



## State of Utah

GARY R. HERBERT  
*Governor*

SPENCER J. COX  
*Lieutenant Governor*

## Department of Environmental Quality

Alan Matheson  
*Executive Director*

DIVISION OF AIR QUALITY  
Bryce C. Bird  
*Director*

### Air Quality Board

Erin Mendenhall *Chair*  
Cassady Kristensen, *Vice-Chair*  
Kevin R. Cromar  
Mitra Basiri Kashanchi  
Randal S. Martin  
Alan Matheson  
Arnold W. Reitze Jr.  
Michael Smith  
William C. Stringer  
Bryce C. Bird,  
*Executive Secretary*

DAQ-041-19

## UTAH AIR QUALITY BOARD MEETING

### FINAL AGENDA

**Wednesday, May 1, 2019 - 1:30 p.m.**  
**195 North 1950 West, Room 1015**  
**Salt Lake City, Utah 84116**

- I. Call-to-Order
- II. Date of the Next Air Quality Board Meeting: June 5, 2019
- III. Informational Items.
  - A. Compliance Summary Follow Up. Presented by Jay Morris.
  - B. Air Quality Health Messaging. Presented by Bo Call.
  - C. Regional Haze Presentation. Presented by Sierra Club.
  - D. Regional Haze Update. Presented by Jay Baker.
  - E. Upcoming Rulemaking Schedule. Presented by Thomas Gunter.
  - F. Scheduling of Working Meetings.
  - G. Tour of new DEQ Technical Support Center.

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](mailto:lwyss@utah.gov).

A.

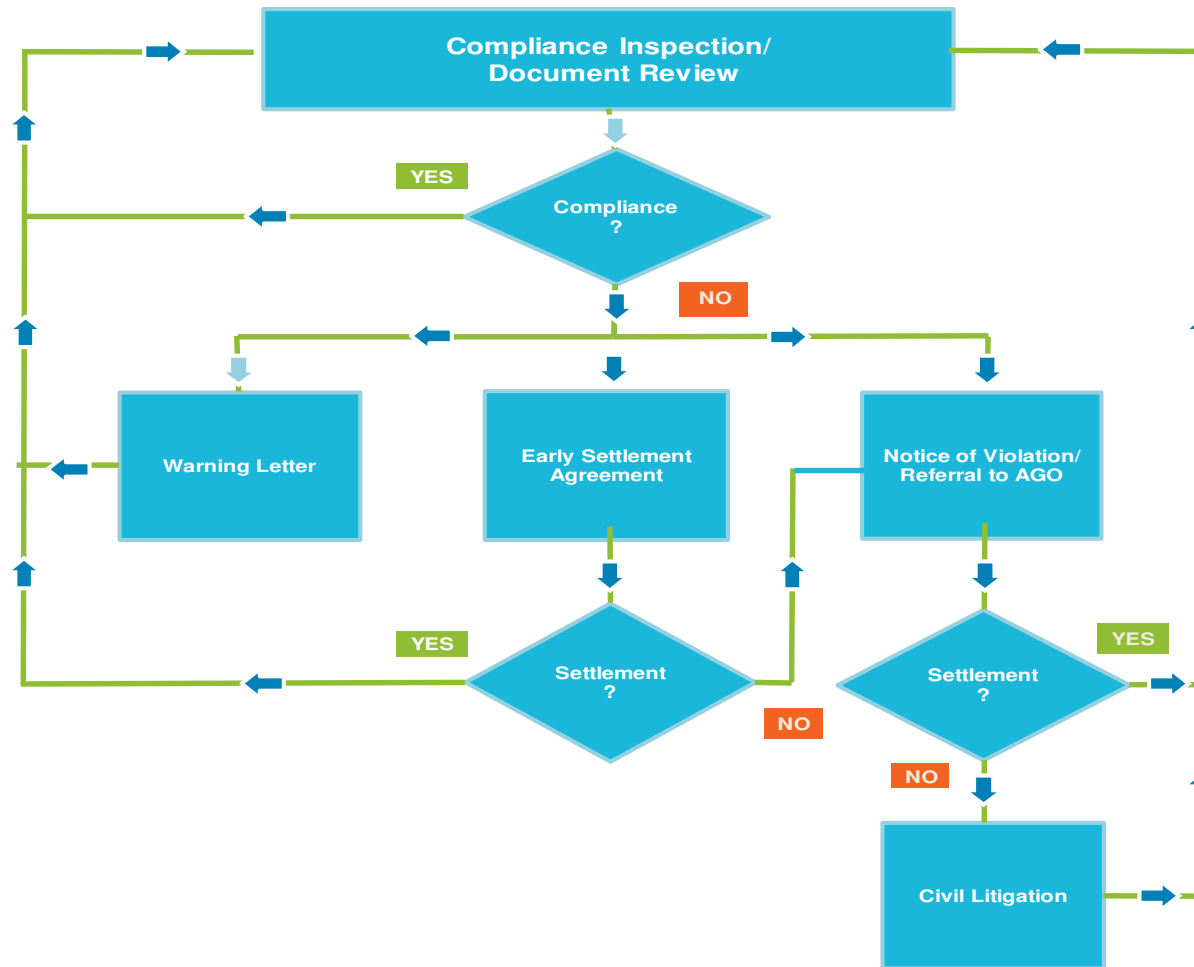
# Compliance Summary

---

# Penalty Policy and Calculation Review



# Compliance/Enforcement Cycle



---

# Two Distinct Processes for Resolution

## Compliance Advisory (CA) and Early Administrative Settlement

- Resolves the alleged violations without admissions of findings.
- Requires a return to full compliance
- Requires a plan to prevent future violations
- Uses the Penalty Policy (R307-130) to determine reasonable and appropriate penalties
- Offers possible 20% reduction for early settlement.

## Notice Of Violation (NOV) Formal Resolution

- Violations are final unless appealed within 30 days.
- Settlement is formal.
- Utah Office of the Attorney General may file for collection of penalties in civil court.
- Uses the Penalty Policy (R307-130) to determine reasonable and appropriate penalties

# Administrative Settlements 2014-2018

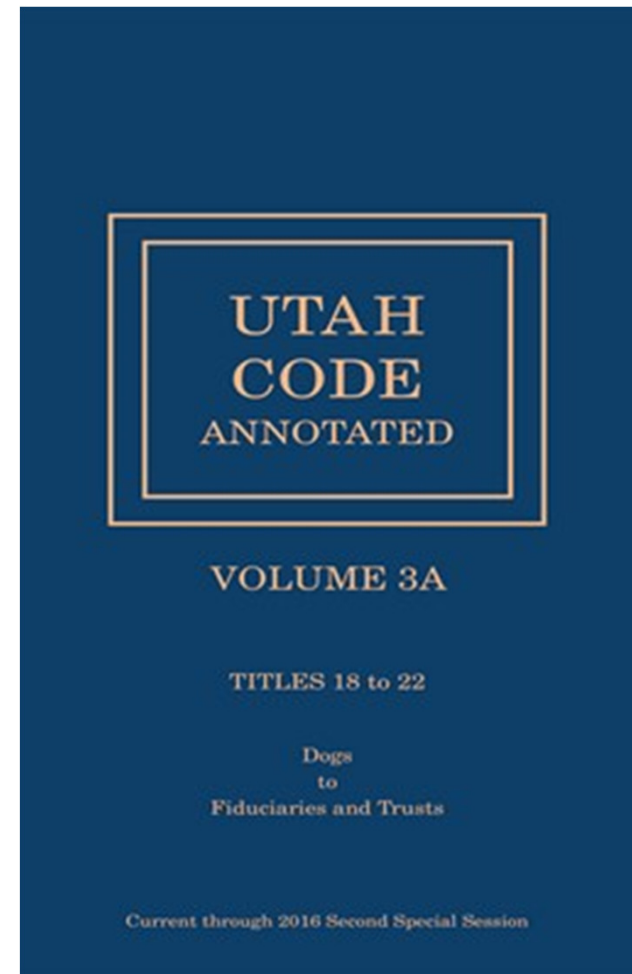
- 7,381 Inspections conducted
- 99 Administrative Settlement Agreements with penalties
- 99.95% Successful return to compliance after receiving first time violation
- .05 % repeat violations



# Penalty Limits

Utah Legislature – Utah Code Chapter 19-2-115(2)(a) sets the penalty limit at \$10,000 per day for each violation

DAQ penalty policy in UAC R307-130 limit cannot exceed \$10,000 per day for each violation limit set by the legislature in Utah Code



# Adjustments – UAC R307-130

Adjustments are made based upon:

- The type of emissions involved
- Good faith effort to comply
- Degree of willfulness and/or negligence
- History of compliance or noncompliance
- Economic benefit of noncompliance
- Inability to pay
- Supplemental Environmental Projects

All penalty money is deposited into the state general fund.



# Penalty Calculation Worksheet R307-130

[illegible]

- Working document with categories and adjustments
- Formulas Used to Calculate Reasonable & Appropriate Penalties
- Demonstration?

---

# Recommendations

- Goal is to get source back in compliance and calculate reasonable and appropriate penalties for the size of the company and severity of the violation(s)
- Review Internal penalty worksheet with AG Office. Provides consistency while the penalty policy allows penalties to be calculated on a case by case basis
- Existing penalty policy and worksheet allows flexibility to negotiate administrative settlements (deferred penalty, multiple payments, SEP credit) and increase penalties based on severity or length of violation(s)
- Information sharing between permitting and compliance branches when a permitting action is required for source to return to compliance. This will reduce the time to process applications



---

# Category A

Penalties: \$7,000-10,000 per day

Violations with high potential for impact on public health and the environment including:

- Violation of emission standards and limitations of NESHAP.
- Emissions contributing to nonattainment area or PSD increment exceedances.
- Emissions resulting in documented public health effects and/or environmental damage.

---

# Category B

Penalties: \$2,000-7,000 per day

Violations of the Utah Air Conservation Act, applicable State and Federal regulations, and orders including:

- Significant levels of emissions resulting from violations of emission limitations or other regulations which are not within Category A.
- Substantial non-compliance with monitoring requirements.
- Significant violations of approval orders, compliance orders, and consent agreements not within Category A.
- Significant and/or knowing violations of "notice of intent" and other notification requirements, including those of NESHAP.
- Violations of reporting requirements of NESHAP.

---

# Category C

Penalties: Up to \$2,000 per day

Minor violations of the Utah Air Conservation Act, applicable State and Federal Regulations, and orders having no significant public health or environmental impact including:

- Reporting violations
- Minor violations of monitoring requirements, orders and agreements
- Minor violations of emission limitations or other regulatory requirements.

---

# Category D

Penalties: Up to \$299.00

Violations of specific provisions of R307 considered minor including:

- Violation of automobile emission standards and requirements
- Violation of wood-burning regulations by private individuals
- Open burning violations by private individuals.

C.

Regional Haze,  
Sierra Club



# **Utah Regional Haze SIP Amendment**

## **May 1, 2019**

**Sierra Club  
National Parks Conservation Association**

# Utah Regional Haze Partial Timeline

**2003** Original RH SIP: Focus on Sulfur

**2008** Amended RH SIP: NOx and PM (imp. by 2014, disapp. 2012)

**2011** Final Mercury & Air Toxics Rule (will lead to Carbon closure)

**2014** Proposed RH SIP: No new pollution controls proposed

**2015** April: Carbon Plant Closes

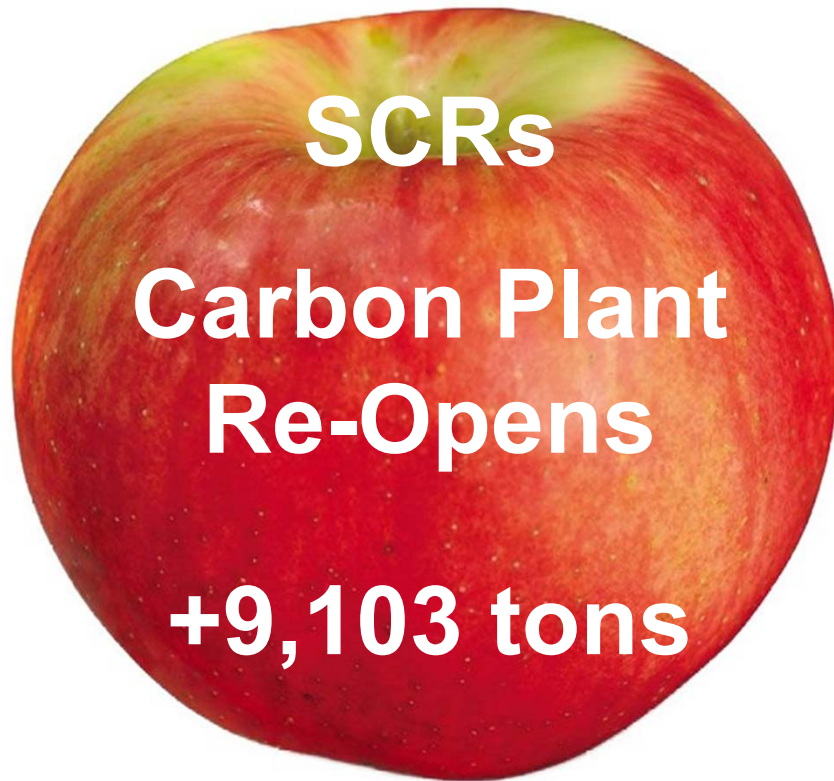
**2015** June: Amended RH SIP: +Carbon Closure (disapp. 2016)

**2016** EPA FIP Orders 4 New SCR Pollution Controls to cut NOx

**2017** EPA's Order Stayed in Court (Utah and RMP lawsuit filed 2016)

**2019** Amended RH SIP: No new pollution controls proposed

## **Does Alternative Plan Result in Less Pollution?**



**SCRs**

**Carbon Plant  
Re-Opens**

**+9,103 tons**

**EPA FIP**



**No SCR's**

**Carbon Plant  
Stays Closed**

**Alternative / SIP**

# No: Once Corrected, EPA Plan = Less Pollution

Units	NOx (tpy)		SO <sub>2</sub> (tpy)		Combined	
	EPA FIP	Alternative	EPA FIP	Alternative	EPA FIP	Alternative
Carbon 1	1,312	0	2,286	0	3,598	0
Carbon 2	1,977	0	3,528	0	5,505	0
Hunter 1	796	3,166	1,153	1,153	1,949	4,319
Hunter 2	798	3,028	1,408	1,408	2,206	4,436
Hunter 3	6,530	4,490	1,230	1,230	7,760	5,720
Huntington 1	793	3,147	1,254	1,254	2,047	4,401
Huntington 2	753	3,366	1,201	1,201	1,954	4,567
Total	12,959	17,197	12,060	6,246	25,019	23,443

9,103

-7,527

15,916

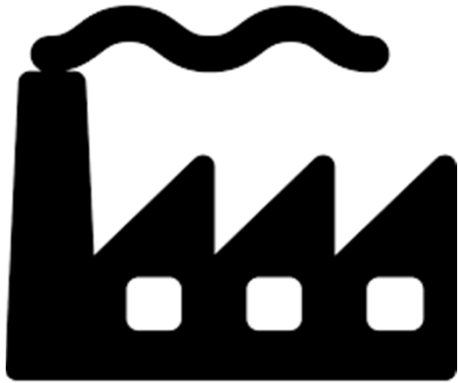
# Will Pollution Controls Extend Coal Unit Lives?



No, Not Necessarily



# **Requiring Pollution Controls Helps Level the Playing Field With Renewable Energy**



## 2017 Economic Contributions of National Park Visitor Spending to the Utah Economy

# of Visitors = 15.2 million

\$ spent in local gateway regions =  
\$1.1 billion

### Expenditures supported:

- 17,600 jobs
- \$547 million in labor income
- \$1.7 billion in economic output









By Brad Goldpaint, Goldpaint Photography - posted on NASA website as Three Arches Above Utah

<https://apod.nasa.gov/apod/ap110524.html>

## Current Controls Won't Achieve Reasonable Progress

Class I Area	Projected 2028 Impairment, 20% Most Impaired Days (dv)	2028 Glidepath 20% Most Impaired Days (dv)
Arches NP	7.46	6.92
Black Canyon of the Gunnison NM	6.38	6.28
Bryce Canyon NP	7.14	6.68
Canyonlands NP	7.46	6.92
Capitol Reef NP	7.42	N/A <sup>2</sup>
Flat Tops WA	5.19	4.99
Grand Canyon NP	7.48	6.44
La Garita WA	6.38	6.28
Maroon Bells/Snowmass WA	5.19	4.99
Mesa Verde WA	7.33	7.22
Mount Zirkel WA	5.49	5.64
San Pedro Parks WA	6.35	5.94
Weminuche WA	6.38	6.28
West Elk WA	5.19	4.99
Zion NP	N/A <sup>3</sup>	

### Includes

Carbon closure

Hunter 3 controls

**N/As** could not be calculated due to incomplete IMPROVE data

See: [EPA's Preliminary 2028 Regional Haze Modeling, Table 3-3](#)





By Wolfgang Staudt - originally posted to Flickr as Capitol Reef National Park, CC BY 2.0,  
<https://commons.wikimedia.org/w/index.php?curid=8091609>

D.  
Regional Haze,  
Division of Air  
Quality



UTAH DEPARTMENT of  
ENVIRONMENTAL QUALITY

**AIR  
QUALITY**

# REGIONAL HAZE OVERVIEW

Air Quality Board May 1, 2019

---

## The Clean Air Act requirements:

- Prevention of any **future impairment** of visibility from manmade air pollution
- Remedying of any **existing impairment** of visibility from manmade air pollution
- Applies to mandatory Federal Class I areas (National Parks & Wilderness Areas)

## Regional Haze Purpose

---





## 156 Class I Visibility Areas



---

## EPA Rules

**1980:** Reasonably Attributable Visibility Impairment (RAVI) Rule

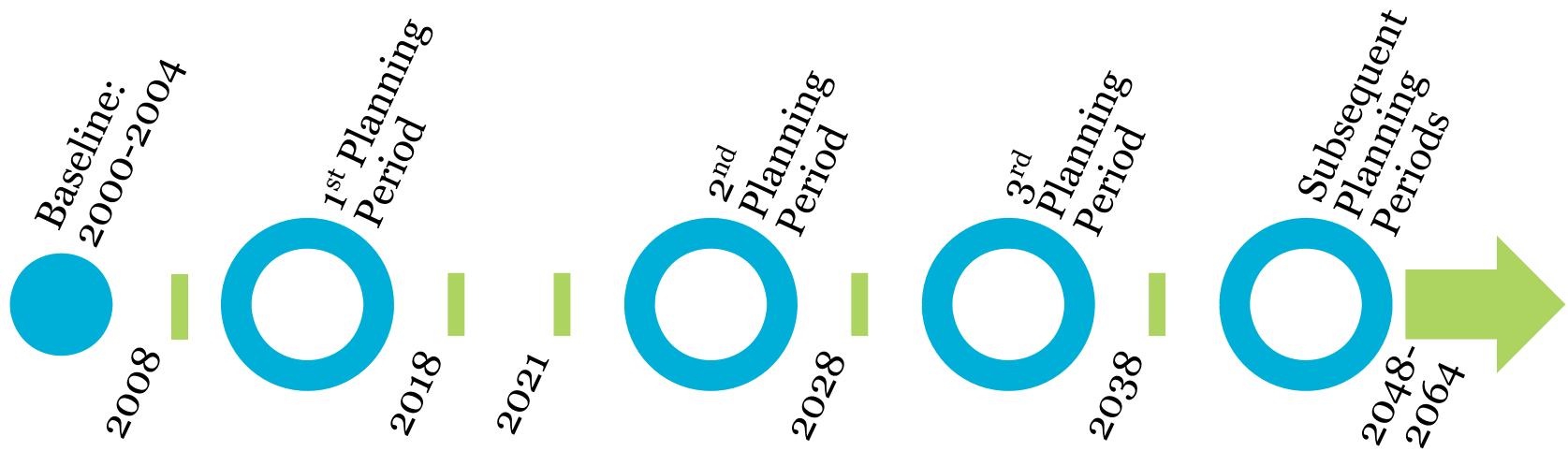
**1999:** Regional Haze Rule – states must develop programs to assure reasonable progress toward meeting the national visibility goal

RH state implementation plans (SIPs) and interim progress reports must demonstrate how states have made, and will continue to make, progress toward achieving their visibility improvement goals.

## Regional Haze Purpose

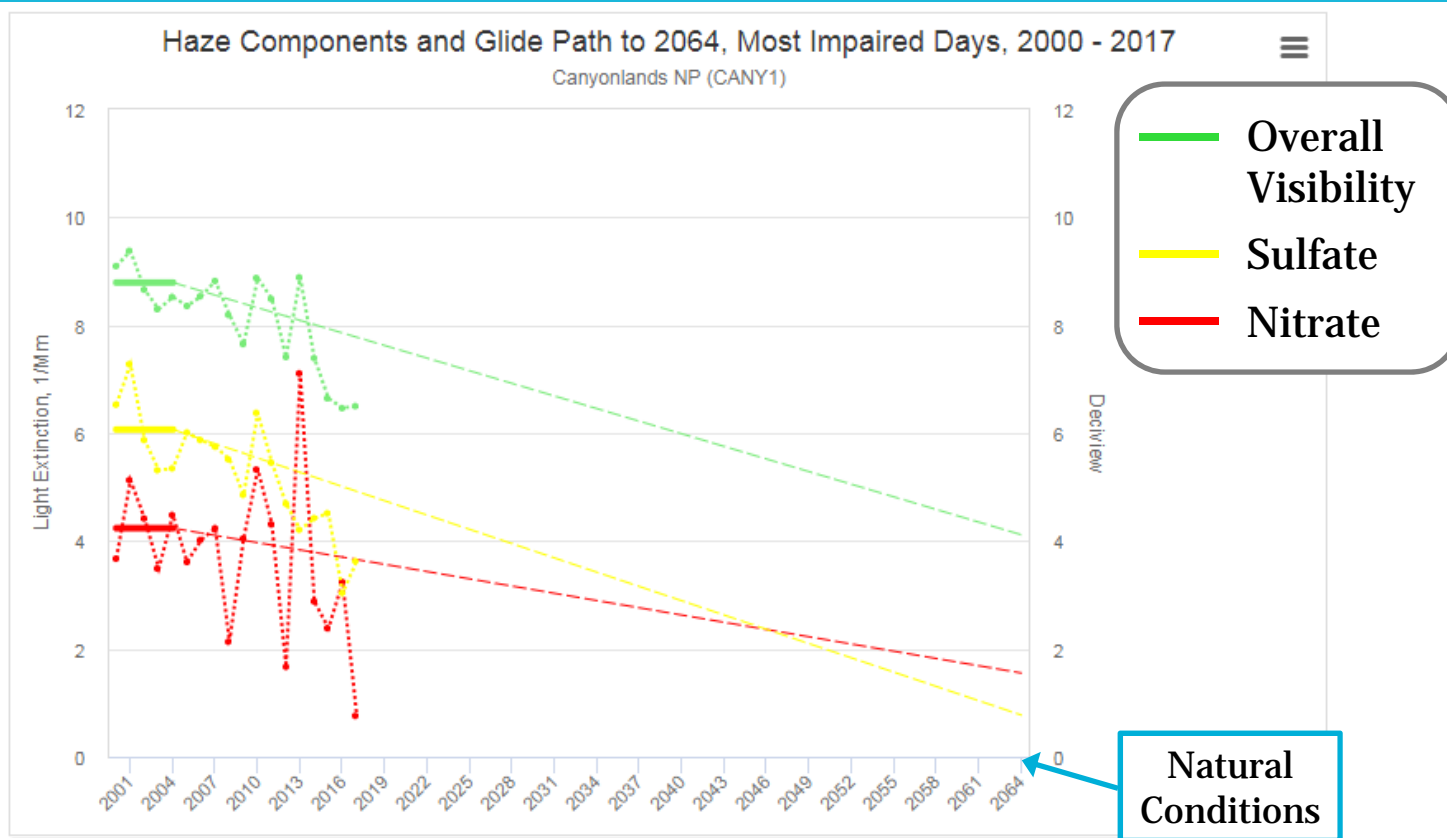
---





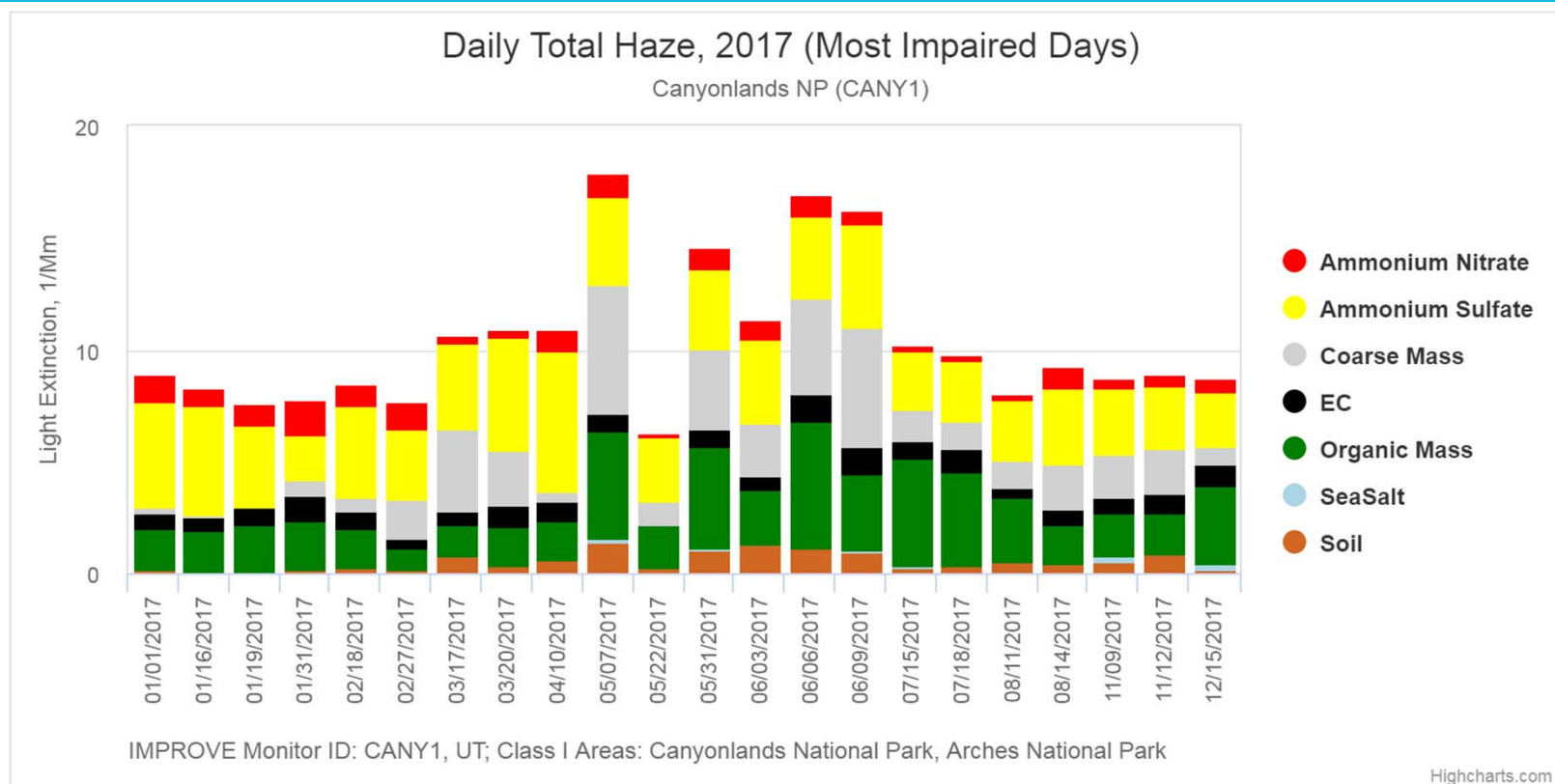
## Regional Haze Timeline





## Progress Toward Visibility Goals (Glide Path)





## Contributions to Haze on Most Impaired Days



- 
- **2003:** First Utah RH SIP adopted. Based on recommendations of the Grand Canyon Visibility Transport Commission reductions were focused on SO<sub>2</sub>. The SIP set SO<sub>2</sub> milestones from 2003 to 2018
  - **2008:** RH SIP revised to include Best Available Retrofit Technology (BART) for NO<sub>x</sub> and PM
    - (Low NO<sub>x</sub> Burners/Over-Fired Air) for the BART Units
  - **2011:** SO<sub>2</sub> milestones were adjusted to reflect changes in the number of states participating in the program.
  - **2012:** EPA disapproved the State's 2008 BART determinations for NO<sub>x</sub>, while approving an SO<sub>2</sub> BART Alternative
    - EPA did not issue a FIP. Utah worked with EPA to develop a SIP revision with a BART Alternative that would meet the requirements of the CAA
  - **2015:** Utah approved a SIP to address BART for NO<sub>x</sub> emissions at large point sources (Carbon, Hunter, and Huntington)
  - **2016:** EPA rejected the SIP revision and promulgated a FIP

## 1<sup>st</sup> Planning Period Timeline

---



---

### BART Alternative

- Low NO<sub>x</sub> Burners with Over-Fired Air on all Hunter and Huntington Units
- Stricter Emission limits
- Carbon Power Plant Closure
- Cost: \$38 million

### EPA FIP

- Selective Catalytic Reduction (SCR) on Units 1 and 2 at Hunter & Huntington
- Cost: \$480 million

### Comparison of the two plans

---

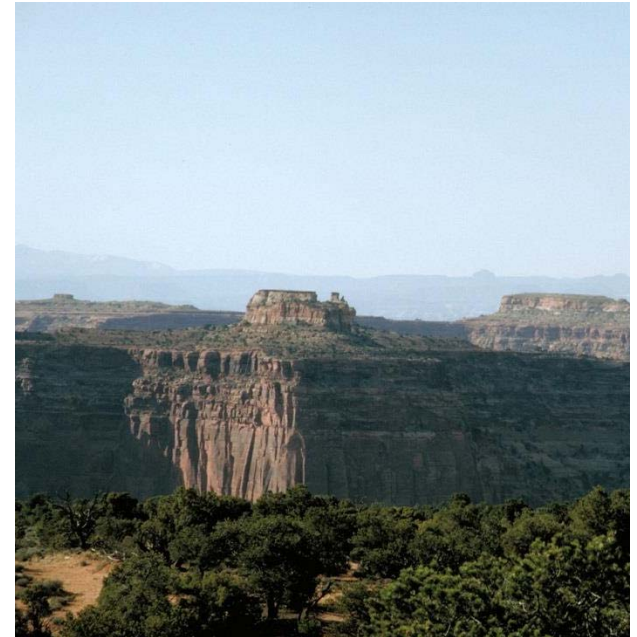




No Controls  
92.2 miles



EPA FIP  
93.3 miles



Utah BART Alternative  
93.4 miles

## Change in Visual Range on Worst Visibility Days



# E. Rulemaking Schedule

# 2019-2020 Rulemaking Calendar



UTAH DEPARTMENT *of*  
ENVIRONMENTAL QUALITY

**AIR  
QUALITY**

Presented by:

Thomas Gunter  
Rules Coordinator

# June 5, 2019

## SIP Section XX Region Haze Parts A and D – Jay Baker

Final Adoption - Amended

- AQB1 – March 6, 2018
  - Public Comment Period – April 1-May 15, 2019
  - Public Hearing – April 17, 2019
    - Multiple comments received

## R307-110-28 – Thomas Gunter

Final Adoption – As Proposed

- AQB1 – March 6, 2018
  - Public Comment Period – April 1-May 1, 2019
    - No Comments Received

## R307-150-3. Applicability – Thomas Gunter

Final Adoption – As Proposed

- AQB1 – March 6, 2018
  - Public Comment Period – April 1-May 1, 2019
    - No Comments Received

## R307-401-10. Source Category Exemptions – Thomas Gunter

Final Adoption – As Amended or CPR

- AQB1 – March 6, 2018
  - Public Comment Period – April 1-May 1, 2019
    - Comments from Hill AFB

## SIP Section X Vehicle Inspection and Maintenance Program, Parts A and F – Mat Carlile

Propose for Public Comment - Amendment

## R307-110-31. Section X. Vehicle Inspection and Maintenance Program, Part A, General Requirements and Applicability – Thomas Gunter

Propose for Public Comment - Amendment

## R307-110-36 . Section X. Vehicle Inspection and Maintenance Program, Part F, Cache County– Thomas Gunter

Propose for Public Comment - Amendment

## R307-204 Emission Standards: Smoke Management – Thomas Gunter

Propose for Public Comment - Amendment

---

# August 7, 2019

SIP Section X Vehicle Inspection and Maintenance  
Program, Parts B and E – Mat Carlile

Propose for Public Comment - Amendment

R307-110-32. Section X. Vehicle Inspection and  
Maintenance Program, Part B, Davis County– Thomas  
Gunter

Propose for Public Comment - Amendment

R307-110-35 . Section X. Vehicle Inspection and  
Maintenance Program, Part E, Weber County– Thomas  
Gunter

Propose for Public Comment - Amendment

PM<sub>2.5</sub> Maintenance Plans (Part A) – Becky Close

- Logan
- Salt Lake
- Provo

Propose for Public Comment - Amendment

R307-110-10 – Thomas Gunter

Propose for Public Comment - Amendment

R307-401-15. Air Strippers and Soil Venting Projects –  
Thomas Gunter

Propose for Public Comment - Amendment

CFR Updates R307-101-3; R307-210; R307-214 –  
Thomas Gunter

Propose for Public Comment - Amendment

5-Year Reviews – Thomas Gunter

R307-125. Clean Air Retrofit, Replacement, and Off-  
Road Technology Grant and Loan Program

R307-501. Oil and Gas Industry: General Provisions

R307-502. Oil and Gas Industry: Pneumatic Controllers

R307-503. Oil and Gas Industry: Flares

R307-504. Oil and Gas Industry: Tank Truck Loading

---

# September 4, 2019

SIP Section X Vehicle Inspection and Maintenance Program, Parts A and F – Mat Carlile

Final Adoption

- AQB1 – June 5, 2019

R307-110-3. Section X. Vehicle Inspection and Maintenance Program, Part A, General Requirements and Applicability– Thomas Gunter

Final Adoption

- AQB1 – June 5, 2019

R307-110-36. Section X. Vehicle Inspection and Maintenance Program, Part F, Cache County– Thomas Gunter

Final Adoption

- AQB1 – June 5, 2019

R307-204. Emission Standards: Smoke Management– Thomas Gunter

Final Adoption

- AQB1 – June 5, 2019

R307-401-12. Reduction in Air Pollutants – Thomas Gunter

Propose for Public Comment - Amendment

---

# October 2, 2019

SIP Section X Vehicle Inspection and Maintenance  
Program, Part D – Mat Carlile

Propose for Public Comment – Amendment

R307-110-34 Section X. Vehicle Inspection and  
Maintenance Program, Part D, Utah County–  
Thomas Gunter

Propose for Public Comment - Amendment



---

# November 6, 2019

## SIP Section X Vehicle Inspection and Maintenance Program, Parts B and E – Mat Carlile

### Final Adoption

- AQB1 – August 7, 2019

## R307-110-32. Section X. Vehicle Inspection and Maintenance Program, Part B, Davis County– Thomas Gunter

### Final Adoption

- AQB1 – August 7, 2019

## R307-110-35. Section X. Vehicle Inspection and Maintenance Program, Part E, Weber County – Thomas Gunter

### Final Adoption

- AQB1 – August 7, 2019

## PM<sub>2.5</sub> Maintenance Plans (Part A) – Becky Close

- Logan
- Salt Lake
- Provo

### Final Adoption

- AQB1 – August 7, 2019

## R307-110-10 – Thomas Gunter

### Final Adoption

- AQB1 – August 7, 2019

## R307-401-15 Air Strippers and Soil Venting Projects – Thomas Gunter

### Final Adoption

- AQB1 – August 7, 2019

## CFR Updates R307-101-3; R307-210; R307-214 – Thomas Gunter

### Final Adoption

- AQB1 – August 7, 2019

---

# December 5, 2019

R307-401-12. Reduction in Air Pollutants – Thomas  
Gunter

Final Adoption

- AQB1 – September 4, 2019
  - Public Comment Period – XXX-XXX, 2019



---

# January 1, 2020

SIP Section X Vehicle Inspection and Maintenance  
Program, Part D – Mat Carlile

Final Adoption

- AQB1 – October 2, 2019
  - Public Comment Period – XXX-XXX, 2019

R307-110-34 Section X. Vehicle Inspection and  
Maintenance Program, Part D, Utah County–  
Thomas Gunter

Final Adoption

- AQB1 – October 2, 2019
  - Public Comment Period – XXX-XXX, 2019

---

# Anticipated Rule/Plan Projects

SO<sub>2</sub> Maintenance Plan – Glade Sowards

Propose for Public Comment – Amendment

R307-110-11. Section IX. Control Measures for Area and Point Sources, Part B, Sulfur Dioxide – Thomas Gunter

Propose for Public Comment - Amendment

SIP Section X Vehicle Inspection and Maintenance Program, Part C – Mat Carlile

Propose for Public Comment - Amendment

R307-110-33. Section X. Vehicle Inspection and Maintenance Program, Part C, Salt Lake County – Thomas Gunter

Propose for Public Comment - Amendment