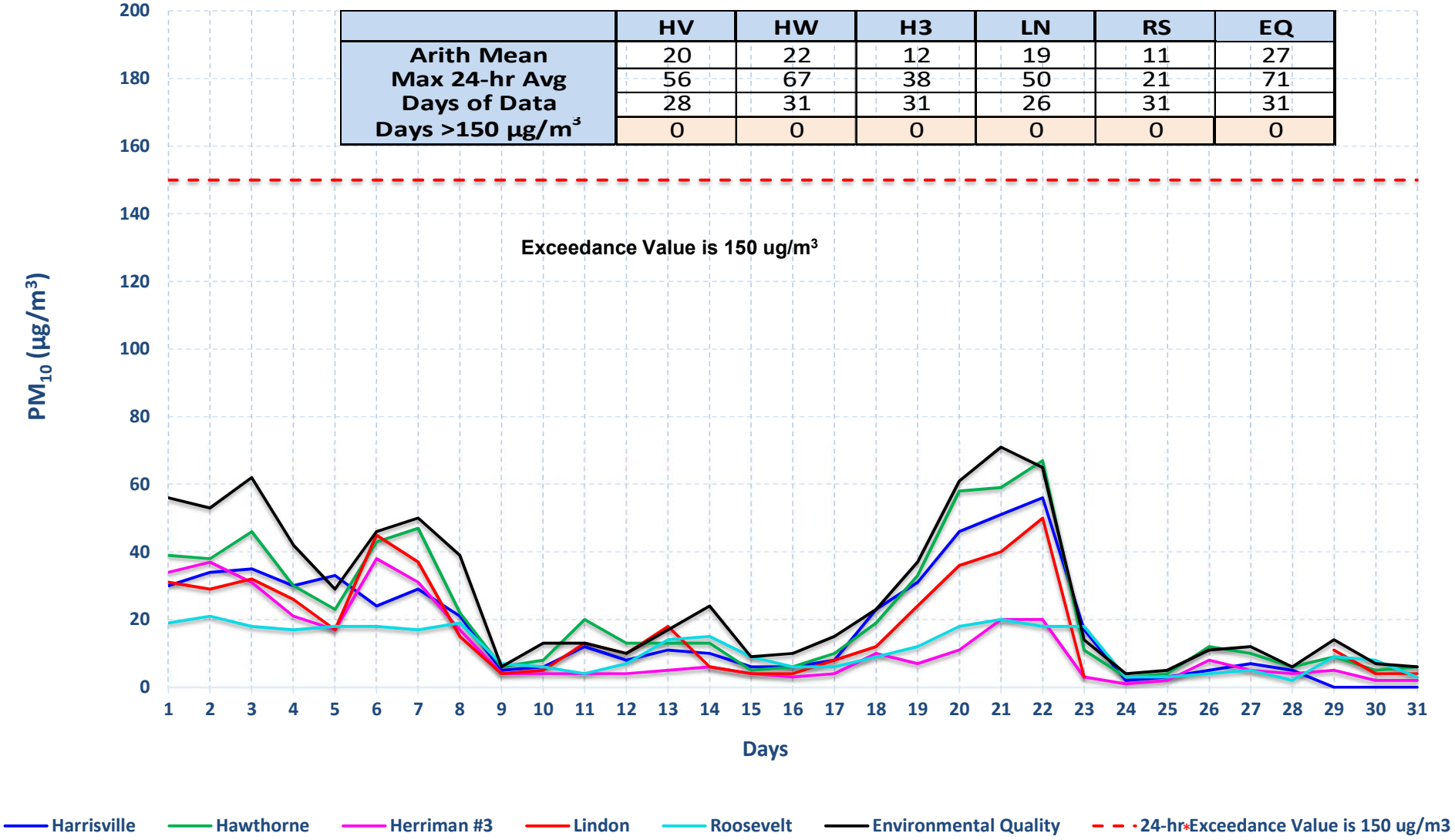
Utah 24-hr PM_{10} Data December 2021

	HV	HW	H3	LN	RS	EQ
Arith Mean	20	22	12	19	11	27
Max 24-hr Avg	56	67	38	50	21	71
Days of Data	28	31	31	26	31	31
Days >150 µg/m³	0	0	0	0	0	0



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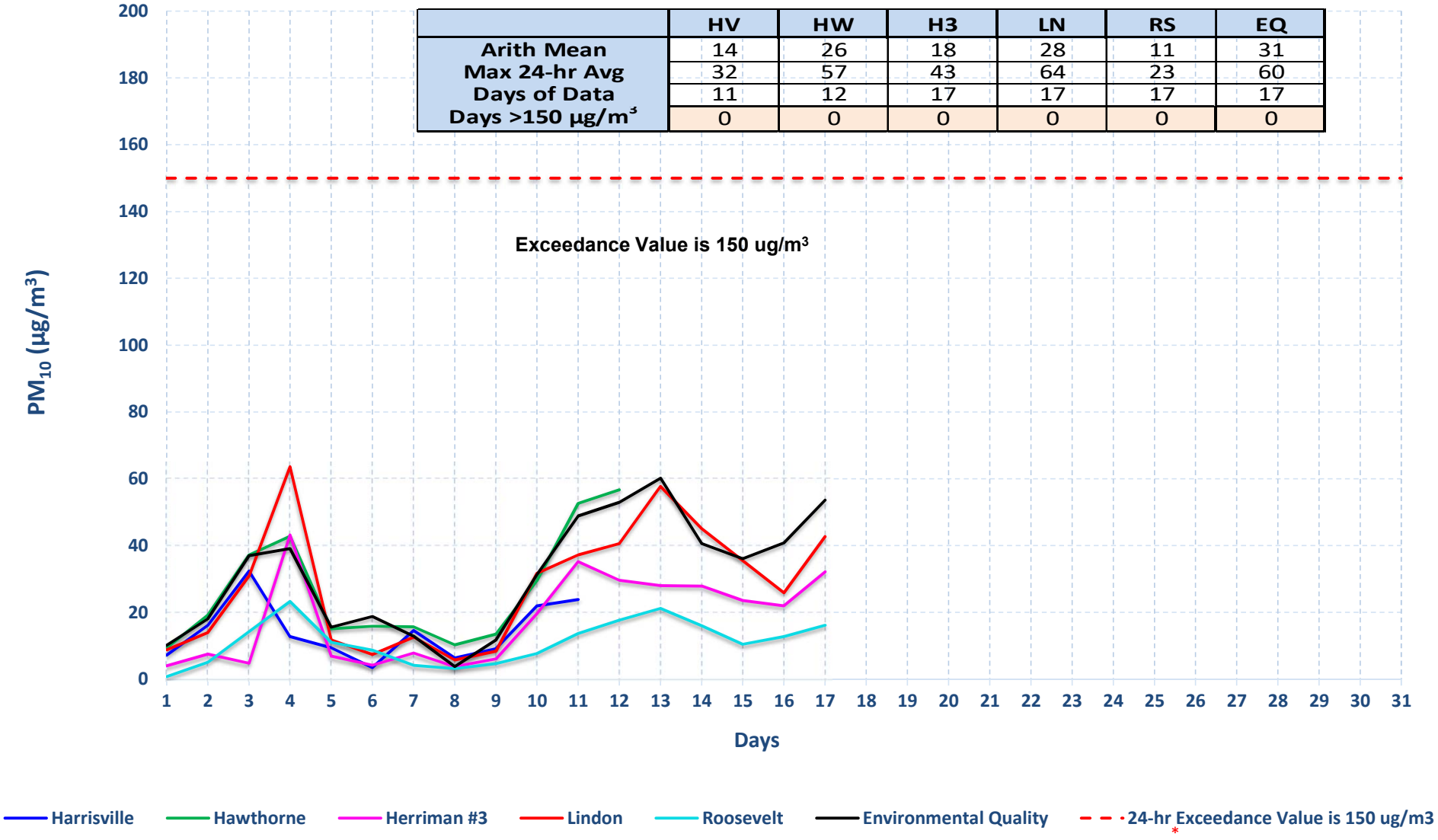
Utah 24-hr PM_{10} Data January 2022

	HV	HW	H3	LN	RS	EQ
Arith Mean	14	26	18	28	11	31
Max 24-hr Avg	32	57	43	64	23	60
Days of Data	11	12	17	17	17	17
Days >150 µg/m³	0	0	0	0	0	0



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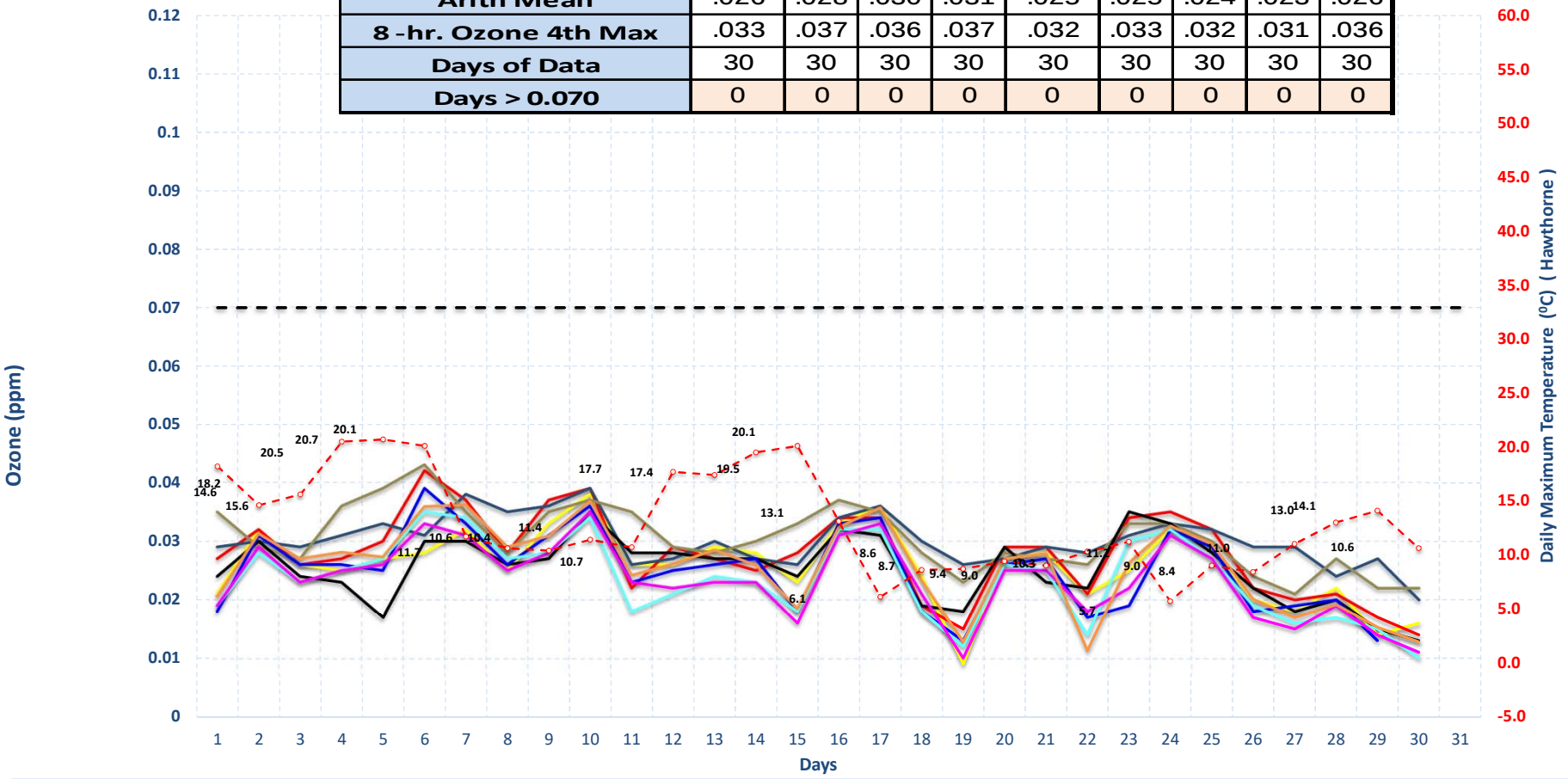
Highest 8-hr Ozone Concentration & Daily Maximum Temperature November 2021

	BV	CV	ED	H3	HV	HW	NR	RP	EQ
Arith Mean	.026	.028	.030	.031	.025	.025	.024	.023	.026
8 -hr. Ozone 4th Max	.033	.037	.036	.037	.032	.033	.032	.031	.036
Days of Data	30	30	30	30	30	30	30	30	30
Days > 0.070	0	0	0	0	0	0	0	0	0



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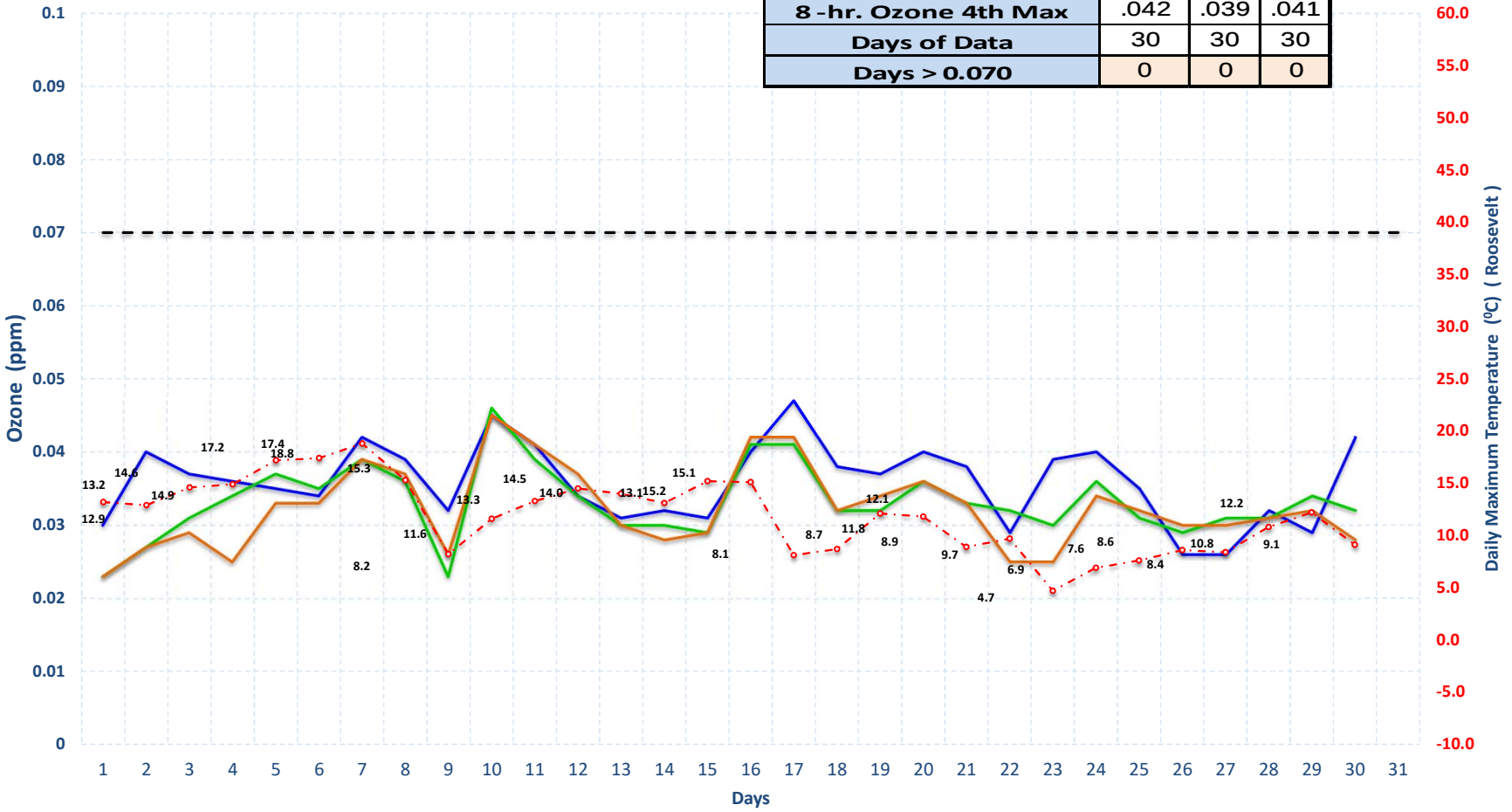
** Controlling Monitor

Highest 8-hr Ozone Concentration & Daily Maximum Temperature November 2021

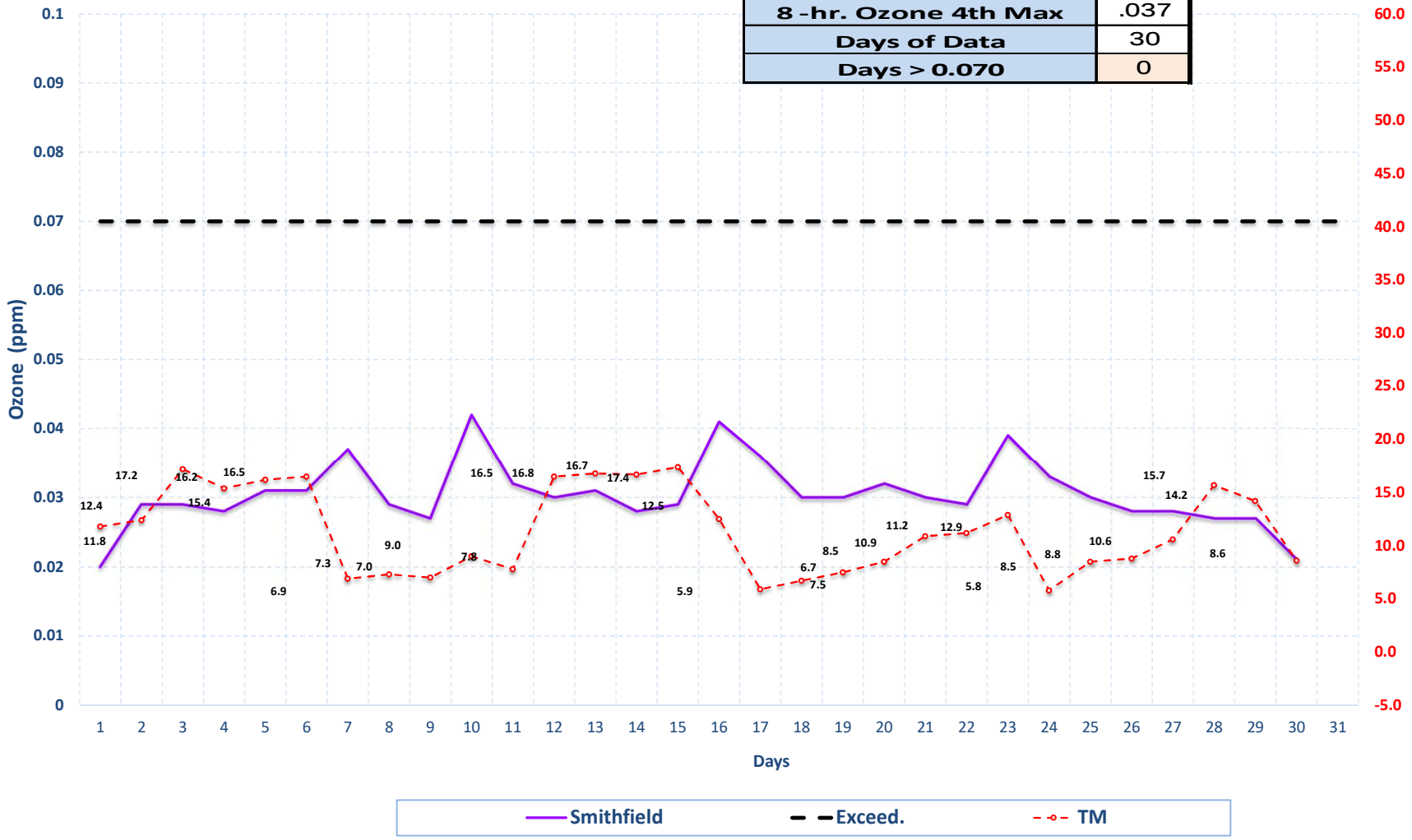
	P2	RS	V4
Arith Mean	.036	.033	.032
8 -hr. Ozone 4th Max	.042	.039	.041
Days of Data	30	30	30
Days > 0.070	0	0	0



Price #2 | Roosevelt | Vernal #4 | Exceed. | TM

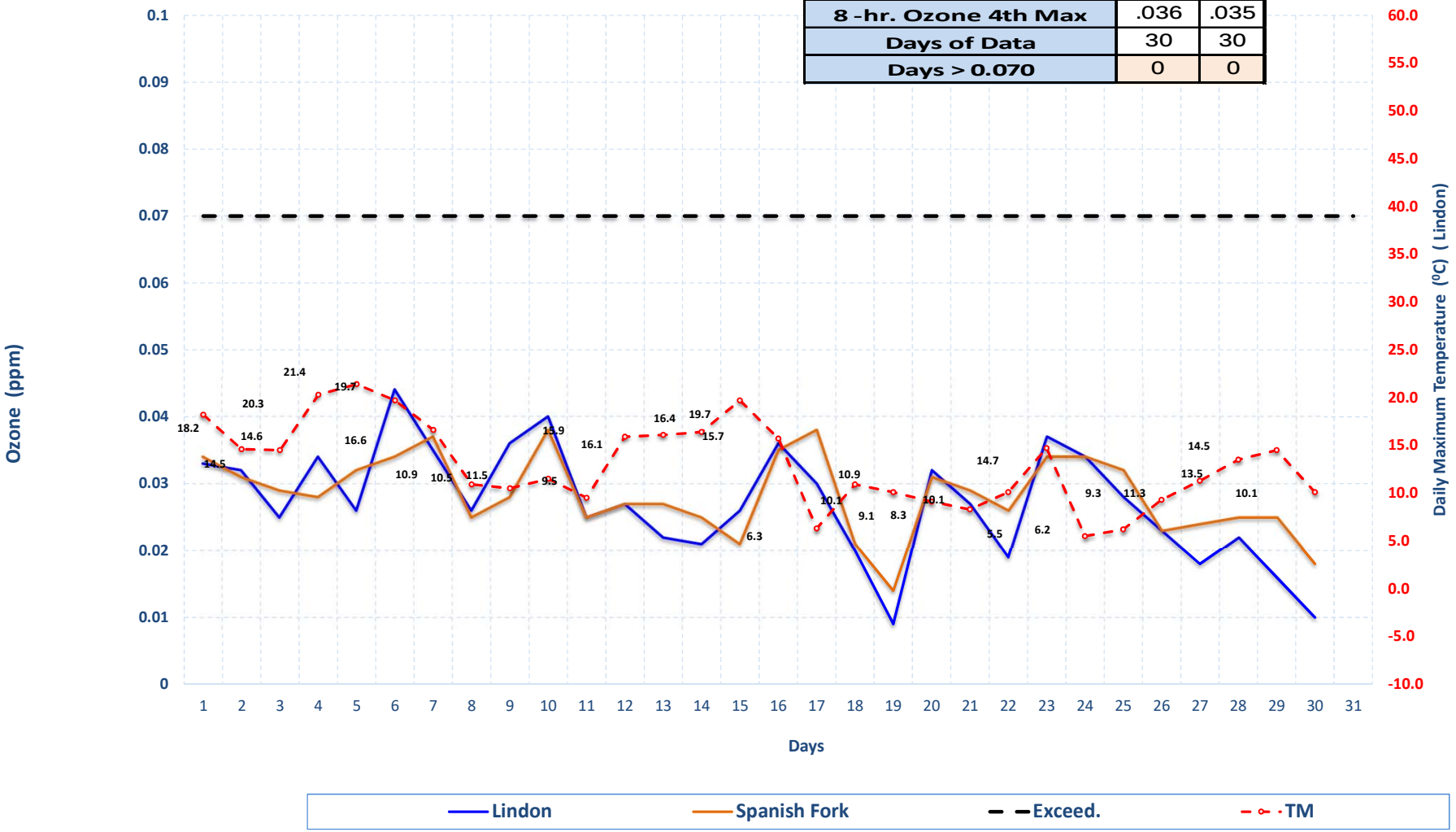
Highest 8-hr Ozone Concentration & Daily Maximum Temperature November 2021

	SM
Arith Mean	.030
8 -hr. Ozone 4th Max	.037
Days of Data	30
Days > 0.070	0



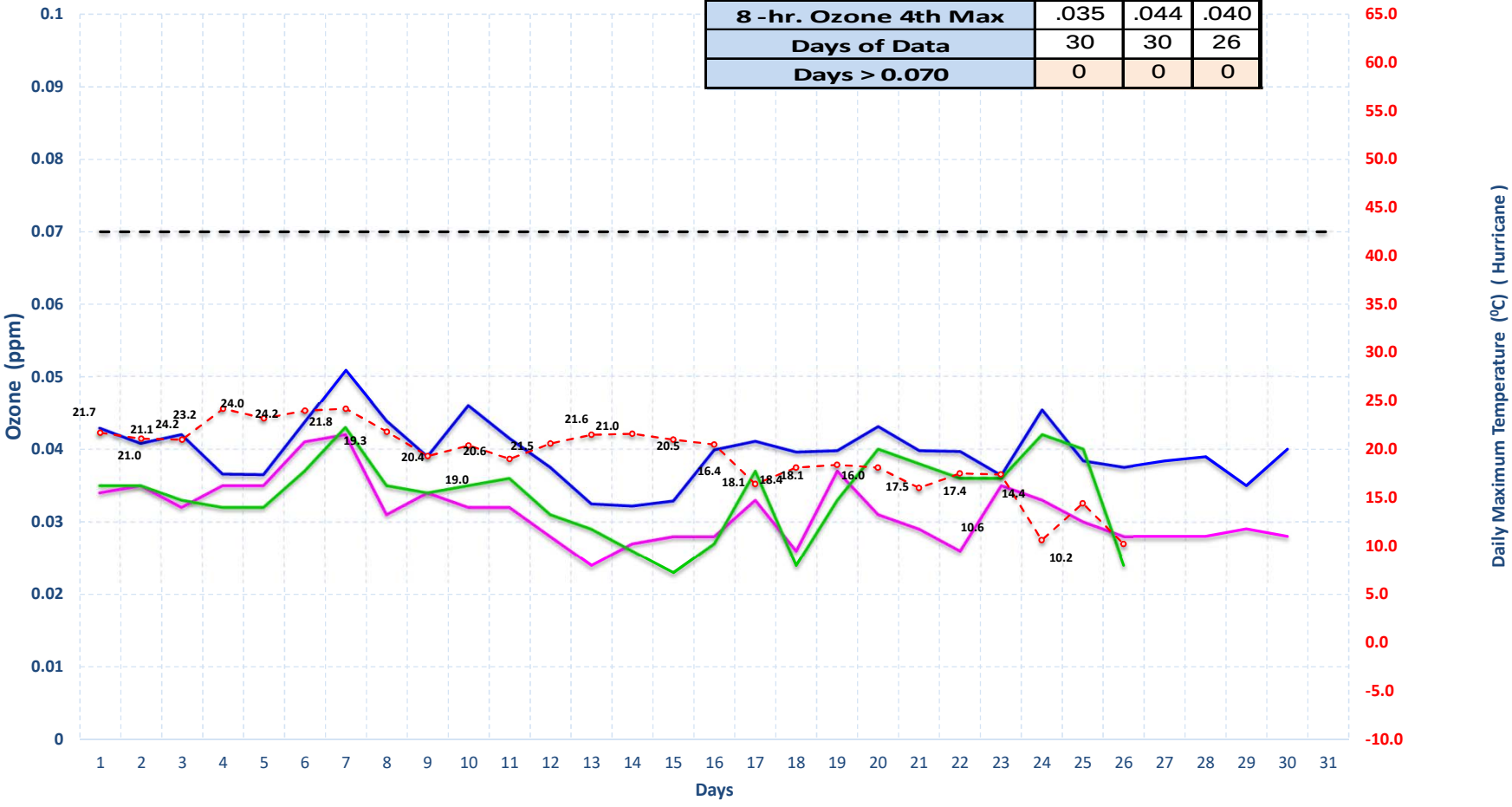
Highest 8-hr Ozone Concentration & Daily Maximum Temperature November 2021

	LN	SF
Arith Mean	.027	.028
8 -hr. Ozone 4th Max	.036	.035
Days of Data	30	30
Days > 0.070	0	0



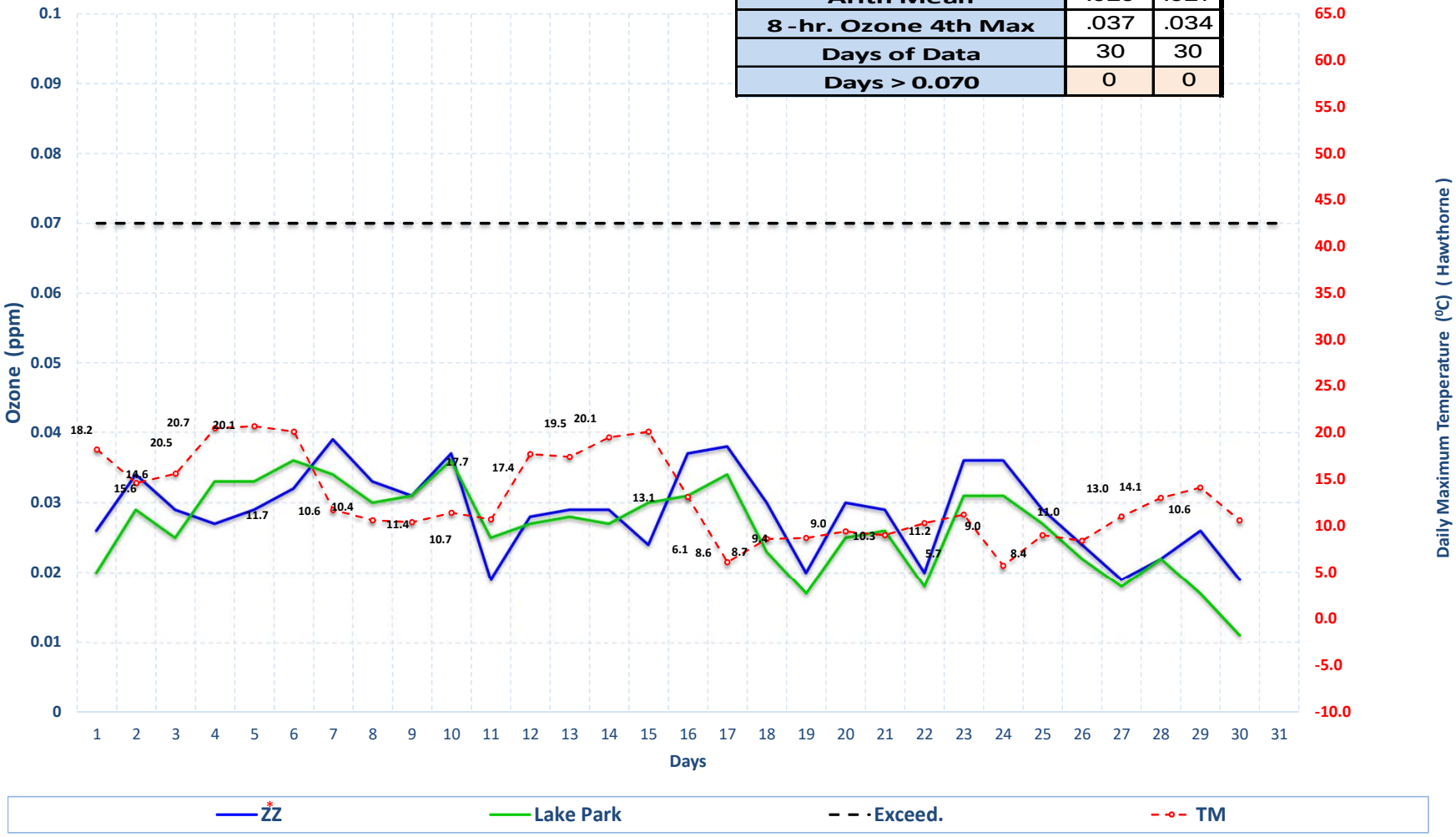
Highest 8-hr Ozone Concentration & Daily Maximum Temperature November 2021

	EN	ES	HC
Arith Mean	.031	.040	.034
8 -hr. Ozone 4th Max	.035	.044	.040
Days of Data	30	30	26
Days > 0.070	0	0	0



Highest 8-hr Ozone Concentration & Daily Maximum Temperature November 2021
Stations monitoring the Inland Port development

	ZZ	LP
Arith Mean	.029	.027
8-hr. Ozone 4th Max	.037	.034
Days of Data	30	30
Days > 0.070	0	0



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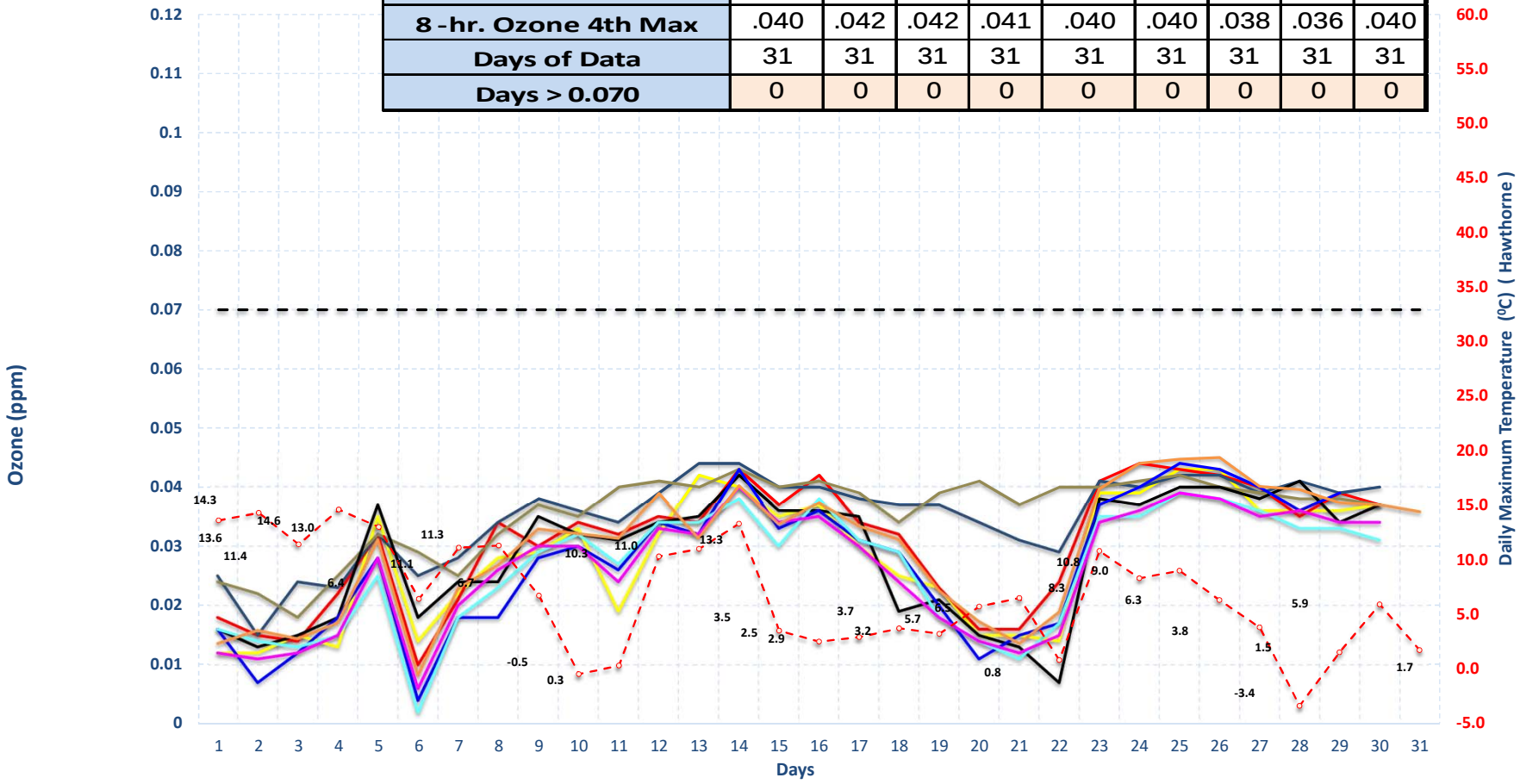
This site was previously named **IP**

Highest 8-hr Ozone Concentration & Daily Maximum Temperature December 2021

	BV	CV	ED	H3	HV	HW	NR	RP	EQ
Arith Mean	.028	.031	.035	.036	.029	.027	.026	.026	.030
8 -hr. Ozone 4th Max	.040	.042	.042	.041	.040	.040	.038	.036	.040
Days of Data	31	31	31	31	31	31	31	31	31
Days > 0.070	0	0	0	0	0	0	0	0	0



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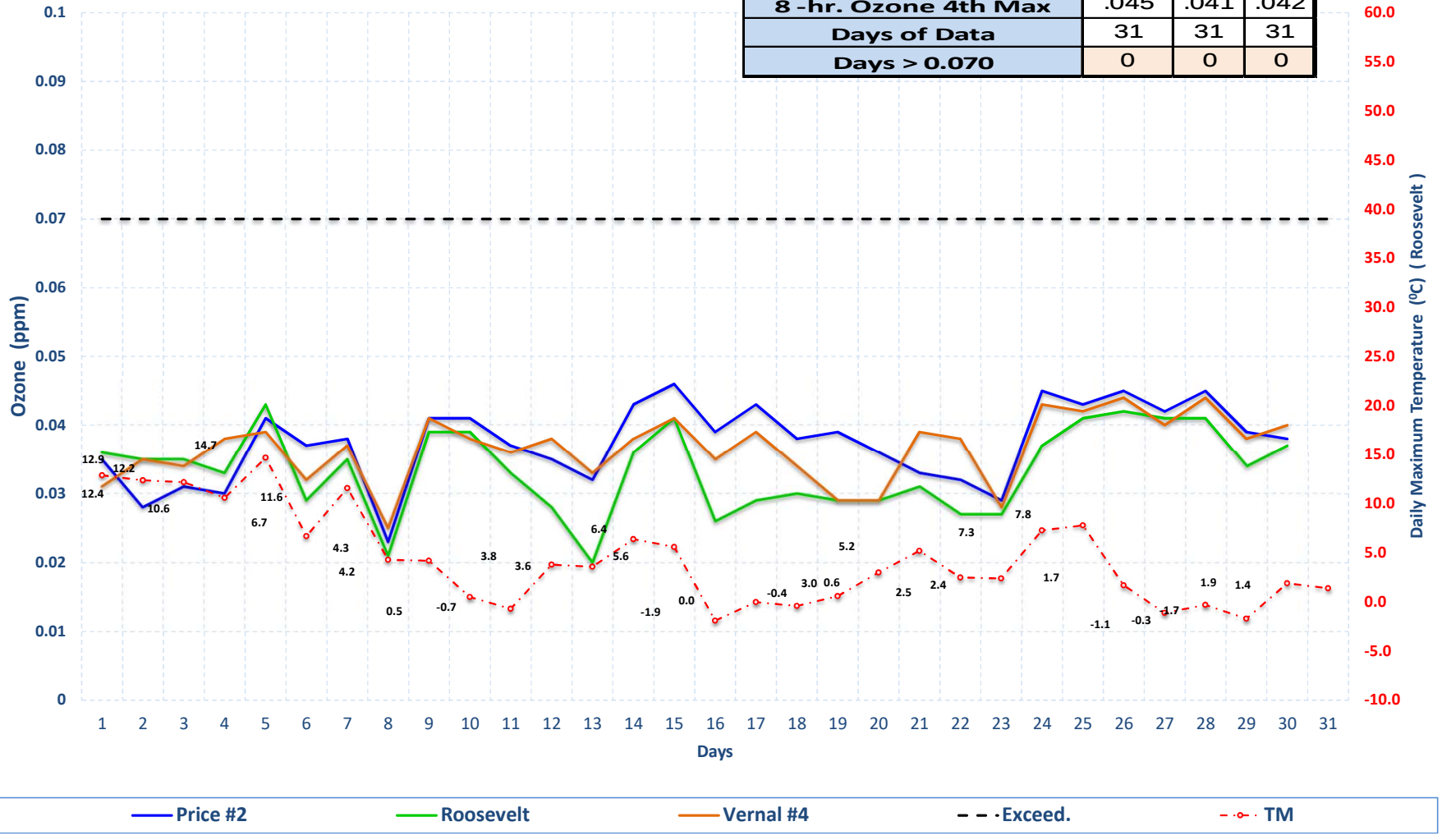
** Controlling Monitor

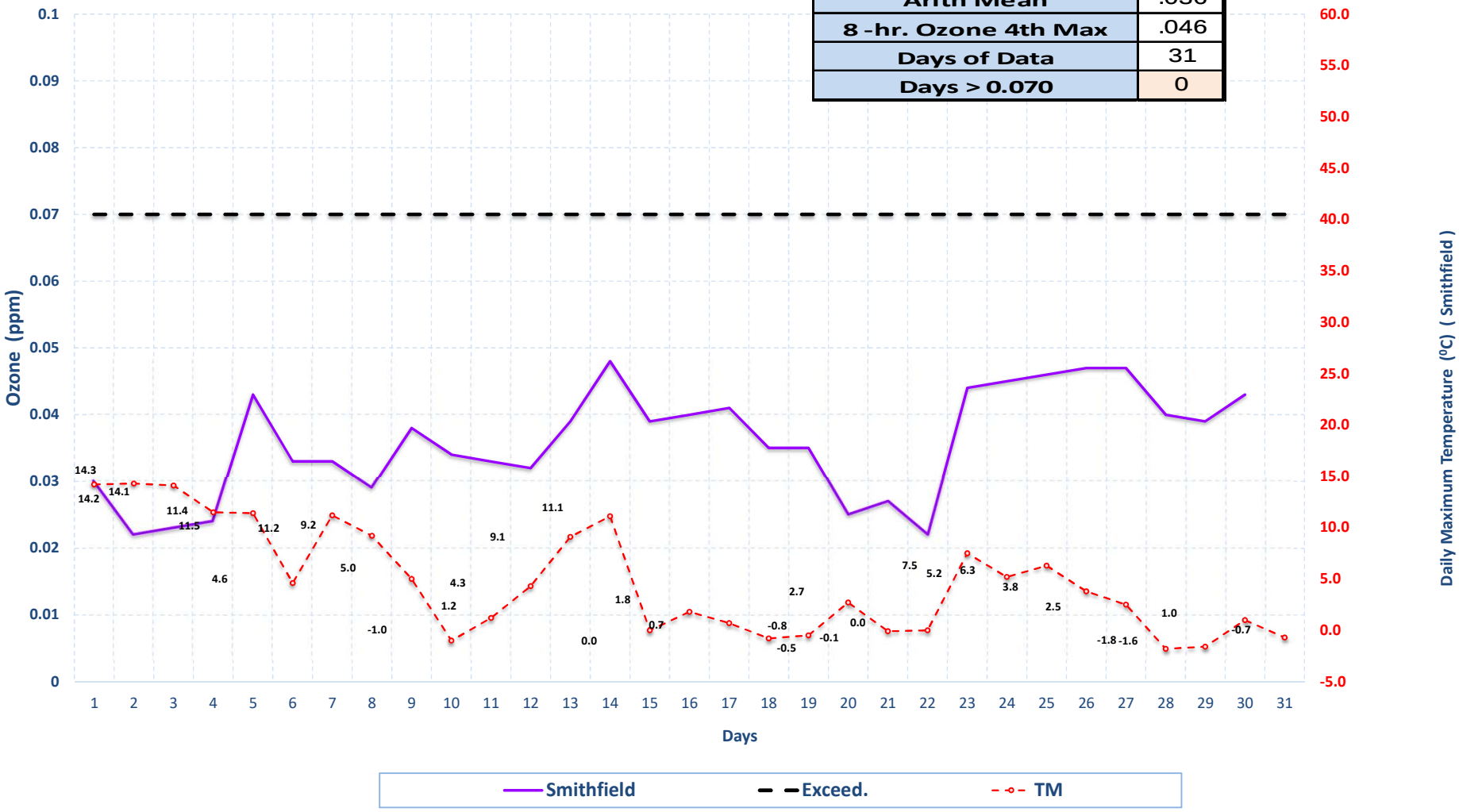
Highest 8-hr Ozone Concentration & Daily Maximum Temperature December 2021

	P2	RS	V4
Arith Mean	.037	.033	.037
8 -hr. Ozone 4th Max	.045	.041	.042
Days of Data	31	31	31
Days > 0.070	0	0	0



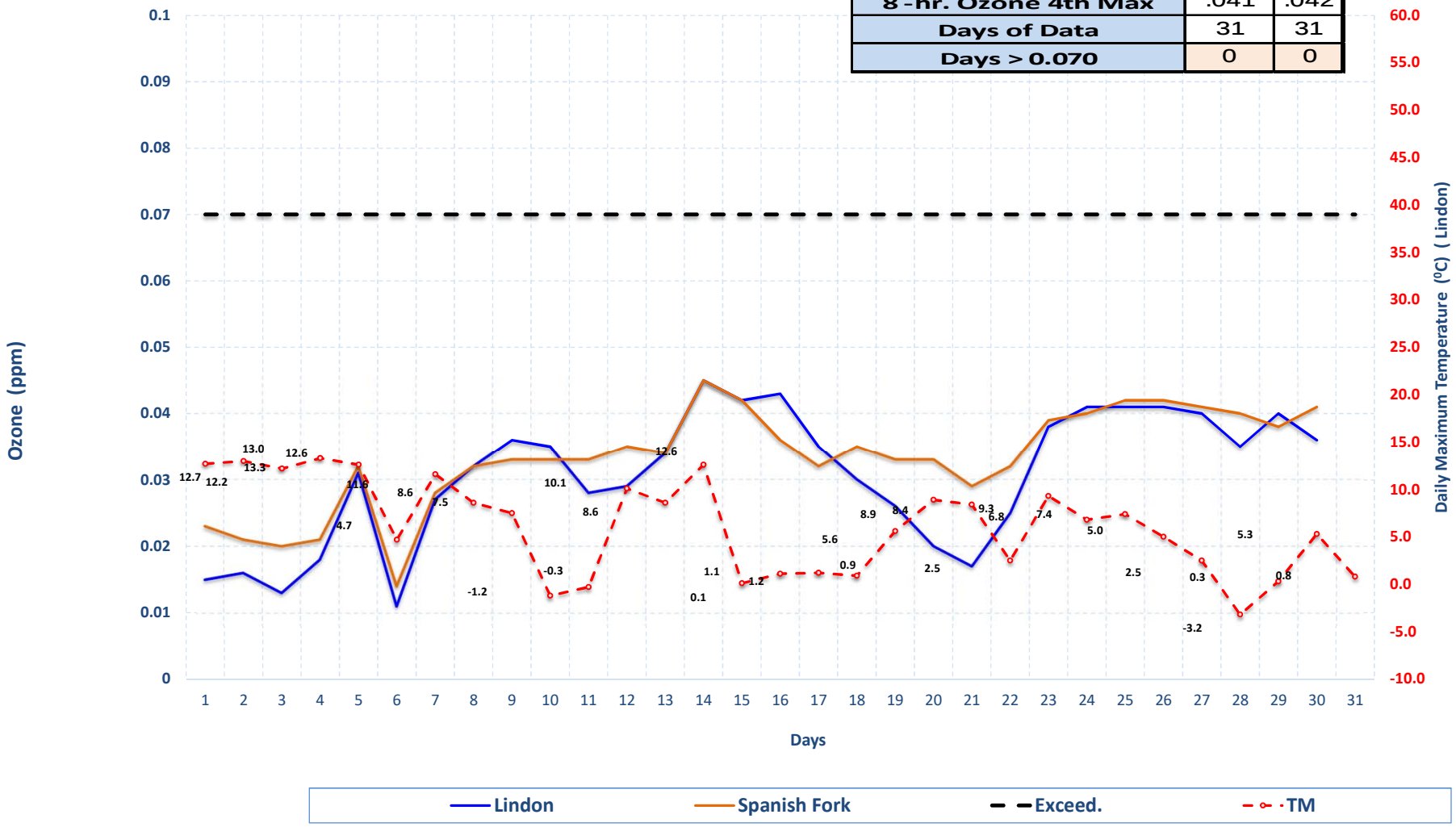
Highest 8-hr Ozone Concentration & Daily Maximum Temperature December 2021

	SM
Arith Mean	.036
8 -hr. Ozone 4th Max	.046
Days of Data	31
Days > 0.070	0



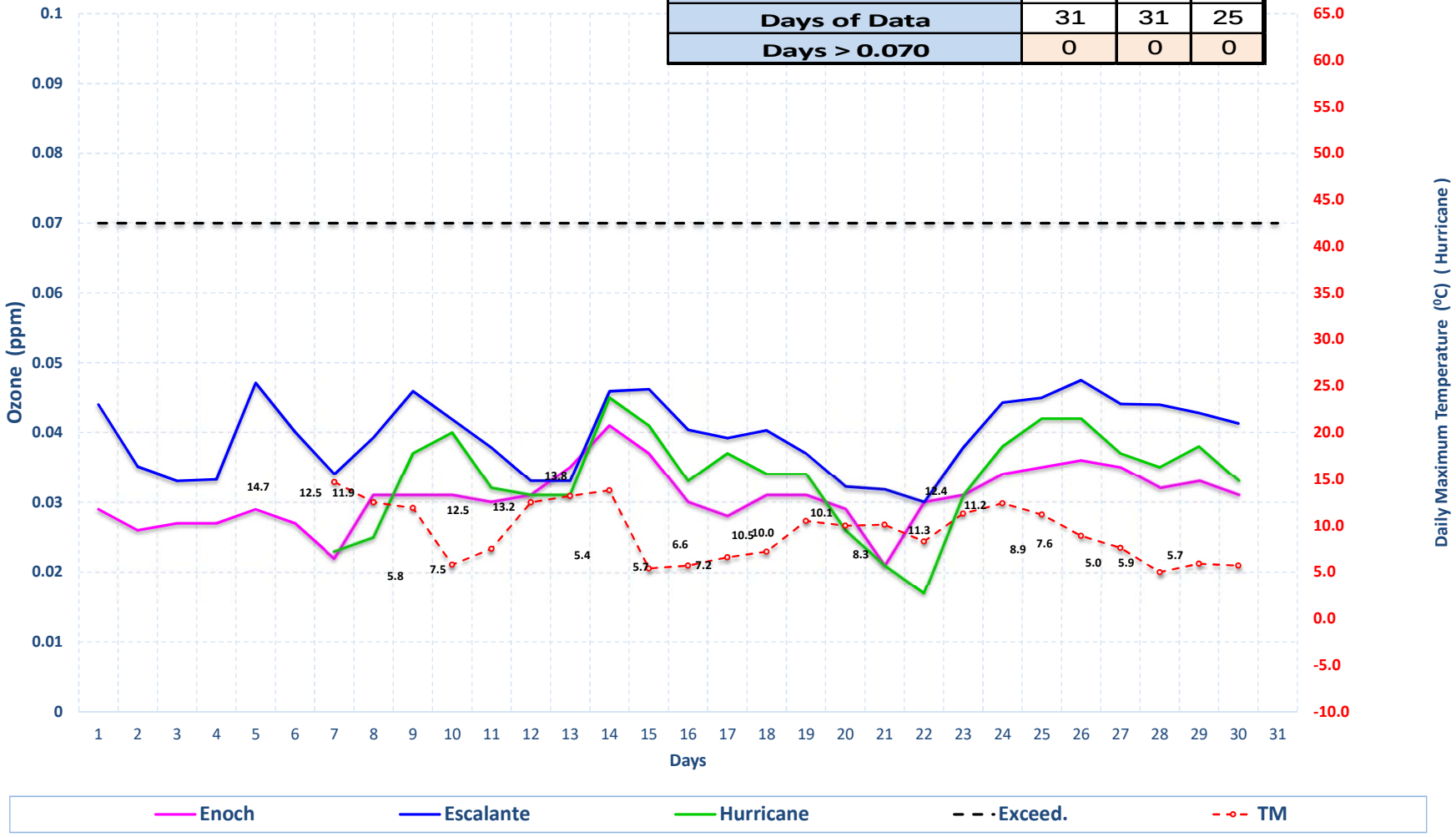
Highest 8-hr Ozone Concentration & Daily Maximum Temperature December 2021

	LN	SF
Arith Mean	.031	.033
8 -hr. Ozone 4th Max	.041	.042
Days of Data	31	31
Days > 0.070	0	0



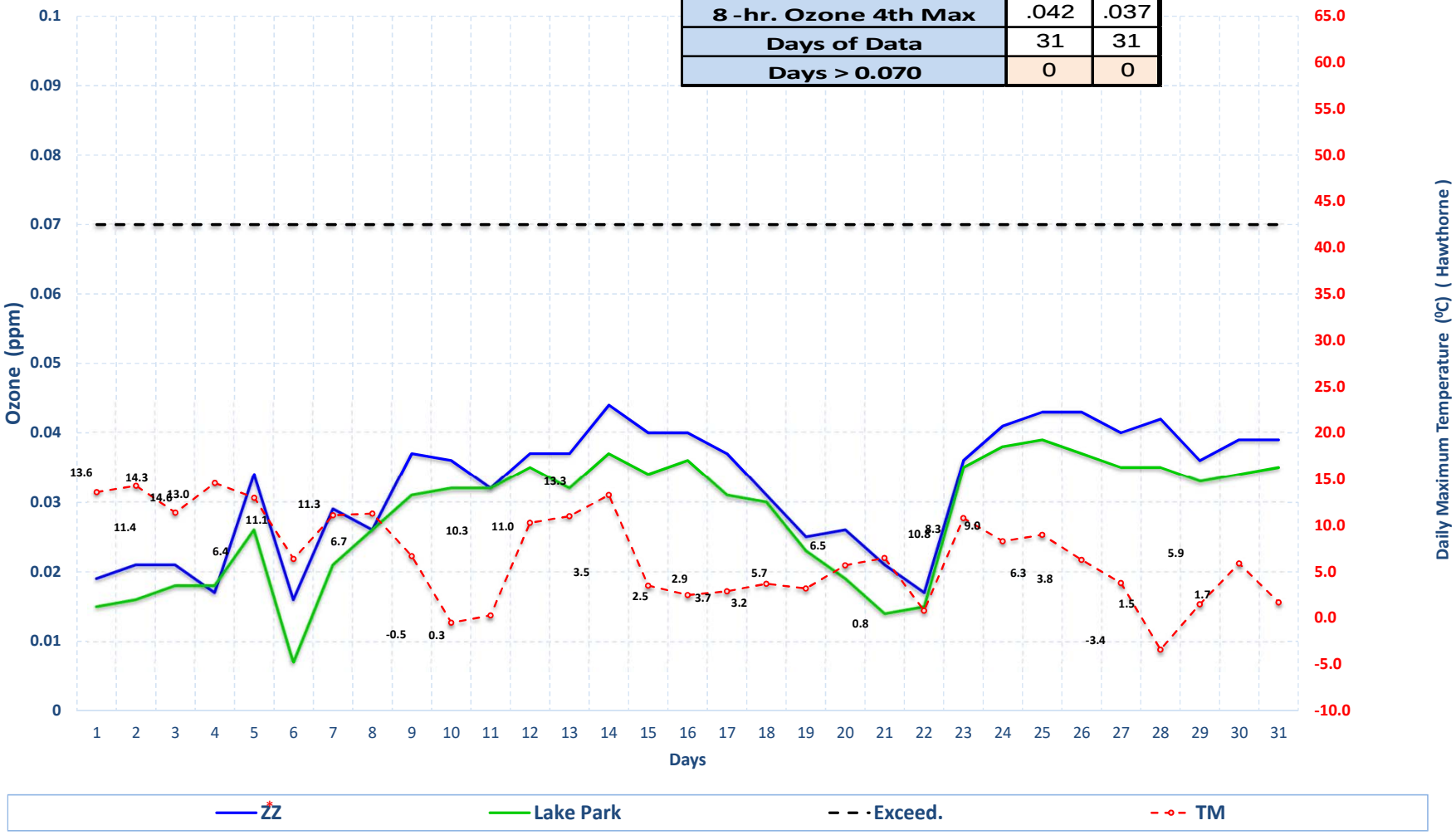
Highest 8-hr Ozone Concentration & Daily Maximum Temperature December 2021

	EN	ES	HC
Arith Mean	.031	.040	.033
8 -hr. Ozone 4th Max	.035	.046	.041
Days of Data	31	31	25
Days > 0.070	0	0	0



Highest 8-hr Ozone Concentration & Daily Maximum Temperature December 2021
Stations monitoring the Inland Port development

	ZZ	LP
Arith Mean	.032	.028
8 -hr. Ozone 4th Max	.042	.037
Days of Data	31	31
Days > 0.070	0	0



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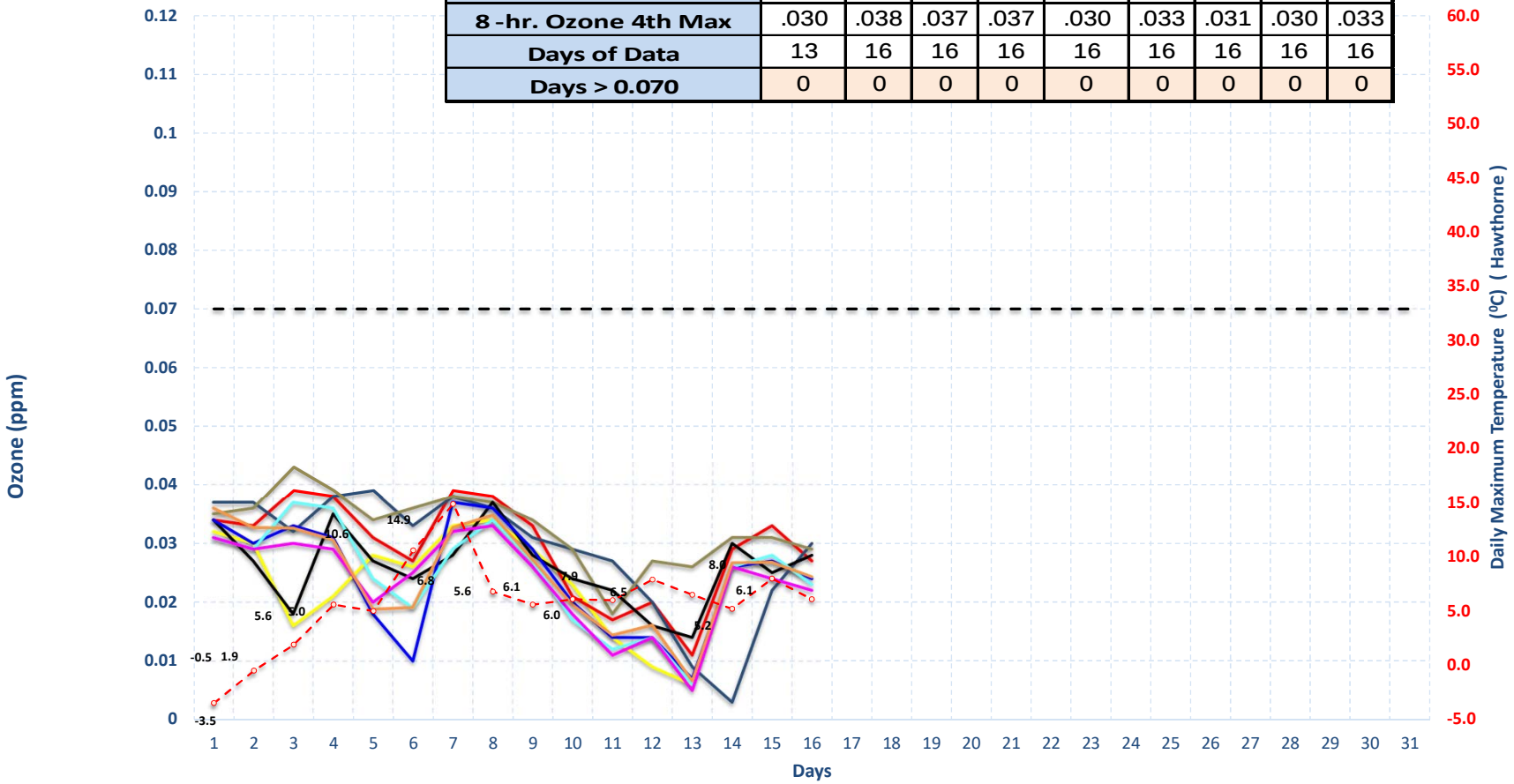
Highest 8-hr Ozone Concentration & Daily Maximum Temperature January 2022

	BV	CV	ED	H3	HV	HW	NR	RP	EQ
Arith Mean	.023	.029	.029	.033	.026	.024	.025	.023	.025
8 -hr. Ozone 4th Max	.030	.038	.037	.037	.030	.033	.031	.030	.033
Days of Data	13	16	16	16	16	16	16	16	16
Days > 0.070	0	0	0	0	0	0	0	0	0



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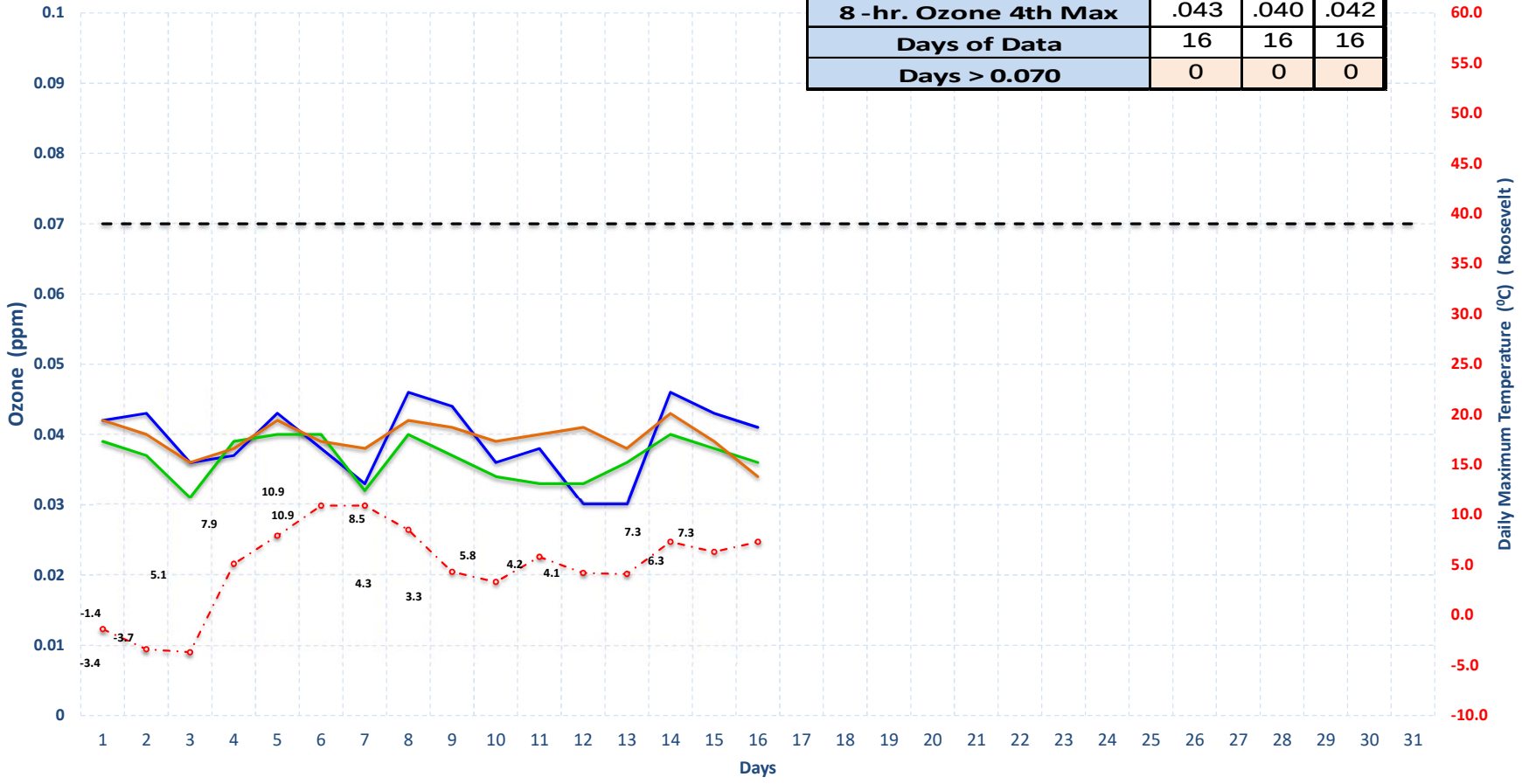
** Controlling Monitor

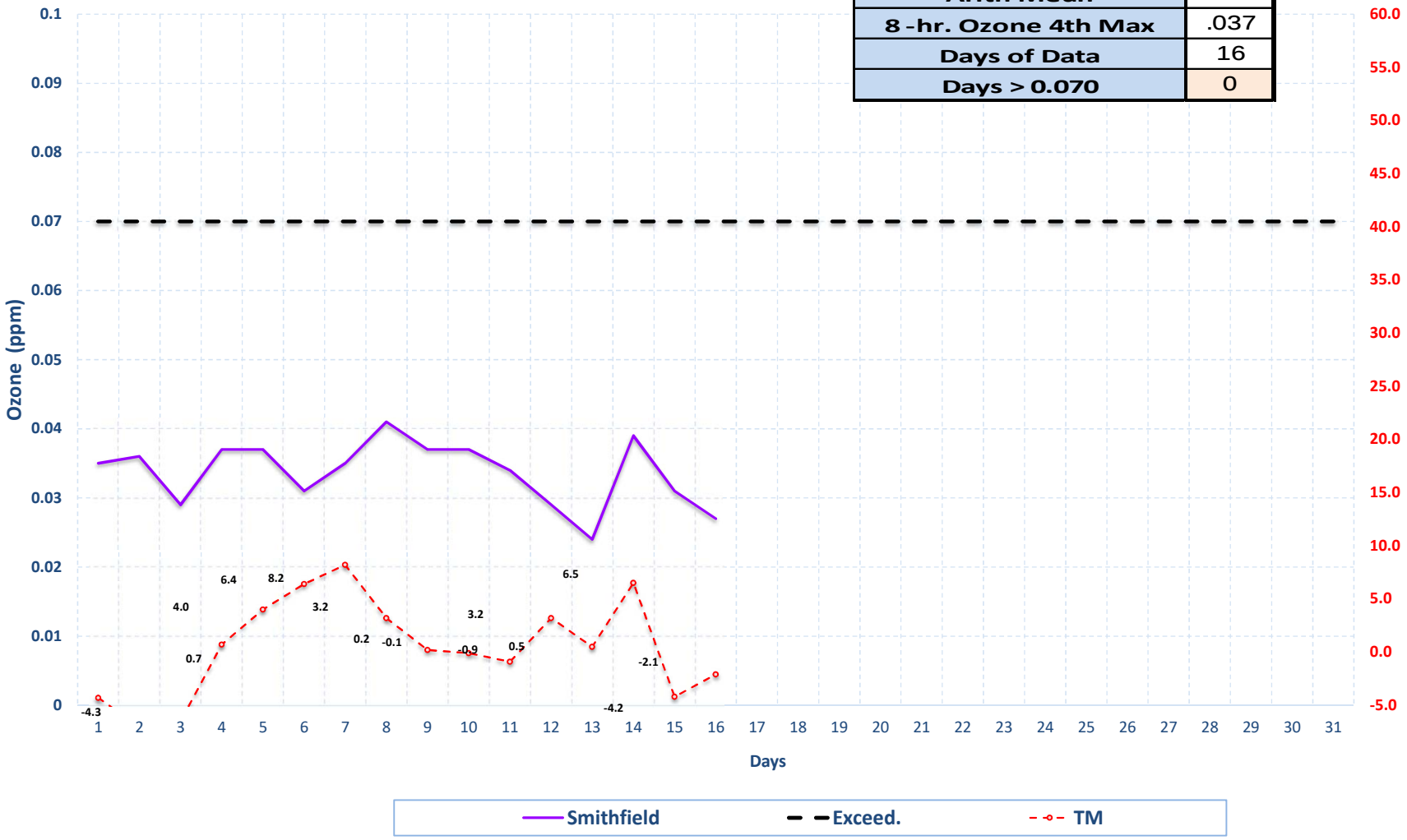
Highest 8-hr Ozone Concentration & Daily Maximum Temperature January 2022

	P2	RS	V4
Arith Mean	.039	.037	.040
8 -hr. Ozone 4th Max	.043	.040	.042
Days of Data	16	16	16
Days > 0.070	0	0	0



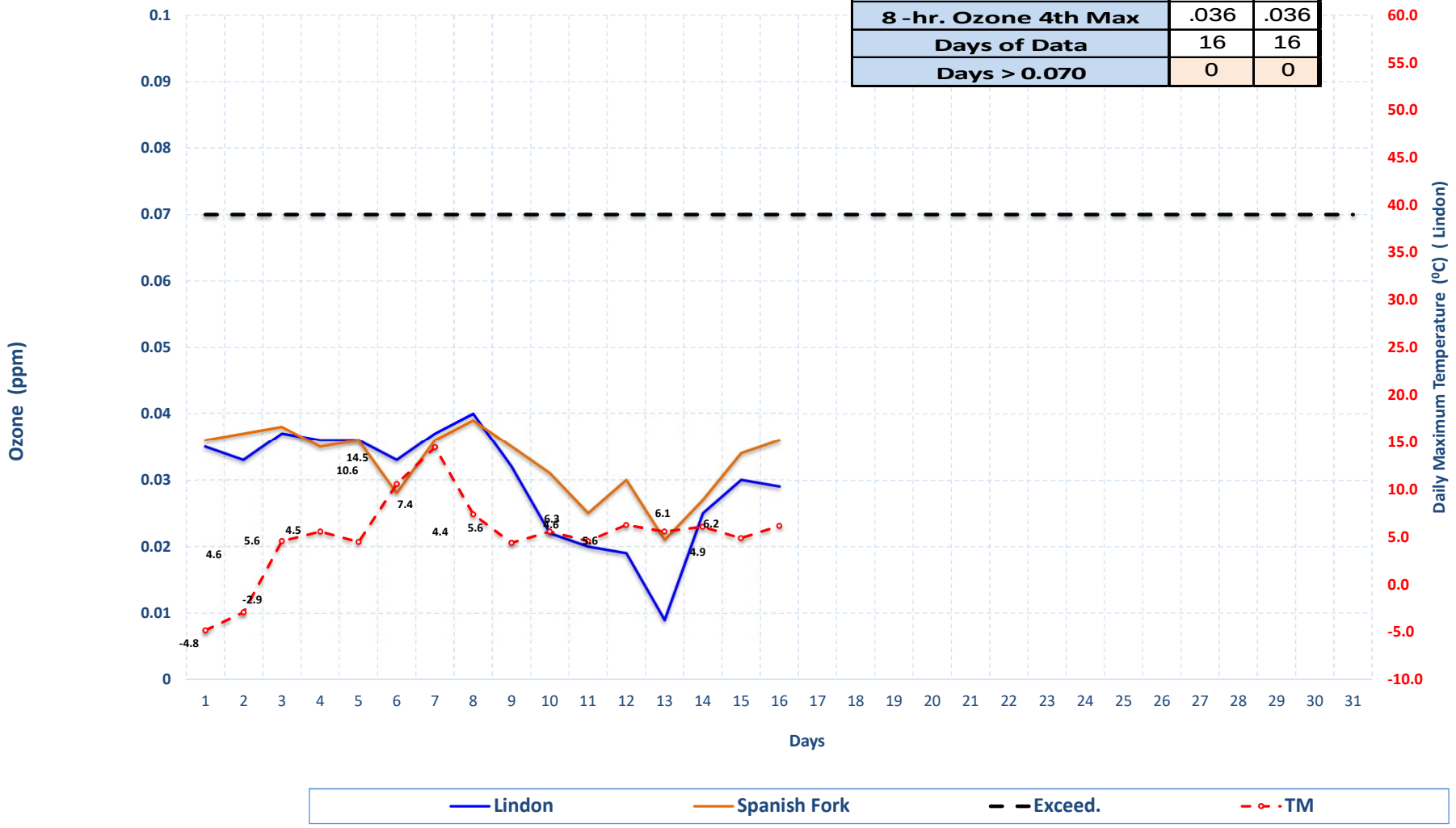
Highest 8-hr Ozone Concentration & Daily Maximum Temperature January 2022

	SM
Arith Mean	.034
8 -hr. Ozone 4th Max	.037
Days of Data	16
Days > 0.070	0



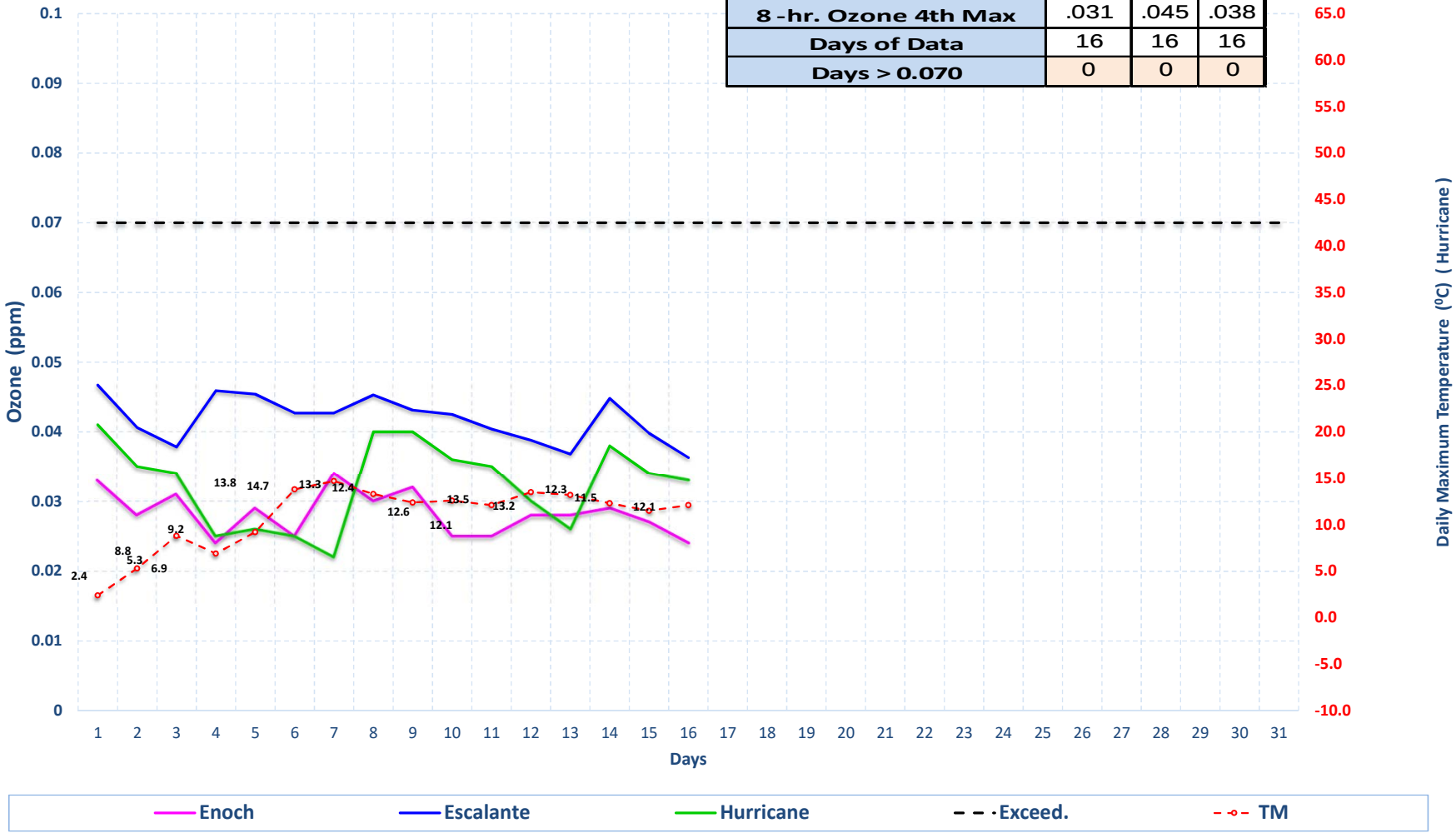
Highest 8-hr Ozone Concentration & Daily Maximum Temperature January 2022

	LN	SF
Arith Mean	.030	.033
8 -hr. Ozone 4th Max	.036	.036
Days of Data	16	16
Days > 0.070	0	0



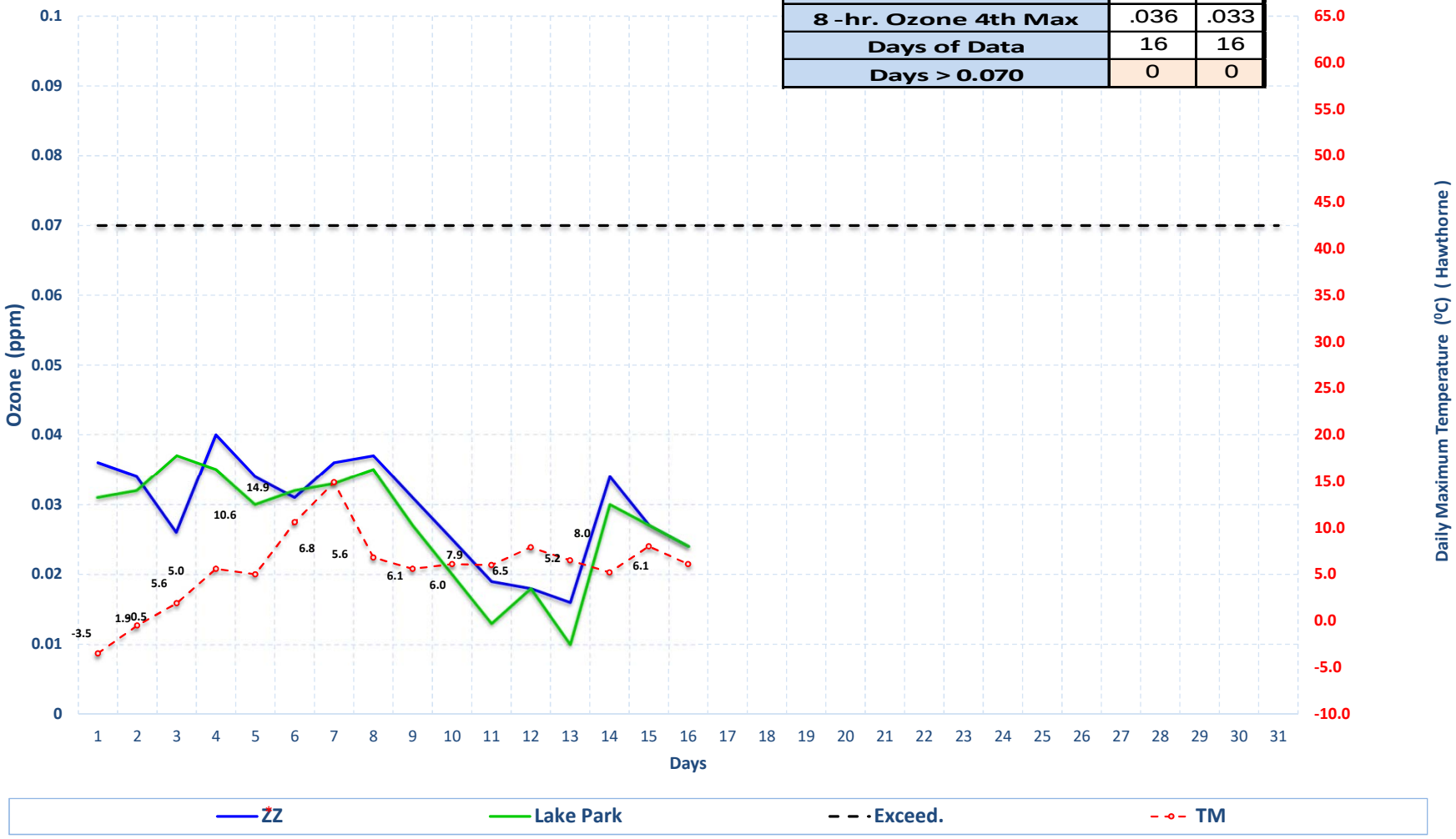
Highest 8-hr Ozone Concentration & Daily Maximum Temperature January 2022

	EN	ES	HC
Arith Mean	.028	.042	.033
8 -hr. Ozone 4th Max	.031	.045	.038
Days of Data	16	16	16
Days > 0.070	0	0	0



Highest 8-hr Ozone Concentration & Daily Maximum Temperature January 2022
Stations monitoring the Inland Port development

	ZZ	LP
Arith Mean	.029	.027
8 -hr. Ozone 4th Max	.036	.033
Days of Data	16	16
Days > 0.070	0	0



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