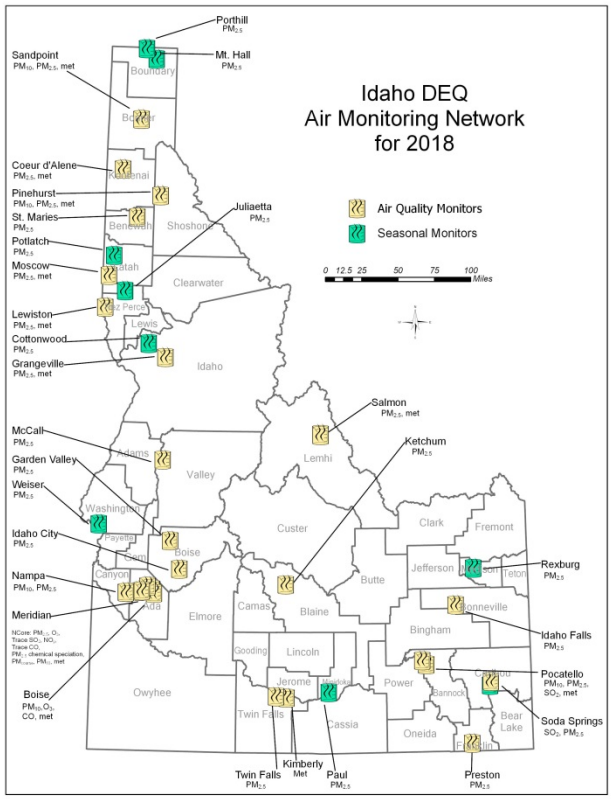
Idaho Department of Environmental Quality Annual Ambient Air Quality Monitoring Network Plan



State of Idaho
Department of Environmental Quality

June 2018

Printed on recycled paper, DEQ June 2018, PID MPOB, CA code 81360. Costs associated with this publication are available from the State of Idaho Department of Environmental Quality in accordance with Section 60-202, Idaho Code.

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June 2018

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Abbreviations, Acronyms, and Symbols

µ	micron
µg	microgram
AQI	Air Quality Index
AQS	air quality system
ARM	approved regional method
BAM	beta attenuation monitor
CBSA	core-based statistical area
CFR	Code of Federal Regulations
CO	carbon monoxide
CRB	Crop Residue Burning
CSA	combined statistical area
DEQ	Idaho Department of Environmental Quality
EPA	United States Environmental Protection Agency
FEM	federal equivalent method
FDMS	filter dynamic measurement system
FRM	federal reference method
m^2	square meter
m^3	cubic meter
MSA	metropolitan statistical area
mbar	millibar
NAAQS	National Ambient Air Quality Standards
NO	nitric oxide
NO_2	nitrogen dioxide
NO_x	nitrogen oxides
NO_y	total reactive nitrogen
O_3	ozone
POC	parameter occurrence code
$PM_{2.5}$	particulate matter with diameter less than or equal to 2.5 µ
PM_{10}	particulate matter with diameter less than or equal to 10 µ
$PM_{10-2.5}$	particulate fraction with a nominal diameter between 2.5 and 10.0 µ
ppb	parts per billion
ppm	parts per million
s	second
SCC	sharp cut cyclone
SIP	state implementation and maintenance plan
SLAMS	state and local air monitoring station
SO_2	sulfur dioxide
SPM	special purpose monitor
STN	Speciation Trends Network
TEOM	tapered element oscillating microbalance
UV	ultraviolet
VSCC	very sharp cut cyclone
XRF	x-ray fluorescence

Executive Summary

The objective of the Idaho Department of Environmental Quality's (DEQ's) 2018 annual ambient air quality monitoring network plan is to determine whether the state's ambient air quality monitoring network is achieving its monitoring objectives and identify any needed modifications. While this is an ongoing annual assessment, DEQ also conducts a comprehensive 5-year network assessment, which was completed in 2015 and is found at *www.deq.idaho.gov/media/60177248/ambient-aq-monitoring-network-5-year-assessment.pdf*.

DEQ proposes the following network modifications in this year's annual network plan:

- Complete the relocation of the nitrogen dioxide (NO_2) analyzer from the Meridian—Near-Road site to the Meridian—St. Luke's NCore site to retain National Ambient Air Quality Standards (NAAQS) monitoring for NO_2.
- Replace DEQ's single remaining 1405-F particulate matter $(PM)_{2.5}$ tapered element oscillating microbalance (TEOM) monitor with a beta attenuation mass (BAM) 1020 $PM_{2.5}$ monitor at the Pocatello—Garrett and Gould monitoring site. Both types are used as special purpose monitors (SPMs) for Air Quality Index (AQI) reporting.
- Replace the Ketchum 1400AB $PM_{2.5}$ TEOM with a BAM 1020 $PM_{2.5}$ monitor at a ground location near the current site. The BAM 1020 is installed and currently undergoing quality assurance field testing.
- Relocate the BAM 1020 $PM_{2.5}$ monitor from the Franklin site to the IDEQ $PM_{2.5}$ state and local air monitoring station, (SLAMS) site in Preston. This monitor will provide continuous $PM_{2.5}$ concentrations in conjunction with the federal reference method (FRM) for AQI reporting.
- Replace the Thermo Scientific 1400AB PM_{10} monitors, which are approaching end-of-service life, with BAM 1020 PM_{10} monitors. In 2018, BAM 1020s are expected to be deployed at the Nampa, Pocatello, and Pinehurst sites. The remaining 1400AB monitors at the Boise and Sandpoint sites will be replaced as funding permits.
- Replace the existing 2025 FRM $PM_{2.5}$ monitors with Met One Instrument's E-SEQ-FRM $PM_{2.5}$ monitors at all the current 2025 FRM sites. The 2025 FRMs have been discontinued and are no longer supported by the manufacturer.
- Install a collocated precision pair of E-SEQ-FRMs at the Nampa site. The existing collocated pair of 2025 FRM $PM_{2.5}$ monitors at St. Luke's will remain in operation until phase out of the 2025 FRMs is complete.
- Remove the collocated 2025 FRM PM_{10} precision monitor at the St. Luke's site. Collocated PM_{10} monitoring for coarse measurements is no longer a regulatory requirement.
- Replace the 1400AB $PM_{2.5}$ TEOM monitor with BAM 1020 $PM_{2.5}$ monitor (both used as SPMs for AQI reporting) at the Garden Valley site.

Since submitting the 2017 annual network plan, DEQ has made the following modifications to the network. Some items required United States Environmental Protection Agency (EPA) approval, while less significant items did not.

- Replaced the 1400AB $PM_{2.5}$ TEOM monitors with BAM 1020 $PM_{2.5}$ monitors (both used as SPMs for AQI reporting) at the McCall and Idaho City sites.

- Completed standardizing all DEQ meteorological towers with the same model 2- and 10-meter temperature probes and aspirated fans to generate delta temperature measurements.
- Shut down the Franklin site due to land access restrictions.

1 Introduction

This document, in accordance with the federal requirements described below, is the Idaho Department of Environmental Quality's (DEQ's) 2018 annual ambient air quality monitoring network plan. The primary goal of the annual network plan is to determine whether the state monitoring network is achieving its monitoring objectives and identify any needed modifications. The appendices provide additional information on network design values (Appendix A), the IMPROVE monitoring network (Appendix B), supplemental correspondence (Appendix C), and federal requirement checklists (Appendix D).

Idaho's monitoring network has four principal objectives: (1) assess compliance with National Ambient Air Quality Standards (NAAQS); (2) support smoke management programs, including agricultural and prescribed burning practices; (3) identify emergency episodes caused by windblown dust or wildfire; and (4) support the evaluation of state implementation and maintenance plans (SIPs). In addition, DEQ operates a network of continuous fine particulate matter ($PM_{2.5}$) monitors and surface meteorology stations to support air quality forecasting, the Air Quality Index (AQI) program, and modeling projects. DEQ also leverages the IMPROVE monitoring network to fulfill requirements for the $PM_{2.5}$ transport (Hells Canyon) and $PM_{2.5}$ background (Craters of the Moon National Monument) monitoring sites (Appendix B).

Beginning July 1, 2007, state agencies were required to adopt and submit to the United States Environmental Protection Agency (EPA) regional administrator an annual monitoring network plan (40 CFR 58.10). The plan shall provide for the establishment and maintenance of an air quality surveillance system that consists of a network made up of the following types of monitoring stations:

- State and local air monitoring stations (SLAMS), including monitors that use the following methods:
  - Federal reference method (FRM)
  - Federal equivalent method (FEM)
  - Approved regional method (ARM)
- NCore stations (included in the national network of multipollutant monitoring stations)
- $PM_{2.5}$ (particulate matter with diameter less than or equal to 2.5 microns [µ]) Speciation Trends Network (STN) stations
- Special purpose monitoring (SPM) stations

This plan also lists seasonal $PM_{2.5}$ monitors used for smoke and agricultural burning management.

The plan shall include a statement of purpose for each monitor and evidence that siting and operation of each monitor meet the requirements of Appendices A, B, C, D, and E of 40 CFR 58 where applicable (Appendix D).

This plan is made available for public inspection for 30 days before submission to EPA and subsequently includes public comments and responses (Appendix E). Any annual network plan that proposes SLAMS network modifications—including new monitoring sites—is subject to

approval by the EPA regional administrator, who shall approve or disapprove the plan within 120 days.

All stations required to be operational by January 1, 2019, and specific locations for the required monitors are included in this plan. The annual network plan contains the following required information for existing and proposed sites where appropriate:

- AQS (air quality system, EPA's database) site identification number
- Location, including street address and geographical coordinates
- Sampling and analysis method for each measured parameter
- Operating schedules for each monitor
- Proposals to remove or move a monitoring station within 18 months following plan submittal
- Monitoring objective and spatial scale of representativeness for each monitor as defined in Appendix D to 40 CFR 58
- Identification of any sites that are suitable or unsuitable for comparison against the annual $PM_{2.5}$ NAAQS as described in 40 CFR §58.30
- Metropolitan statistical area (MSA), core-based statistical area (CBSA), combined statistical area (CSA), or other area represented by the monitor
- Designation of any lead monitors as either source-oriented or nonsource-oriented (i.e., NCore) according to Appendix D of 40 CFR 58
- Source-oriented monitors for which a waiver has been requested or granted by the EPA regional administrator as allowed for under paragraph 4.5(a)(ii) of Appendix D to 40 CFR 58
- Source-oriented or nonsource-oriented site for which a waiver has been requested or granted by the EPA regional administrator for the use of lead-PM_{10} (particulate matter with diameter less than or equal to 10 µ) monitoring in lieu of lead-total suspended particulate monitoring allowed under paragraph 2.10 of Appendix C to 40 CFR 58

The annual network plan documents how states and local agencies provide for the review of changes to a $PM_{2.5}$ monitoring network that impact the location of a violating $PM_{2.5}$ monitor. The affected state or local agency must document the process for obtaining public comment and include any comments received through the public notification process within their submitted plan.

2 Air Quality Surveillance Systems and Monitoring Objectives

Ambient air monitoring objectives have shifted over time, requiring air quality agencies to reevaluate and reconfigure monitoring networks. A variety of factors contribute to these shifting monitoring objectives:

- Air quality has changed since adoption of the federal Clean Air Act and NAAQS. For example, the problems of high ambient concentrations of lead and carbon monoxide (CO) have largely been solved.

- Populations and behaviors have changed. For example, the US population has (on average) grown, aged, and shifted toward urban and suburban areas over the past four decades. In addition, rates of vehicle ownership and annual miles driven have increased.
- New air quality objectives have been established, including rules to reduce air toxics, $PM_{2.5}$, and regional haze.
- The understanding of air quality issues and the capability to monitor air quality have both improved. Together, the enhanced understanding and capabilities can be used to design more effective air monitoring networks.

Ambient air monitoring networks must be designed to meet three basic monitoring objectives. Each objective is equally important and must be considered individually.

- **Provide air pollution data to the general public in a timely manner**. Data can be presented to the public in a number of ways, including air quality maps, newspaper articles or advertisements, Internet sites, and as part of weather forecasts and public advisories.
- **Provide support for determining compliance with ambient air quality standards and developing emissions control strategies**. Data from qualified monitors for NAAQS pollutants are used for comparing an area's air pollution levels against the NAAQS. Data from monitors of various types can be used in developing attainment and maintenance plans. Data from SLAMS, and especially the NCore station, are used to evaluate the regional air quality models used in developing emission strategies and to track effectiveness of air pollution abatement control measures. In monitoring locations near major air pollution sources, source-oriented monitoring data can provide insight into how well industrial sources are controlling their pollutant emissions.
- **Provide support for air pollution research studies**. Air pollution data from the NCore multipollutant monitoring network can be used to supplement data collected by researchers working on health effects assessments and atmospheric processes or for monitoring methods development work.

To support the air quality management work indicated in the three basic air monitoring objectives, a network must be designed with a variety of monitoring site types. Monitoring sites must be capable of informing airshed managers about many things including the peak air pollution levels, typical levels in populated areas, air pollution transported into and outside of a city or region, and air pollution levels near specific emissions sources. The following list summarizes these site types:

- Maximum concentrations of air pollutants expected to occur in the area covered by the network
- Typical pollutant concentrations in areas of high population density
- Impact of significant sources or source categories on air quality
- General background concentration levels of air pollutants
- Extent of regional pollutant transport among populated areas and compliance with secondary air quality standards
- Air pollution impacts on visibility, vegetation damage, or other welfare-based impacts

The adequacy of an ambient air monitoring network may be determined by using a variety of tools, including the following:

- Federal monitoring requirements and network minimums
- Analyses of historical monitoring data
- Maps of pollutant emissions densities
- Dispersion modeling
- Special studies/saturation sampling
- SIP requirements
- Revised monitoring strategies (e.g., new regulations, reengineering of the air monitoring network)
- Network maps and network descriptions with site objectives defined
- Best professional judgment

The appropriate location of a monitor can only be determined on the basis of stated objectives. The following tools can help determine whether monitor locations are meeting their stated objectives:

- Maps, graphical overlays, and information based on geographic information systems, which are extremely helpful for visualizing the adequacy of monitor locations
- Plots (graphs) of potential emissions levels and/or historical monitored levels of pollutants versus monitor locations
- Modeling or special studies (including saturation monitoring studies) may be appropriate for determining the adequacy of a particular monitor location

3 DEQ's Ambient Air Quality Monitoring Network

DEQ is responsible for operating and maintaining the ambient air monitoring network for the state of Idaho. Some air monitors in Idaho are managed by tribal monitoring organizations on tribal lands. This document is limited to the monitors in the air monitoring network that are managed by DEQ (Figure 1).

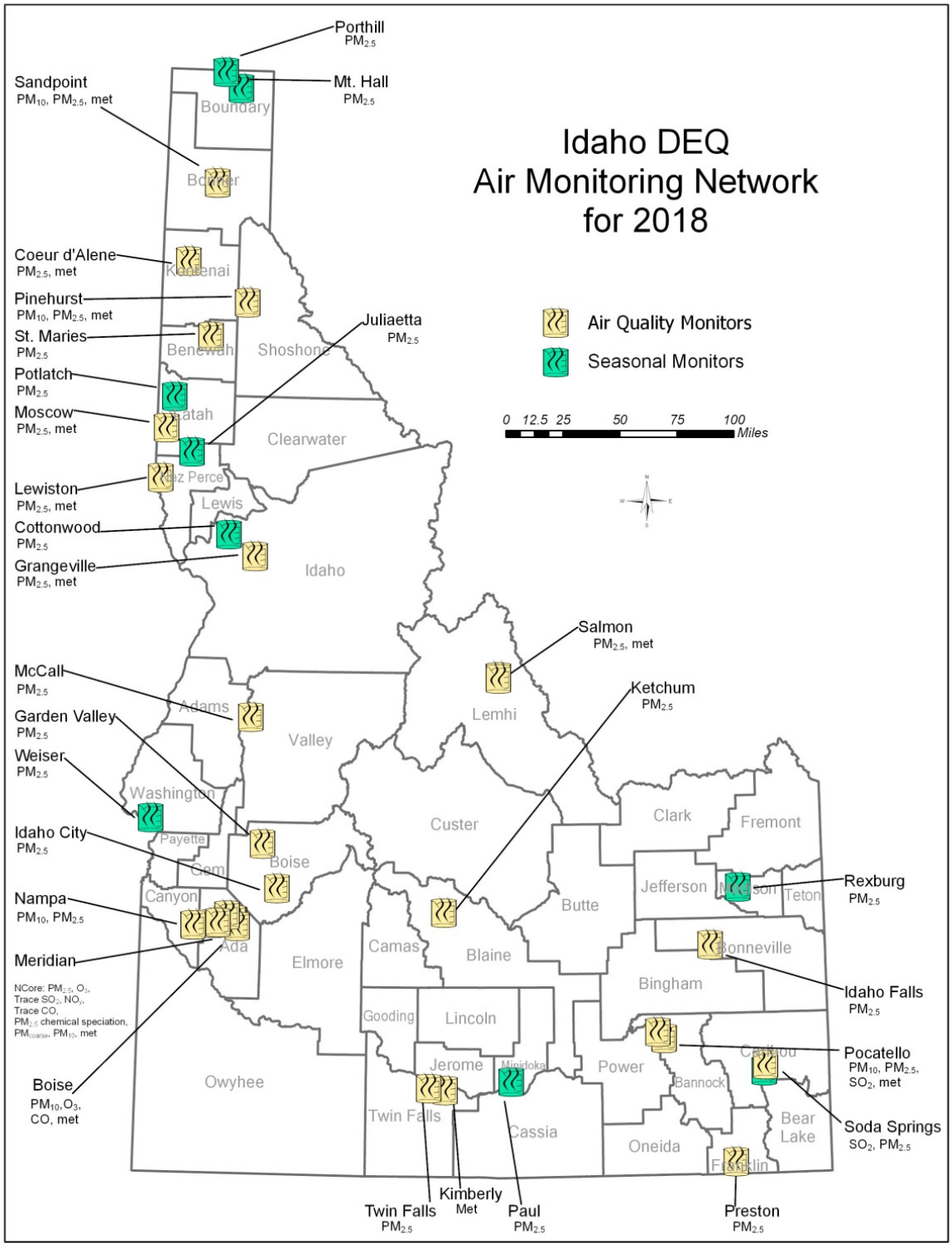


Figure 1. Idaho air quality monitoring network, 2018.

3.1 Monitoring Sites

On January 1, 2018, DEQ's SLAMS network consisted of 26 distinct monitoring sites measuring criteria pollutants and surface meteorology (Table 1). DEQ's ambient air quality monitoring network is operated and maintained by monitoring staff at DEQ's six regional offices.

Table 1. DEQ monitoring stations, locations, and AQS identification codes.

Site	Address	Latitude/ Longitude	AQS Identification
Sandpoint— University of Idaho	U of I Research Center, 2105 N. Boyer Ave. Sandpoint, ID 83864	+48.291820/ - 116.556560	160170003
Coeur d'Alene— Lancaster Rd.	Lancaster Road Hayden, ID 83835	+47.788908/ -116.804539	160550003
Coeur d'Alene—LMP	Camp Cross, McDonald Point Lake Coeur d'Alene, ID	+47.555253/ -116.817331	160550004
St. Maries	Forest Service Building St. Maries, ID 83861	+47.316667/ -116.570280	160090010
Pinehurst	106 Church St. Pinehurst, ID 83850	+47.536389/ -116.236667	160790017
Moscow	1025 Plant Sciences Rd. Moscow, ID 83843	+46.728000/ -116.955667	160570005
Lewiston	1200 29th St. Lewiston, ID 83501	+46.408352/ -116.992533	160690012
Grangeville	US Forest Service Compound Grangeville, ID 83530	+45.9274167/ -116.105944	160490002
McCall	500 N. Mission St. McCall, ID 83638	+44.542486/ -116.062358	160850002
Garden Valley	946 Banks Lowman Rd. Garden Valley, ID 83622	+44.104675/ -115.973084	160150002
Nampa—Fire Station	923 1st St. S. Nampa, ID 83651	+43.580310/ -116.562676	160270002
Meridian— St. Luke's	Eagle Rd and I-84 Meridian, ID 83642	+43.600699/ -116.347853	160010010
Boise— Eastman Garage	166 N. 9th Boise, ID 83702	+43.616379/ -116.203817	160010014
Boise— Fire Station #5	16th and Front Boise, ID 83702	+43.618889/ -116.213611	160010009
Boise— White Pine Elementary	401 E. Linden St. Boise, ID 83706	+43.577603/ -116.178156	160010017
Garden City	Ada County Fairgrounds Garden City, ID 83714	+43.647819/ -116.269514	160010020
Idaho City	3851 Hwy 21 Idaho City, ID 83631	+43.823017/ -115.838557	160150001
Ketchum	111 West 8th St. Ketchum, ID 83340	+43.682558/ -114.371094	160130004
Twin Falls	650 W. Addison Twin Falls, ID 83301	+42.56505/ -114.494767	160830007

Site	Address	Latitude/ Longitude	AQS Identification
Kimberly	50 Highway 50 Kimberly, ID 83341	+42.553325/ -114.354853	160830009
Pocatello—Garrett and Gould	Garrett and Gould Pocatello, ID 83204	+42.876725/ -112.460347	160050015
Pocatello— Sewage Treatment Plant	Batiste Chubbuck Rd. Pocatello, ID 83204	+42.916389/ -112.515833	160050004
Preston	450 East 800 South Preston, ID 83263	+42.08266/ -111.863297	160410002
Soda Springs	5-Mile Rd. Soda Springs, ID 83276	+42.695278/ -111.593889	160290031
Idaho Falls	Hickory and Sycamore St. Idaho Falls, ID 83402	+43.464700/ -112.046450	160190011
Salmon— Charles St.	N. Charles St. Salmon, ID 83467	+45.181893/ -113.890285	160590004

DEQ also uses seasonal monitors at nine locations for the state's Crop Residue Burning (CRB) Program (Table 2). These monitors are operated on a case-by-case basis; thus, seasonal operation duration varies widely.

Table 2. CRB station locations.

Site	Address	Latitude/ Longitude
Porthill	Tavern Farm Rd. Porthill, ID 83853	+48.995911/ -116.509953
Mt. Hall	1275 Idaho 1 Bonners Ferry, ID 83805	+48.894014/ -116.359381
Cottonwood	BLM Field Office, 1 Butte Dr. Cottonwood, ID 83522	+46.06319/ -116.34824
Potlatch	510 Elm St. Potlatch, ID 83855	+46.92106/ -116.89627
Juliaetta	3rd Street Juliaetta, ID 83535	+46.578731/ -116.708958
Weiser	690 W. Indianhead Rd. Weiser, ID 83672	+44.261694/ -116.979172
Paul	201 N. 1st Street West Paul, ID 83347	+42.6078167/ -113.7868167
Soda Springs— Caribou Hospital	Caribou Hospital, 300 South 3rd Street West Soda Springs, ID 83276	+42.651670/ -111.614720
Rexburg	Madison Middle School, 575 W. 7th Street Rexburg, ID 83440	+43.809486/ -111.800475

3.2 DEQ Monitoring Network—Monitoring Purpose, Scale of Representativeness, and Area Represented

The ambient air quality and meteorological data collected from DEQ's network is used for a variety of purposes, including the following:

- Determining compliance with the NAAQS
- Determining the locations of maximum pollutant concentrations
- Forecasting air quality to determine the AQI
- Providing early detection of smoke impacts (smoke management)
- Determining the effectiveness of air pollution control programs
- Evaluating the effects of air pollution levels on public health
- Tracking the progress of air quality-related SIPs
- Supporting pollutant dispersion models
- Developing responsible, cost-effective air pollution control strategies
- Analyzing air quality trends

Spatial scale of representativeness is used to clarify the link between general monitoring objectives, site types, and the physical location of a particular monitor. The goal in locating monitors is to correctly match the spatial scale represented by the sample of monitored air with the spatial scale most appropriate for the monitoring site type, air pollutant measured, and monitoring objective. Thus, spatial scale of representativeness is described by the physical dimensions of the air parcel nearest to a monitoring site throughout which actual pollutant concentrations are reasonably similar. The scales of interest for the monitoring site types described above are as follows:

1. ***Microscale***—Defines the concentrations in air volumes associated with area dimensions ranging from several meters up to about 100 meters.
2. ***Middle scale***—Defines the concentrations typical of areas up to several city blocks in size with dimensions ranging from about 100 to 500 meters.
3. ***Neighborhood scale***—Defines concentrations within some extended area of the city that has relatively uniform land use with dimensions in the range of 0.5–4.0 kilometers.
4. ***Urban scale***—Defines concentrations within an area of city-like dimensions, on the order of 4–50 kilometers. Within a city, the geographic placement of emissions sources may result in no single site that can be said to represent air quality on an urban scale. The neighborhood and urban scales have the potential to overlap in applications that concern secondarily formed or homogeneously distributed air pollutants.
5. ***Regional scale***—Defines an area that is usually rural, is of reasonably homogeneous geography without large emissions sources, and extends from tens to hundreds of kilometers.
6. ***National and global scales***—These measurement scales represent concentrations characterizing a nation or the globe as a whole.

Proper siting of a monitor requires specifying the monitoring objective, types of sites necessary to meet the objective, and desired spatial scale of representativeness. For example, consider a case where the objective is to determine NAAQS compliance by understanding the maximum

ozone concentrations for an area. Candidate areas would most likely be located downwind of a metropolitan area, probably in suburban residential areas where children and other susceptible individuals are likely to be outdoors. Sites in such areas are most likely to represent an urban scale of measurement. In this example, physical location would be determined by considering ozone precursor emission patterns, public activity, and meteorological characteristics affecting ozone formation and dispersion. Thus, spatial scale of representativeness would not be used in the selection process but would be a result of site location.

In some cases, the physical location of a site is determined from jointly considering both the basic monitoring objective and the type of monitoring site desired or required. For example, to determine typical $PM_{2.5}$ concentrations over a geographic area that has relatively high $PM_{2.5}$ concentrations, a neighborhood scale site is most appropriate. Such a site would likely be located in a residential or commercial area having a high overall $PM_{2.5}$ emission density but not in the immediate vicinity of any single dominant source. In this example, the desired scale of representativeness would be an important factor in determining the physical location of the monitoring site.

In either case, classification of the monitor by its type and spatial scale of representativeness is necessary and will aid in interpreting the monitoring data for a particular monitoring objective (e.g., public reporting, NAAQS compliance determination, or research support).

Table 3 illustrates the relationship between the various site types that can be used to support the three basic monitoring objectives and the scales of representativeness that are generally most appropriate for each site type.

Table 3. Relationships between site types and scales of representativeness.

Site Type	Appropriate Siting Scales
Maximum concentration	Micro, middle, neighborhood (*sometimes* urban or regional for secondarily formed pollutants)
Population oriented	Neighborhood, urban
Source impact	Micro, middle, neighborhood
General/background	Urban, regional
Regional transport	Urban, regional
Welfare-related impacts	Urban, regional

Federal ambient air monitoring regulations use the statistical-based definitions for metropolitan areas provided by the Office of Management and Budget and the Census Bureau. These areas are referred to as metropolitan statistical areas or micropolitan statistical areas—both of which are CBSAs—and CSAs. A CBSA associated with at least one urbanized area of 50,000 individuals or more is termed an MSA. A CBSA associated with at least one urbanized cluster of at least 10,000 individuals or more is termed a micropolitan statistical area. A CSA consists of two or more adjacent CBSAs.

By definition, both MSAs and CSAs have a high degree of integration; however, many such areas cross state or other political boundaries. An MSA or CSA may also cross more than one airshed. EPA recognizes that state or local agencies must consider MSA/CSA boundaries and their own political boundaries and geographical characteristics in designing their air monitoring

networks. EPA also recognizes there may be situations where the EPA regional administrator and the affected state or local agencies may need to augment or divide the overall MSA/CSA monitoring responsibilities and requirements among these various agencies to achieve an effective network design. Full monitoring requirements apply separately to each affected state or local agency in the absence of an agreement between the affected agencies and the EPA regional administrator.

Table 4 summarizes the monitoring purpose, area represented, and monitoring scale of representativeness for DEQ's monitoring sites, including seasonal monitors.

Table 4. Monitoring objectives, areas represented, and scales of representation.

Site	Regulatory Objective	Area Represented	Monitoring Scale
Sandpoint—University of Idaho	AQI, PM_{10} SIP, PM_{10} NAAQS, smoke management, modeling-meteorological	Bonner County	Neighborhood
Coeur d'Alene—Lancaster Rd.	AQI, smoke management, modeling-meteorological	Coeur d'Alene, ID MSA	Urban
Coeur d'Alene—LMP	Modeling-meteorological	Coeur d'Alene, ID MSA	Neighborhood
St. Maries	$PM_{2.5}$ NAAQS, AQI, smoke management	Benewah County	Neighborhood
Pinehurst	PM_{10} SIP, PM_{10} NAAQS, $PM_{2.5}$ NAAQS, AQI, smoke management, modeling-meteorological	Shoshone County	Neighborhood
Porthill	Smoke management	Boundary County	Urban
Mt. Hall	Smoke management	Boundary County	Urban
Moscow	AQI, smoke management, modeling-meteorological	Latah County	Urban
Lewiston	AQI, smoke management, modeling-meteorological	Lewiston ID–WA MSA	Neighborhood
Grangeville	AQI, smoke management, modeling-meteorological	Idaho County	Neighborhood
Cottonwood	Smoke management	Idaho County	Neighborhood
Potlatch	Smoke management	Latah County	Neighborhood
Juliaetta	Smoke management	Latah County	Neighborhood
McCall	AQI, smoke management	Valley County	Urban
Garden Valley	AQI, smoke management	Boise County	Urban
Nampa—Fire Station	PM_{10} NAAQS, $PM_{2.5}$ NAAQS, AQI	Boise City-Nampa MSA[a]	Neighborhood
Meridian—St. Luke's	NCore—trace gas, NCore—$PM_{10-2.5}$, $PM_{2.5}$ NAAQS, $PM_{2.5}$ chemical speciation, O_3 NAAQS, AQI, modeling-meteorological, NO_2	Boise City-Nampa MSA[a]	Neighborhood
Boise—Eastman Garage	CO SIP, CO NAAQS	Northern Ada County	Micro

Site	Regulatory Objective	Area Represented	Monitoring Scale
Boise— Fire Station #5	PM_{10} SIP, PM_{10} NAAQS, smoke management, AQI	Northern Ada County	Neighborhood
Boise— White Pine Elementary	O_3 NAAQS	Boise City-Nampa MSA[a]	Neighborhood
Garden City	Modeling-meteorological	Boise City-Nampa MSA[a]	Neighborhood
Idaho City	Smoke management, AQI	Boise County	Neighborhood
Weiser	Smoke management	Washington County	Neighborhood
Ketchum	Smoke management, AQI	Blaine County	Urban
Twin Falls	Smoke management, AQI	Twin Falls, ID micropolitan statistical area	Neighborhood
Kimberly	Modeling-meteorological	Twin Falls, ID micropolitan statistical area	Urban
Paul	Smoke management	Minidoka County	Neighborhood
Pocatello— Garrett and Gould	PM_{10} SIP, PM_{10} NAAQS, AQI, modeling-meteorological	Pocatello, ID MSA	Neighborhood
Pocatello— Sewage Treatment Plant	SO_2 NAAQS	Pocatello, ID MSA	Middle
Preston	$PM_{2.5}$ NAAQS, $PM_{2.5}$ SIP, AQI	Logan UT-ID MSA	Neighborhood
Soda Springs	SO_2 NAAQS	Caribou County	Middle
Soda Springs— Caribou Hospital	Smoke management	Caribou County	Urban
Idaho Falls	AQI, smoke management	Idaho Falls, ID MSA	Neighborhood
Salmon— Charles St.	$PM_{2.5}$ NAAQS, AQI, modeling-meteorological	Lemhi County	Neighborhood
Rexburg	Smoke management	Madison County	Urban

Notes: AQI = air quality index, CO = carbon monoxide, MSA = metropolitan statistical area, NAAQS = National Ambient Air Quality Standard, $PM_{2.5}$ = particulate matter less than 2.5 µ in diameter, PM_{10} = particulate matter less than 10 µ in diameter, O_3 = ozone, NO = nitric oxide, NO_2 = nitrogen dioxide, NO_x = nitrogen oxides, SIP = state implementation plan, SO_2 = sulfur dioxide

[a] Boise City-Nampa MSA, as defined by the United States Census Bureau, includes Ada, Boise, Canyon, Gem, and Owyhee Counties.

3.3 Monitoring Methods, Monitor Designation, and Sampling Frequency

Monitoring methods used for making NAAQS compliance determinations at a SLAMS site must be designated FRM or FEM according to 40 CFR 53. A method for monitoring $PM_{2.5}$ concentrations that has not been designated as an FRM or FEM may be approved as an ARM by the EPA regional administrator. SPMs do not meet any of the above criteria and are typically used for special studies or as surrogate measures or indicators of emergency episodes (e.g., beta attenuation monitors (BAMs) used for early detection of smoke).

Table 5 lists monitoring methods used by DEQ along with associated method codes required when submitting the monitoring data to EPA's AQS database. Method codes for meteorological parameters are not included in the table.

Table 5. Air monitoring method codes.

Parameter/ Pollutant	Method Designation	AQS Method Code	Instrument and Instrument Parameters
PM_{10}	FEM	079	TEOM—gravimetric analysis, instrumental—R&P SA246B inlet
	FEM	122	Met One Beta Gauge (BAM)
PM_{10}	FRM	127	Thermo/R & P 2025 sequential PM_{10}
CO	FRM	593[a]	Teledyne API Model 300EU
	FEM	593[a]	Teledyne API Model T300U
	FEM	093	Teledyne API Model T300
SO_2	FEM	100	Teledyne API Model T100—UV fluorescent
	FEM	060	Thermo Model 43C, pulsed fluorescence
	FRM	600[a]	Teledyne API Model 100EU—UV fluorescent
	FEM	600[a]	Teledyne API Model T100U
O_3	FEM	087	Teledyne API, Model 400E
	FEM	087	Teledyne API Model T400
NO_2	FRM	099	Teledyne API, Model 200E—chemiluminescence
	FEM	200	Teledyne API Model T200UP—photolytic
	FEM	599	Teledyne API, Model 200EU
NO_y	FEM	699[a]	Teledyne API, Model 200EU
	FEM	699[a]	Teledyne API, Model T200U
$PM_{2.5}$	FRM	145	R&P Model 2025 sequential w/ VSCC
	FRM	545	Met One E-SEQ-FRM w/VSCC
$PM_{2.5}$	SPM	701 or 703[b]	R&P TEOM w/ SCC—no correction factor
	SPM	715 or 716[b]	R&P TEOM w/ VSCC—no correction factor
	SPM	178	Thermo TEOM 1405 w/ SCC
	FEM	581	Thermo TEOM 1405-F (FDMS) w/ VSCC
	SPM	183	Thermo TEOM 1405-F (FDMS) w/ SCC
	FEM	170	Met One Beta Gauge (BAM) w/ VSCC
	SPM	731	Met One Beta Gauge (BAM) w/ SCC
$PM_{10-2.5}$	FRM	176	Thermo Scientific Partisol-Plus Model 2025 Sequential Sampler Pair w/ VSCC

Notes: BAM = beta attenuation monitor, CO = carbon monoxide, FDMS = filter dynamics measurement system, FEM = federal equivalent method, FRM = federal reference method, NO_2 = nitrogen dioxide, No_y = total reactive nitrogen, O_3 = ozone, $PM_{2.5}$ = particulate matter less than 2.5 µ in diameter, PM_{10} = particulate matter less than 10 µ in diameter, $PM_{10-2.5}$ = particulate matter in between 2.5 and 10 µ in diameter, SCC = sharp cut cyclone, SO_2 = sulfur dioxide, SPM = special purpose monitor, TEOM = tapered element oscillating microbalance, UV = ultraviolet, VSCC = very sharp cut cyclone, XRF = X-ray fluorescence

[a] Trace gas monitor – NCore

[b] Applicable code varies seasonally w/ instrument operating temperature settings.

Monitoring sites designated as SLAMS are intended to address specific air quality management interests and are frequently single-pollutant measurement sites. The SLAMS sites must be approved by the EPA regional administrator.

Monitoring sites designated as SPMs in the annual network plan and AQS do not count toward meeting network minimum requirements. SPM sites using methods designated as FRMs or FEMs or approved as ARMs are bound to the quality assurance requirements of 40 CFR 58 Appendix A. The purposes of the SPMs in DEQ's network are to provide continuous particulate matter concentrations for posting to the AQI, supporting the CRB program, and monitoring episodic events.

Gaseous pollutants and meteorological parameters are sampled continuously and typically averaged for each hour. Data completeness for a continuous monitor is computed as the number of valid hourly samples collected divided by the number of potential hourly samples for the period in question (e.g., 8,760 potential hourly samples annually).

Particulate matter can be sampled continuously or by time-integrated, filter-based methods. Filter-based methods typically collect samples for 24-hour periods. For NAAQS comparison, particulate matter data are reported as a 24-hour average, collected from midnight to midnight at local standard time. The minimum monitoring schedule for a $PM_{2.5}$ site is based on the type of monitor, monitor's objectives, and design value (relative to the 24-hour NAAQS) determined for the monitored site (Figure 2).

For the monitors in DEQ's ambient air quality monitoring network, Table 6 lists a variety of parameters associated with the monitors as well as information that is used in reporting data to the AQS.

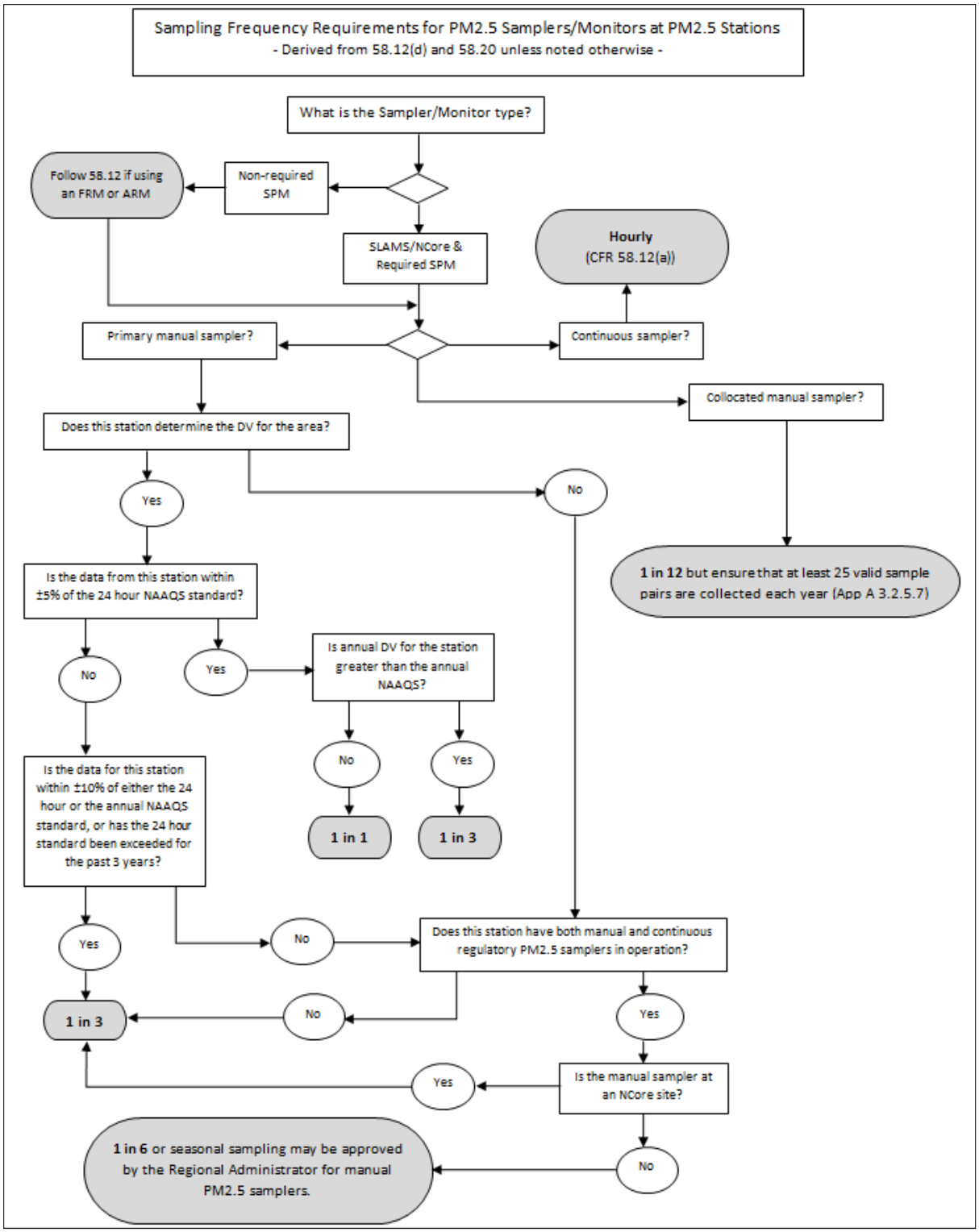


Figure 2. Minimum monitoring frequency based on ratio of local concentration to standard. (Note: DV = design value.)

Table 6. Site summary including pollutants monitored, monitor designation, monitoring frequency, and method codes.

Site	Pollutant Monitored	Begin Date	Monitor Designation	Monitoring Frequency	AQS Method Code	Parameter Code	POC #
Sandpoint—University of Idaho	10-meter meteorology	N/A	SPM	Continuous	—[a]	—[a]	—[a]
	PM_{10}—TEOM	2013	SLAMS	Continuous	079	81102	3
	$PM_{2.5}$—BAM 1020	2015	SPM	Continuous	731	88502	3
Coeur d'Alene—Lancaster Rd.	$PM_{2.5}$—BAM 1020	2015	SPM	Continuous	731	88502	3
	10-meter meteorology	N/A	SPM	Continuous	—[a]	—[a]	—[a]
Coeur d'Alene—LMP	10-meter meteorology	N/A	SPM	Continuous	—[a]	—[a]	—[a]
St. Maries	$PM_{2.5}$—FRM	2003	SLAMS	1/1	145	88101	1
	$PM_{2.5}$—BAM 1020	2014	SPM	Continuous	731	88502	3
Pinehurst	$PM_{2.5}$—FRM	1999	SLAMS	1/1	145	88101	1
	$PM_{2.5}$—BAM 1020	2014	SPM	Continuous	731	88502	4
	PM_{10}—TEOM	1998	SLAMS	Continuous	079	81102	3
	10-meter meteorology	N/A	SPM	Continuous	—[a]	—[a]	—[a]
Moscow	$PM_{2.5}$—BAM 1020	2016	SPM	Continuous	731	88502	4
	10-meter meteorology	N/A	SPM	Continuous	—[a]	—[a]	—[a]
Lewiston	$PM_{2.5}$—BAM 1020	2016	SPM	Continuous	731	88502	4
	10-meter meteorology	N/A	SPM	Continuous	—[a]	—[a]	—[a]
Grangeville	$PM_{2.5}$—BAM 1020	2016	SPM	Continuous	731	88502	4
	10-meter meteorology	N/A	SPM	Continuous	—[a]	—[a]	—[a]
McCall	$PM_{2.5}$—BAM 1020	2017	SPM	Continuous	715 or 731	88502	4
Garden Valley	$PM_{2.5}$—TEOM	2001	SPM	Continuous	715 or 716	88502	3
Nampa—Fire Station	PM_{10}—TEOM	2000	SLAMS	Continuous	079	81102	2
	$PM_{2.5}$—FRM	2008	SLAMS	1/3	145	88101	1
	$PM_{2.5}$—BAM 1020	2015	SPM	Continuous	731	88502	3

Site	Pollutant Monitored	Begin Date	Monitor Designation	Monitoring Frequency	AQS Method Code	Parameter Code	POC #
Meridian—St. Luke's	$PM_{2.5}$—FRM	2006	NCore	1/3	145	88101	1
	$PM_{2.5}$—BAM 1020	2016	SPM	Continuous	731	88502	7
	$PM_{2.5}$ Chemical Speciation	2006	NCore	1/3			5
	$PM_{10-2.5}$	2011	NCore	1/3	176	86101	1
	O_3	2007	NCore	Continuous	087	44201	1
	SO_2	2009	NCore	Continuous	600	42401	1 and 2
	NO_y	2009	NCore	Continuous	699	42600/42601/42612	1,3,1
	CO	2009	NCore	Continuous	593	42101	1
	PM_{10}	2011	NCore	1/3	127	85101	1
	10-meter meteorology	N/A	NCore	Continuous	—[a]	—[a]	—[a]
	$PM_{2.5}$—FRM	2013	Precision	1/6	145	88101	2
	PM_{10}	2011	Precision	1/12	127	85101	2
Boise—Eastman Garage	CO	1993	SLAMS	Continuous	093	42101	1
Boise—Fire Station #5	PM_{10}—TEOM	1999	SLAMS	Continuous	079	81102	3
Boise—White Pine Elementary	O_3	2009	SLAMS	Continuous	087	44201	1
Garden City	10-meter meteorology	N/A	SPM	Continuous	—[a]	—[a]	—[a]
Idaho City	$PM_{2.5}$—BAM 1020	2000	SPM	Continuous	715 or 716	88502	4
Ketchum	$PM_{2.5}$—TEOM	2009	SPM	Continuous	715 or 716	88502	3
Twin Falls	$PM_{2.5}$—BAM 1020	2016	SPM	Continuous	731	88502	3
Kimberly	10-meter meteorology	N/A	SPM	Continuous	—[a]	—[a]	—[a]
Pocatello—Garrett and Gould	$PM_{2.5}$—1405-F TEOM/FDMS	2015	SPM	Continuous	183	88502	4
	PM_{10}—TEOM	2001	SLAMS	Continuous	079	81102	3
	10-meter meteorology	N/A	SPM	Continuous	—[a]	—[a]	—[a]
Pocatello—Sewage Treatment Plant	SO_2	1981	SLAMS	Continuous	100	42401	2 and 4
Preston	$PM_{2.5}$—FRM	2017	SLAMS	1/1	145	88101	1
Soda Springs	SO_2	2000	SLAMS	Continuous	100	42401	1 and 2

Site	Pollutant Monitored	Begin Date	Monitor Designation	Monitoring Frequency	AQS Method Code	Parameter Code	POC #
Idaho Falls	$PM_{2.5}$—BAM 1020	2015	SPM	Continuous	731	88502	4
Salmon—Charles St.	$PM_{2.5}$—FRM	2003	SLAMS	1/3	145	88101	1
	$PM_{2.5}$—BAM 1020	2009	SPM	Continuous	731	88502	4
	10-meter meteorology	N/A	SPM	Continuous	—[a]	—[a]	—[a]

Notes: BAM = beta attenuation monitor, CO = carbon monoxide, FDMS = filter dynamics measurement system, FRM = federal reference method, NO = nitric oxide, NO_2 = nitrogen dioxide, NO_x = nitrogen oxides, NO_y = total reactive nitrogen, O_3 = ozone, $PM_{2.5}$ = particulate matter less than 2.5 µ in diameter, PM_{10} = particulate matter less than 10 µ in diameter, $PM_{10-2.5}$ = particulate matter in between 2.5 and 10 µ in diameter, parameter occurrence code, POC = SO_2 = sulfur dioxide, TEOM = tapered element oscillating microbalance

[a] Meteorological parameters are listed in Table 7.

DEQ currently operates twelve 10-meter meteorological stations. Meteorological measurements are used to support AQI forecasting and air quality modeling analyses. Data collected from DEQ's meteorological stations are submitted to the AQS.

Table 7 provides a list of parameters measured at DEQ meteorological stations. DEQ operates the meteorological monitoring network according to EPA's 2008 *Quality Assurance Handbook for Air Pollution Measurement Systems Volume IV: Meteorological Measurements Version 2.0 (Final).*

Table 7. DEQ meteorological monitoring stations and parameters.

Site	Meteorological Parameters Monitored							
	2-meter temp. (°C)	10-meter temp. (°C)	Barometric Pressure (mbar)	Relative Humidity (%)	Wind Direction (degrees)	Wind Speed (m/s)	Solar Radiation (Watt/m^2)	Precipitation (rain, inches)
Sandpoint—University of Idaho	X	X	X	X	X	X	X	X
Pinehurst	X	X	X	X	X	X	X	X
Coeur d'Alene—LMP	X	X	X	X	X	X	X	X
Coeur d'Alene—Lancaster Rd.	X	X	X	X	X	X	X	X
Moscow	X	X	X	X	X	X	X	X
Lewiston	X	X	X	X	X	X	X	X
Grangeville	X	X	X	X	X	X	X	X
Meridian—St. Luke's	X	X	X	X	X	X	X	N/A
Garden City	X	X	X	X	X	X	X	N/A
Kimberly	X	X	X	X	X	X	X	N/A
Pocatello—Garrett and Gould	X	X	X	X	X	X	X	X
Salmon—Charles St.	X	X	X	X	X	X	X	N/A

Notes: m/s = meter per second, mbar = millibar, Watt/m^2 = watt per square meter, N/A = parameter not monitored, X = monitored parameter

4 DEQ Network Modifications Subsequent to EPA-Approved 2017 Ambient Monitoring Network Plan

The following network modifications were made after EPA approved the 2017 annual network plan. Modifications proposed and implemented after the 2017 plan and before DEQ submitted this 2018 plan have been addressed on a case-by-case basis and communicated through email and mail, when necessary. Applicable documentation is included in Appendix C.

- Replaced the 1400AB $PM_{2.5}$ TEOM monitors with BAM 1020 $PM_{2.5}$ monitors (both used as SPMs for AQI reporting) at the McCall and Idaho City sites.
- Completed standardizing all DEQ meteorological towers with same model 2- and 10-meter temperature probes and aspirated fans to generate delta temperature measurements.
- Shut down the Franklin site due to land access restrictions.

5 Proposed Network Modifications

DEQ's rationale for proposing network modifications (if any) for each monitored pollutant is provided below with a summary of the proposed changes. Annual air quality data summaries for DEQ's air monitoring network are found at *www.deq.idaho.gov/air-quality/monitoring/monitoring-network*. More information about criteria pollutants (those pollutants for which EPA has established NAAQS) and NAAQS is found at *https://www.epa.gov/criteria-air-pollutants*.

5.1 PM_{10} Monitoring Network

Five PM_{10} monitoring sites are currently operating. These monitors support local SIP efforts and/or PM_{10} maintenance plans by assessing compliance with the PM_{10} NAAQS and will continue operating through 2018. Monitoring in these areas is required to demonstrate attainment of the appropriate NAAQS.

PM_{10} monitoring locations are selected to represent average population exposure to spatially representative concentrations in the middle, neighborhood, and urban scales.

The following airsheds are designated as moderate nonattainment for the 24-hour PM_{10} NAAQS (150 micrograms per cubic meter [µg/m³]):

- Shoshone County—partial (excluding Pinehurst)
- Pinehurst (Shoshone County – partial – city of Pinehurst)
- Fort Hall Reservation (Bannock County—partial, Power County—partial)

The Fort Hall Reservation nonattainment area is on tribal land and is not administered by DEQ.

The following airsheds were previously classified as nonattainment but are now classified as maintenance areas and require monitoring to demonstrate compliance with a specific PM_{10} NAAQS over specific time frames:

- Boise-Northern Ada County
- Bonner County—partial (city of Sandpoint)
- Portneuf Valley (Bannock County—partial, Power County—partial)

PM_{10} design values for 2015–2017 are listed in Appendix A.

Because PM_{10} monitoring must meet the regulatory requirements associated with SIPs and maintenance plan objectives, DEQ proposes no substantive change to the PM_{10} monitoring network.

For more information on area designations of Idaho's airsheds, visit *www.epa.gov/green-book*.

5.2 $PM_{2.5}$ Core NAAQS Compliance Monitoring Network

DEQ operates a core network of six $PM_{2.5}$ monitoring sites for NAAQS compliance. DEQ began monitoring $PM_{2.5}$ by FRM in 1998 with an initial network of 13 sites. Over time, the network has been reduced due to site redundancy within airsheds or overall low ambient concentrations relative to the NAAQS. The following six sites remain:

- Pinehurst
- St. Maries
- Treasure Valley (Nampa—Fire Station)
- Treasure Valley (Meridian—St. Luke's)
- Salmon
- Preston

Federal regulations require a minimum of two $PM_{2.5}$ monitoring sites in the Treasure Valley, based on population. The Meridian—St. Luke's monitor also satisfies the requirement for $PM_{2.5}$ monitoring at NCore sites.

The West Silver Valley airshed (including Pinehurst) has been designated as moderate nonattainment area for the annual $PM_{2.5}$ NAAQS (12 µg/m³). The part of Franklin County in the Logan UT/ID NAA has been a classified nonattainment area for the 24-hour $PM_{2.5}$ NAAQS (35 µg/m³).

DEQ relocated the SLAMS site from Franklin to Preston.

$PM_{2.5}$ design values (updated for 2015–2017) and current and proposed sampling frequencies are listed in Appendix A, where Table A2 presents data obtained from both FRM and FEM monitors.

5.3 $PM_{2.5}$ Continuous Monitoring Network

DEQ monitors $PM_{2.5}$ year-round at 17 sites throughout the state with continuous $PM_{2.5}$ monitors. The real-time and continuous $PM_{2.5}$ data support DEQ's air quality forecasting, AQI, and smoke management programs. These monitors are special purpose, non-NAAQS monitors.

The $PM_{2.5}$ continuous monitors are located at these monitoring sites:

- Sandpoint—University of Idaho
- Coeur d'Alene—Lancaster Road
- St. Maries
- Pinehurst
- Moscow
- Lewiston
- Grangeville
- McCall
- Garden Valley

- Idaho City
- Nampa—Fire Station
- Meridian—St. Luke's
- Ketchum
- Twin Falls
- Pocatello—Garrett and Gould
- Idaho Falls
- Salmon

DEQ also uses seasonal SPMs (nephelometers and E-samplers) at nine locations to support the state's CRB Program (Table 2).

A SPM monitor is also used each year, typically at the Boise Fire Station site, to assess wildfire smoke impacts in and around the downtown Boise area. This monitor is only set up and used during wildfire smoke events.

DEQ is replacing the remaining 1400AB $PM_{2.5}$ TEOMs with BAM 1020 $PM_{2.5}$ monitors (both types are used as SPMs for AQI reporting) at the Ketchum and Garden Valley sites. DEQ also plans to replace the single remaining 1405-F $PM_{2.5}$ TEOM with a BAM 1020 $PM_{2.5}$ monitor (both types are used as SPMs for AQI reporting) at the Pocatello—Garrett and Gould $PM_{2.5}$ monitoring site. The BAMs are easier to maintain than the TEOMs and are more practical from a resource standpoint.

The Ketchum TEOM is currently located on a rooftop, and access is difficult. The TEOM is being relocated to a ground location near the current site and will be replaced with a BAM. The BAM is currently being field tested. Historically, the TEOM has been a seasonal monitor; year-round operation is being used to assess seasonal particulate concentrations.

DEQ will relocate the BAM 1020 $PM_{2.5}$ monitor from the Franklin site to the IDEQ $PM_{2.5}$ SLAMS site in Preston. This monitor will provide continuous $PM_{2.5}$ concentrations in conjunction with the FRM for AQI reporting.

5.4 Ozone Monitoring Network

DEQ currently operates two ozone monitors, both in the Treasure Valley. Federal regulations require two ozone monitors in an urban area or MSA the size of the Boise City–Nampa MSA. One site must be designed to record the maximum concentration for the MSA. NCore sites can be counted toward minimum SLAMS ozone network requirements. Ozone is monitored during the ozone season as prescribed in 40 CFR 58 Appendix D. For 2018, per the recent ozone NAAQS review and revision, the ozone season in Idaho is now April 1 through September 30.

The Treasure Valley ozone monitors are located at the following sites:

- Meridian—St. Luke's NCore site near the Meridian St. Luke's Hospital
- White Pine Elementary site in southeastern Boise

DEQ began monitoring at the White Pine Elementary site in 2009 when it had to relocate the Whitney Elementary School site, which was demolished in 2008. The White Pine Elementary

site was chosen based on evidence that it would represent the maximum ozone concentration for the Boise City–Nampa MSA.

DEQ will conduct an assessment to determine locations in eastern Idaho where ozone monitoring may be required and determine resources for additional monitoring.

Ozone design values for 2015–2017 are listed in Appendix A.

5.5 Carbon Monoxide Monitoring Network

Monitoring for CO in the Treasure Valley began in 1977. Violations of the health-based standard for CO occurred every winter from 1977 until 1986, and as a result, Northern Ada County was designated a CO nonattainment area by EPA. In December 2002, the *Northern Ada County CO Limited Maintenance Plan* was approved by EPA, which reclassified the area as attainment for the CO NAAQS. No exceedances of the CO NAAQS have occurred since 1991.

DEQ operates two CO monitors: the Boise—Eastman Garage site in downtown Boise and the Meridian—St. Luke's NCore site. The Boise—Eastman Garage site is an urban canyon site designed to measure maximum concentrations to which the population is exposed. This site is needed to demonstrate NAAQS compliance as specified in the *Northern Ada County CO Maintenance Plan*. The Meridian—St. Luke's CO monitor is a trace level monitor, capable of measuring much lower CO than conventional CO monitors used for NAAQS compliance. The Meridian—St. Luke's CO monitor is required for NCore sites.

DEQ proposes no changes to the CO monitoring network.

CO (1-hour and 8-hour) design values for 2015–2017 are listed in Appendix A.

5.6 Sulfur Dioxide Monitoring Network

Three sulfur dioxide (SO_2) monitors currently operate in Idaho:

- Pocatello—Sewage Treatment Plant (STP)
- Soda Springs
- Meridian—St. Luke's

The Pocatello—STP site is a maximum concentration site used to assess impacts of local industrial emissions. The Soda Springs monitor is also a maximum concentration site for assessing industrial impacts from a nearby source. Both SO_2 monitoring locations in southeastern Idaho were identified as fence-line hot spots from conventional dispersion model applications. The Meridian—St. Luke's monitor is a trace-level monitor required for NCore monitoring.

DEQ proposes no changes to the SO_2 monitoring network.

SO_2 design values for 2015–2017 are listed in Appendix A.

5.7 Nitrogen Dioxide Monitoring Network

DEQ was granted approval by EPA to shut down the Meridian—Near-Road site, which included NO_2 monitoring. To retain NAAQS monitoring for NO_2, DEQ is relocating the NO_2 monitor to the Meridian—St. Luke's NCore site.

NO_2 design values for 2015–2017 are listed in Appendix A.

5.8 $PM_{10-2.5}$ (PM_{coarse}) Monitoring Network

$PM_{10-2.5}$ (PM_{coarse}) is defined as the particulate fraction with a nominal diameter between 2.5 and 10.0 µ. $PM_{10-2.5}$ is determined by calculating the fractional mass difference between collocated and matching (i.e., same type of monitor) FRM PM_{10} and FRM $PM_{2.5}$ monitors. Section 3 of Appendix D to 40 CFR 58 requires $PM_{10-2.5}$ monitoring at NCore monitoring stations.

DEQ initiated $PM_{10-2.5}$ monitoring at the Meridian—St. Luke's NCore site beginning January 1, 2011. Both the $PM_{2.5}$ and $PM_{10-2.5}$ samplers are operated every third day according to the national monitoring schedule.

DEQ will remove the collocated 2025 FRM PM_{10} precision monitor at the St. Luke's site. Collocated PM_{10} monitoring for coarse measurements is no longer a regulatory requirement.

5.9 Summary of Proposed Network Modifications for DEQ's 2018 Air Monitoring Network Plan

DEQ proposes the following network modifications:

- Complete the relocation of the nitrogen dioxide (NO_2) analyzer from the Meridian—Near-Road site to the Meridian—St. Luke's NCore site to retain National Ambient Air Quality Standards (NAAQS) monitoring for NO_2.
- Replace DEQ's single remaining 1405-F particulate matter $(PM)_{2.5}$ tapered element oscillating microbalance (TEOM) monitor with a beta attenuation mass (BAM) 1020 $PM_{2.5}$ monitor at the Pocatello—Garrett and Gould monitoring site. Both types are used as special purpose monitors (SPMs) for Air Quality Index (AQI) reporting.
- Replace the Ketchum 1400AB $PM_{2.5}$ TEOM with a BAM 1020 $PM_{2.5}$ monitor at a ground location near the current site. The BAM 1020 is installed and currently undergoing quality assurance field testing.
- Relocate the BAM 1020 $PM_{2.5}$ monitor from the Franklin site to the IDEQ $PM_{2.5}$ state and local air monitoring station, (SLAMS) site in Preston. This monitor will provide continuous $PM_{2.5}$ concentrations in conjunction with the federal reference method (FRM) for AQI reporting.
- Replace the Thermo Scientific 1400AB PM_{10} monitors, which are approaching end-of-service life, with BAM 1020 PM_{10} monitors. In 2018, BAM 1020s are expected to be deployed at the Nampa, Pocatello, and Pinehurst sites. The remaining 1400AB monitors at the Boise and Sandpoint sites will be replaced as funding permits.

- Replace the existing 2025 FRM $PM_{2.5}$ monitors with Met One Instrument's E-SEQ-FRM $PM_{2.5}$ monitors at all the current 2025 FRM sites. The 2025 FRMs have been discontinued and are no longer supported by the manufacturer.
- Install a collocated precision pair of E-SEQ-FRMs at the Nampa site. The existing collocated pair of 2025 FRM $PM_{2.5}$ monitors at St. Luke's will remain in operation until phase out of the 2025 FRMs is complete.
- Remove the collocated 2025 FRM PM_{10} precision monitor at the St. Luke's site. Collocated PM_{10} monitoring for coarse measurements is no longer a regulatory requirement.
- Replace the 1400AB $PM_{2.5}$ TEOM monitor with BAM 1020 $PM_{2.5}$ monitor (both used as SPMs for AQI reporting) at the Garden Valley site.

6 Future Ambient Air Monitoring Requirements and Associated Costs

EPA is required to review criteria pollutant NAAQS on a routine 5-year schedule. At any time, EPA may be completing the review of a number of pollutants and through rulemaking will propose changes to ambient air monitoring requirements for some pollutants. This review can result in additional monitors and new monitoring requirements for Idaho. At this time, until rulemakings are made final, it is difficult to specifically project DEQ's future monitoring requirements and associated costs.

Appendix A. DEQ Ambient Monitoring Network Design Values

Many of the Idaho Department of Environmental Quality's (DEQ's) particulate matter $(PM)_{2.5}$ and PM_{10} monitors were impacted by smoke from wildfires and dust storms from 2015 to 2017. The Clean Air Act allows agencies to flag such data for exceptional and natural events and for the United States Environmental Protection Agency (EPA) to concur if appropriate steps and demonstrations are completed. Design values are provided below reflecting inclusion and exclusion of these data; these values are preliminary (Table A1 and Tables A3–A7).

Table A2 represents data obtained from both federal reference method (FRM) and federal equivalent method (FEM) monitors.

Table A1. 2015–2017 PM_{10} preliminary design values.

Site	County/ AQS ID	Estimated Exceedances			3-Year Estimated Exceedances
		2015	2016	2017	
Sandpoint	Bonner 160170003	1.0/0.0	0.0	5.0/0.0	2.0/0.0
Pinehurst	Shoshone 160790017	2.0/0.0	0.0	1.0/0.0	1.0/0.0
Nampa	Canyon 160270002	0.0	0.0	0.0	0.0
Boise	Ada 160010009	0.0	0.0	1.0/0.0	0.0
Pocatello	Bannock 160050015	0.0	0.0	1.0/0.0	0.0

Notes: A monitor violates the 24-hour PM_{10} National Ambient Air Quality Standard if the 3-year average of estimated exceedances (>150 micrograms per cubic meter) is greater than 1. Concentration data are denoted with/without exceptional event data included. AQS = air quality system; ID = identification

Table A2. 2015–2017 preliminary design values for core $PM_{2.5}$ monitoring stations—FRM or FEM (primary monitor).

Monitoring Site	County/ AQS ID	98th Percentile 24-Hour Concentration (µg/m^3)			2015–2017 24-Hour Design Value (µg/m^3)	Required Sampling Frequency[a] (Current Frequency)	2015–2017 Annual Design Value (µg/m^3)
		2015	2016	2017			
Meridian—St. Luke's	Ada 160010010	35/26	19/19	40/36	31/27	1:3[b] **(1:3)**	7.5/6.4
St. Maries	Benewah 160090010	37/33	26/26	54/38	39/32	1:1 **(1:1)**	10.5/8.7
Nampa—Fire Station	Canyon 160270002	36/26	21/21	45/37	34/28	1:3 **(1:3)**	9.4/8.3
Franklin	Franklin 160410001	19/18	33/33	38/24	30/25	1:3 **(1:1)**	7.0/6.4[c]
Salmon	Lemhi 160590004	43/37	39/39	60/40	47/39	1:3 **(1:3)**	12.5/10.3
Pinehurst	Shoshone 160790017	46/32	29/29	50/36	42/32	1:3 **(1:1)**	12.2/10.2

Notes: A monitor violates the 24-hour $PM_{2.5}$ National Ambient Air Quality Standard (NAAQS) if the 3-year average of the annual 98th-percentile 24-hour average exceeds 35 micrograms per cubic meter (µg/m^3). The annual $PM_{2.5}$ NAAQS is violated if the 3-year average of the annual arithmetic mean exceeds 12 µg/m^3. Concentration data are denoted with/without all "flagged" exceptional event data included. The concentration values may change depending on how many of the "flagged" exceptional events are documentable, as concurred by EPA. Special purpose monitors are not listed in this table. Those data are provided in DEQ's annual data summary reports provided on the DEQ webpage. AQS = air quality system; ID = identification

[a] Required sampling frequencies based on flagged exceptional event data excluded. Figure 2 provides an explanation of required monitoring/sampling frequencies.

[b] NCore monitors are required to operate every third day.

[c] Does not meet data completeness criteria.

Table A3. 2015–2017 ozone preliminary design values.

Site	County/ AQS ID	4th-Highest Daily Maximum 8-Hour Average (ppm)			3-Year Design Value (ppm)
		2015	2016	2017	
Boise—White Pine	Ada 160010017	0.064	0.072	0.076/0.068	0.068
Meridian—St. Luke's	Ada 160010010	0.066	0.062	0.071/0.069	0.066

Notes: A monitor violates the 8-hour ozone National Ambient Air Quality Standard if the 3-year average of the annual 4th-highest daily maximum average exceeds 0.070 parts per million (ppm). Concentration data are denoted with/without exceptional event data included. AQS = air quality system; ID = identification

Table A4. 2015–2017 carbon monoxide preliminary design values (1-hour).

Site	County/ AQS ID	1st-/2nd-Highest 1-Hour Average (ppm)		
		2015	2016	2017
Boise—Eastman	Ada 160010014	12.6/5.7	6.9/6.0	20/15.9
Meridian—St. Luke's	Ada 160010010	1.4/1.3	1.6/1.4	1.0/0.9
Meridian—Near-Road	Ada 160010023	1.2/1.2	1.3/1.3	1.0/1.0[a]

Notes: A monitor violates the 1-hour carbon monoxide National Ambient Air Quality Standard if it exceeds 35 parts per million (ppm) more than once per year. AQS = air quality system; ID = identification
[a] Does not meet data completeness criteria

Table A5. 2015–2017 carbon monoxide preliminary design values (8-hour).

Site	County/ AQS ID	1st-/2nd-Highest 8-Hour Average (ppm)		
		2015	2016	2017
Boise—Eastman	Ada 160010014	2.6/2.5	3.0/2.5	7.5/4.1
Meridian—St. Luke's	Ada 160010010	1.2/1.0	1.0/0.9	0.8/0.7
Meridian—Near-Road	Ada 160010023	1.1/0.9	0.9/0.9	0.7/0.7[a]

Notes: A monitor violates the 8-hour CO National Ambient Air Quality Standard if it exceeds 9 parts per million (ppm) more than once per year. AQS = air quality system; ID = identification
[a] Does not meet data completeness criteria

Table A6. 2015–2017 sulfur dioxide preliminary design values.

Site	County/ AQS ID	99th Percentile—Highest Daily Maximum 1-Hour Average (ppb)			3-Year Design Value (ppb)
		2015	2016	2017	
Pocatello—STP	Bannock 160050004	45	33	37	38
Soda Springs	Caribou 160290031	23	32	34	30
Meridian—St. Luke's	Ada 160010010	3	4	3	3

Notes: A monitor violates the 1-hour sulfur dioxide National Ambient Air Quality Standard if the 3-year average of the annual 99th-percentile highest daily maximum 1-hour averages exceeds 75 parts per billion (ppb). AQS = air quality system; ID = identification

Table A7. 2015–2017 nitrogen dioxide (NO_2) preliminary design values.

Site	County/ AQS ID	98th Percentile—Highest Daily Maximum 1-Hour Average (ppb)			3-Year Design Value (ppb)
		2015	2016	2017	
Meridian—Near-Road	Ada 160010023	47	41	50[a]	46

Notes: A monitor violates the 1-hour nitrogen dioxide National Ambient Air Quality Standard if the 3-year average of the annual 98th-percentile highest daily maximum 1-hour averages exceeds 100 parts per billion (ppb). AQS = air quality system; ID = identification
[a] Does not meet data completeness criteria

Appendix B. Craters of the Moon and Hells Canyon Monitoring Stations (IMPROVE Network)

The Idaho Department of Environmental Quality (DEQ) is leveraging the IMPROVE monitoring network to fulfill requirements for the particulate matter $(PM)_{2.5}$ transport (Hells Canyon) and $PM_{2.5}$ background (Craters of the Moon National Monument) monitoring sites (Figure B1).

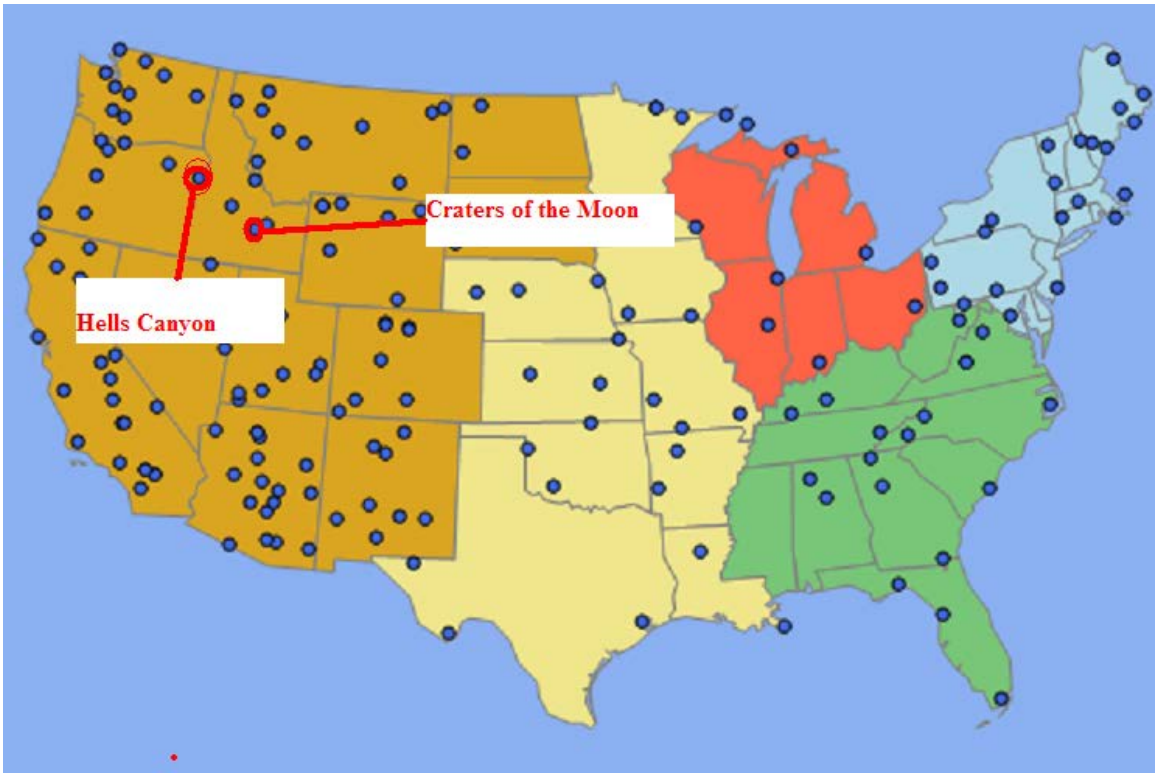


Figure B1. IMPROVE monitoring network.

The IMPROVE program was initiated in 1985 as an extensive long-term monitoring program to establish current visibility conditions, track changes in visibility, and determine causal mechanism for the visibility impairment in national parks and wilderness areas (*http://vista.cira.colostate.edu/Improve/*).

Craters of the Moon

Monitoring began at the Craters of the Moon site in 1992 (Figure B2). Raw data gathered at this site is found at *http://views.cira.colostate.edu/web/*.

Figure B2. Craters of the Moon sampling platform.

Figure B3 shows the typical background concentration of $PM_{2.5}$ of 1–6 micrograms per cubic meter ($\mu g/m^3$). On occasion, the monitor is impacted by smoke from regional fires and other burning activities.

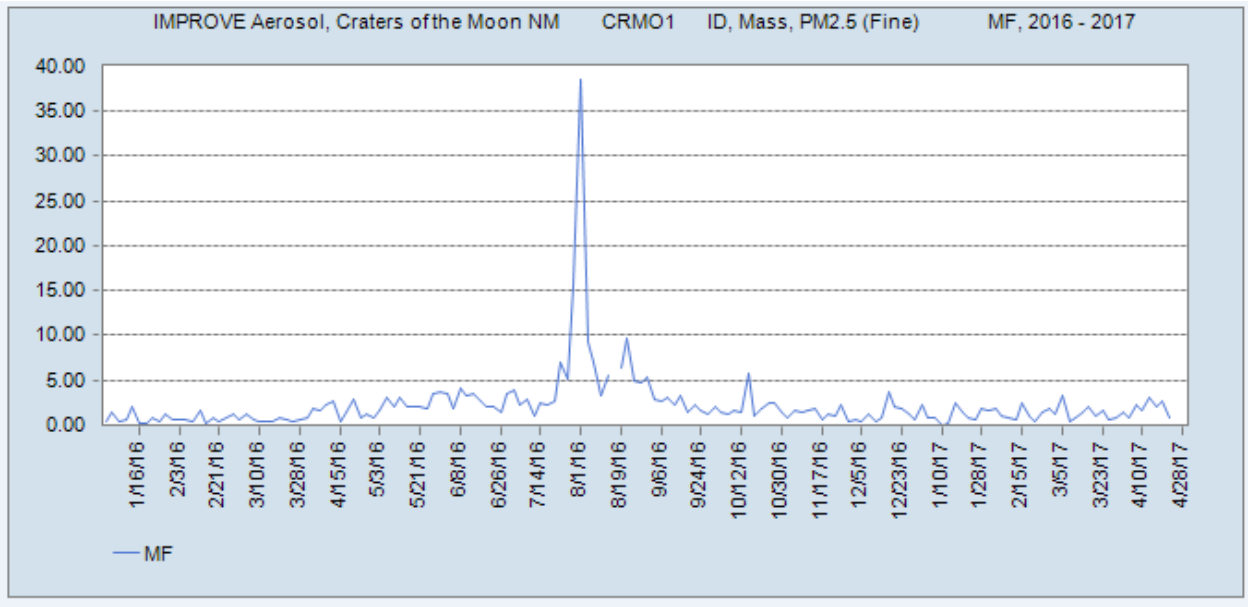


Figure B3. 2016–2017 $PM_{2.5}$ measured at Craters of the Moon IMPROVE site.

Hells Canyon

Monitoring began at the Hells Canyon site in 2001 (Figure B4). Raw data gathered at this site is found at *http://views.cira.colostate.edu/web/*.

Figure B4. Hells Canyon monitoring station.

Figure B5 shows the Hells Canyon $PM_{2.5}$ measurements for 2016–2017. Typical transport concentrations of 2–6 µg/m^3 are represented; however, on occasion, values can be higher. Typically, elevated levels of $PM_{2.5}$ are associated with either summer/fall smoke impacts or regional winter stagnation events.

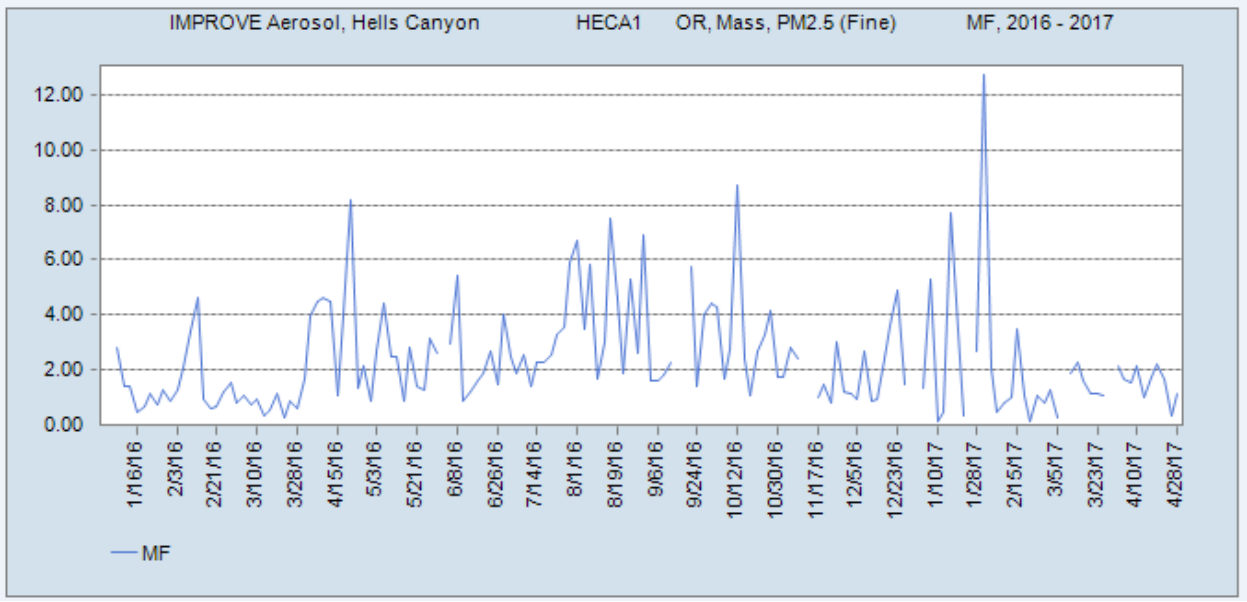


Figure B5. 2016–2017 $PM_{2.5}$ measured at Hells Canyon IMPROVE site.

Appendix C. EPA–DEQ Correspondence

There is nothing reportable for this year's annual network plan.

Appendix D. 40 CFR 58—Appendix D and E Checklists

State of Idaho CBSA List[1,2]			
CBSA Number	Name	State	Estimate 2017 Population
14260	Boise City	ID	709,845
17660	Coeur d'Alene	ID	157,637
26820	Idaho Falls	ID	145,643
30300	Lewiston	ID-WA	62,920
38540	Pocatello	ID	85,269
13940	Blackfoot	ID	45,927
30860	Logan	UT-ID	138,002
15420	Burley	ID	44,393
25200	Hailey	ID	28,444
34140	Moscow	ID	39,333
34300	Mountain Home	ID	26,823
39940	Rexburg	ID	52,235
41760	Sandpoint	ID	43,560
46300	Twin Falls	ID	108,751
27220	Jackson	WY-ID	34,646

[1]Minimum monitoring requirements apply to the metropolitan statistical area (MSA). CBSA includes both MSAs and micropolitan statistical areas.
[2]Population based on latest available census figures.

PART 58 APPENDIX D SITE EVALUATION FORM FOR PM2.5				
APPLICABLE SECTION	REQUIREMENT	CRITERIA MET?		
		YES	NO	N/A
4.7.1(a)	States, and where applicable local agencies must operate the minimum number of required $PM_{2.5}$ SLAMS sites listed in Table D-5 of this appendix. Use the form below and Table D-5 to verify if each of your MSAs have the appropriate number of SLAMS FRM/FEM/ARM samplers.	X		
4.7.1(b)	Each required SLAMS FRM/FEM/ARM monitoring stations or sites must be sited to represent area-wide air quality in the given MSA (typically neighborhood or urban spatial scale, though micro-or middle-scale okay if it represent many such locations throughout the MSA).	X		
4.7.1(b)(1)	At least one SLAMS FRM/FEM/ARM monitoring station is to be sited at neighborhood or larger scale in an area of expected maximum concentration for each MSA where monitoring is required by 4.7.1(a).	X		
4.7.1(b)(2)	For CBSAs with a population of 1,000,000 or more persons, at least one FRM/FEM/ARM $PM_{2.5}$ monitor is to be collocated at a near-road NO_2 station.			X
4.7.1(b)(3)	For MSAs with additional required SLAMS sites, a FRM/FEM/ARM monitoring station is to be sited in an area of poor air quality.	X*		
4.7.2	Each State must operate continuous $PM_{2.5}$ analyzers equal to at least one-half (round up) the minimum required sites listed in Table D-5 of this appendix. At least one required continuous analyzer in each MSA must be collocated with one of the required FRM/FEM/ARM monitors, unless at least one of the required FRM/FEM/ARM monitors is itself a continuous FEM or ARM monitor, in which case no collocation requirement applies.	X		
4.7.3	Each State shall install and operate at least one $PM_{2.5}$ site to monitor for regional background and at least one $PM_{2.5}$ site to monitor regional transport (note locations in comment field). Non-reference PM2.5 monitors such as IMPROVE can be used to meet this requirement.	X**		
4.7.4	Each State shall continue to conduct chemical speciation monitoring and analyses at sites designated to be part of the $PM_{2.5}$ Speciation Trends Network (STN).	X		

Comments:

*DEQ has several sites in Idaho that are not found within an officially listed MSA, but DEQ has retained SLAMS FRM/FEM/ARM monitoring stations there due to moderate to poor air quality. Those sites include Pinehurst, Salmon, and St. Maries.

**DEQ uses the IMPROVE network's Hells Canyon site for PM2.5 regional transport and the Craters of the Moon National Monument site for PM2.5 regional background.

MSA Description[1]	MSA population[2,3]	Design Value for years 2015-2017	Minimum required number of PM2.5 SLAMS FRM/FEM/ARM sites (from Table D-5)	Present number of PM2.5 SLAMS FRM/FEM/ARM sites in MSA	Present number of continuous PM2.5 analyzers in MSA	Present number of PM2.5 STN analyzers in MSA
Boise City-Nampa, ID MSA	709,845	25 (24-hour)	1	2	4	2
Logan, UT-ID MSA	138,002	28 (24-hour)	1	1	1	0

[1]see http://www2.census.gov/econ/susb/data/msa_codes_2007_to_2011.txt)

[2]Minimum monitoring requirements apply to the metropolitan statistical area (MSA). CBSA includes both MSAs and micropolitan statistical areas.

[3]Population based on latest available census figures.

Table D-5 of Appendix D to Part 58 – PM2.5 Minimum Monitoring Requirements

MSA population[1, 2]	Most recent 3-year design value ≥85% of any PM2.5 NAAQS[3]	Most recent 3-year design value <85% of any PM2.5 NAAQS[3, 4]
>1 million	3	2
500K to 1 million	2	1
50K to <500K[5]	1	0

[1]Minimum monitoring requirements apply to the Metropolitan statistical area (MSA).
[2]Population based on latest available census figures. https://www.census.gov/
[3]The $PM_{2.5}$ National Ambient Air Quality Standards (NAAQS) levels and forms are defined in 40 CFR part 50.
[4]These minimum monitoring requirements apply in the absence of a design value.
[5]Metropolitan statistical areas (MSA) must contain an urbanized area of 50,000 or more population.

PART 58 APPENDIX D SITE EVALUATION FORM FOR PM10				
APPLICABLE SECTION	REQUIREMENT	CRITERIA MET?		
		YES	NO	N/A
4.6(a)	Table D-4 indicates the approximate number of permanent stations required in MSAs to characterize national and regional PM10 air quality trends and geographical patterns. Use the form below and Table D-4 to verify if your PM10 network has to appropriate number of samplers.	X		
Comments:				

MSA Description[1]	MSA population[2, 3]	Minimum required number of PM10 stations (from Table D-4)	Present number of PM10 stations in MSA
Boise City-Nampa, ID MSA	709,845	1-2	2

[1]see http://www2.census.gov/econ/susb/data/msa_codes_2007_to_2011.txt
[2]Minimum monitoring requirements apply to the Metropolitan statistical area (MSA). CBSA includes both MSAs and micropolitan statistical areas.
[3]Population based on latest available census figures.

Table D-4 of Appendix D to Part 58 – PM10 Minimum Monitoring Requirements			
MSA population[1, 2]	High concentration2	Medium concentration3	Low concentration4 5
>1 million	6-10	4-8	2-4
500K to 1 million	4-8	2-4	1-2
250K to 500K	3-4	1-2	0-1
100K to 250K	1-2	0-1	0

[1]Selection of urban areas and actual numbers of stations per area will be jointly determined by EPA and the State agency.
[2]High concentration areas are those for which ambient PM10 data show ambient concentrations exceeding the PM10 NAAQS by 20 percent or more.
[3]Medium concentration areas are those for which ambient PM10 data show ambient concentrations exceeding 80 percent of the PM10 NAAQS.
[4]Low concentration areas are those for which ambient PM10 data show ambient concentrations less than 80 percent of the PM10 NAAQS.
[5]These minimum monitoring requirements apply in the absence of a design value.

PART 58 APPENDIX D SITE EVALUATION FORM FOR SO2				
APPLICABLE SECTION	REQUIREMENT	CRITERIA MET?		
		YES	NO	N/A
4.4.1	State and, where appropriate, local agencies must operate a minimum number of required SO_2 monitoring sites (based on PWEI calculation specified in 4.4.2 – use Table 1 and 2 below to determine minimum requirement for each CBSA)	X		
4.4.2(a)(1)	Is the monitor sited within the boundaries of the parent CBSA and is it one of the following site types: population exposure, highest concentration, source impacts, general background, or regional transport?	X		
4.4.3(a)	Has the EPA Regional Administrator required additional SO_2 monitoring stations above the minimum number of monitors required in 4.4.2? If so, note location in comment field.	X*		
4.4.5(a)	Is your agency counting an existing SO2 monitor at an NCore site in a CBSA with a minimum monitoring requirement?	X		
Comments: *DEQ is conducting source/highest concentration monitoring in Pocatello and Soda Springs.				

Table					
CBSA Description[1]	CBSA population[1, 2]	total amount of SO2 in tons per year emitted within the CBSA (used 2014 NEI[3])	PWEI (population x total emissions ÷1,000,000)	Minimum required number of SO2 monitors in CBSA (see Table 2 below)	Present number of SO2 monitors in CBSA
Boise City, ID	709,845	784.52	556.9	0	1

[1] *https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=PEP_2017_PEPANNRES&prodType=table*
[2] Minimum monitoring requirements apply to the Core Based statistical area (CBSA). CBSA includes both metropolitan and micropolitan statistical areas.
[3] 2014 NEI v2: *https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data*. Point sources 2017.

Table 2. Minimum SO2 Monitoring Requirements (Section 4.4.2 of App D to Part 58)	
PWEI (Population weighted Emission Index) Value	Require number of SO2 monitors
>= 1,000,000	3
>= 100,000 but < 1,000,000	2
>= 5,000 but < 100,000	1

PART 58 APPENDIX D SITE EVALUATION FORM FOR CARBON MONOXIDE (CO)					
APPLICABLE SECTION	REQUIREMENT	OBSERVED	CRITERIA MET?		
			YES	NO	N/A
4.2.1(a)	One CO monitor is required to operate collocated with one required near-road NO_2 monitor in CBSAs having a population of 1,000,000 or more persons. If a CBSA has more than one required near-road NO_2 monitor, only one CO monitor is required to be collocated with a near-road NO_2 monitor within that CBSA.				X
4.2.2(a)	Has the EPA Regional Administrator required additional CO monitoring stations above the minimum number of monitors required in 4.2.1? If so, note location in comment field.		X*		
Comments: *DEQ has two additional monitors that are required. One is at DEQ's St. Luke's – Meridian, ID N-Core site, and the other one is at DEQ's Boise – Eastman CO maintenance area site.					

MSA Description[1]	CBSA population[2, 3]	Minimum required number of SLAMS CO sites	Present number of SLAMS CO sites in MSA
Boise City-Nampa, ID MSA	709,845	1 – N-Core* 1 – Maintenance Area*	2

[1]see http://www2.census.gov/econ/susb/data/msa_codes_2007_to_2011.txt

[2]Minimum monitoring requirements apply to the Core Based statistical area (CBSA). CBSA includes both metropolitan and micropolitan statistical areas.

[3]Population based on latest available census figures.

PART 58 APPENDIX D SITE EVALUATION FORM FOR NITROGEN DIOXIDE (NO2)				
APPLICABLE SECTION	REQUIREMENT	CRITERIA MET?		
		YES	NO	N/A
4.3.2(a)	Near-road NO2 Monitors: One microscale near-road NO_2 monitoring station in each CBSA with a population of 500,000 or more persons.			X
4.3.2(a)	Near-road NO2 Monitors: An additional near-road NO_2monitoring station is required for any CBSA with a population of 2,500,000 persons, or in any CBSA with a population of 500,000 or more persons that has one or more roadway segments with 250,000 or greater AADT count.			X
4.3.2(b)	Near-road NO2 Monitors: Measurements at required near-road NO_2 monitor sites utilizing chemiluminescence FRMs must include at a minimum: NO, NO_2, and NO_X			X
4.3.3(a)	Area-wide NO2 Monitoring: One monitoring station in each CBSA with a population of 1,000,000 or more persons to monitor a location of expected highest NO_2 concentrations representing the neighborhood or larger spatial scales.			X
Comments: DEQ recently shut down its near-road monitoring site per EPA approval. DEQ is proposing to operate an NO2 monitor at its St. Luke's N-Core site.				

Table

CBSA Description[1]	CBSA population[2, 3]	Required number of Near-road NO2 sites	Present number of Near-road NO2 sites	Required number of Area-wide NO2 sites	Present number of Area-wide NO2 sites
Boise City-Nampa, ID MSA	709,845	0	0	0	0

[1]see http://www2.census.gov/econ/susb/data/msa_codes_2007_to_2011.txt
[2]Minimum monitoring requirements apply to the Core Based statistical area (CBSA). CBSA includes both metropolitan and micropolitan statistical areas.
[3]Population based on latest available census figures.

PART 58 APPENDIX D SITE EVALUATION FORM FOR OZONE				
APPLICABLE SECTION	REQUIREMENT	CRITERIA MET?		
		YES	NO	N/A
4.1(b)	At least one O_3 site for each MSA, or CSA if multiple MSAs are involved, must be designed to record the maximum concentration (note location in comment field).	X*		
4.1(c)	The appropriate spatial scales for O_3 sites are neighborhood, urban, and regional (note deviations in comment field).	X		
4.1(f)	Confirm that the monitoring agency consulted with EPA R10 when siting the maximum O3 concentration site.	X		
4.1(i)	O3 is being monitored at SLAMS monitoring sites during the "ozone season" as specified in Table D-3 of Appendix D to Part 58.	X		
Comments: *DEQ's White Pine Elementary site in Boise serves as the maximum concentration site.				

MSA Description[a]	MSA population[1, 2]	Minimum required number of SLAMS O3 sites (from Table D-2)	Present number of SLAMS O3 sites in CBSA	
Boise City-Nampa, ID MSA	709,845	2	2	
[a]see http://www2.census.gov/econ/susb/data/msa_codes_2007_to_2011.txt				

Table D-2 of Appendix D to Part 58 - SLAMS O3 Monitoring Minimum Requirements		
MSA population[1, 2]	Most recent 3-year design value concentrations ≥85% of any O3 NAAQS[3]	Most recent 3-year design value concentrations <85% of any O3 NAAQS[3, 4]
>10 million	4	2
4-10 million	3	1
350,000-<4 million	2	1
50,000-<350,000[5]	1	0

[1]Minimum monitoring requirements apply to the Metropolitan statistical area (MSA). CBSA includes both MSAs and micropolitan statistical areas.
[2]Population based on latest available census figures.
[3]The ozone (O3) National Ambient Air Quality Standards (NAAQS) levels and forms are defined in 40 CFR part 50.
[4]These minimum monitoring requirements apply in the absence of a design value.
[5]Metropolitan statistical areas (MSA) must contain an urbanized area of 50,000 or more population.

Table D-3 of Appendix D to Part 58—Ozone Monitoring Season by State		
State	Begin month	End Month
Idaho	April	September

PART 58 APPENDIX E SITE EVALUATION FORM FOR CO					
SITE NAME__**Eastman**_____ SITE ADDRESS__**166 N. 9th Street, Boise ID 83702**					
AQS ID__**160010014**_____ EVALUATION DATE__**4/27/2018**_____ EVALUATOR___**Leah Arnold – Idaho DEQ**_____					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	For neighborhood or larger spatial scale sites the probe must be located 2-15 meters above ground level and must be at least 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood scale avoid placing the monitor probe inlet near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site.	Eastman is a microscale site.			X
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the probe inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet (exception is street canyon or source-oriented sites where buildings and other structures are unavoidable).		X		
	(b) The probe inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the probe inlet must be at least 10 meters or further from the drip line of trees.			X*	
	(c) No trees should be between source and probe inlet for microscale sites.		X**		
6. SPACING FROM ROADWAYS	2. (b) Microscale CO monitor probes in downtown areas or urban street canyon locations shall be located a minimum distance of 2 meters and a maximum distance of 10 meters from the edge of the nearest traffic lane.		X***		
	2. (c) Microscale CO monitor inlet probes in downtown areas or urban street canyon locations shall be located at least 10 meters from an intersection and preferably at a midblock location.		X		
9. PROBE MATERIAL & RESIDENCE TIME	(a) Sampling train material must be FEP Teflon or borosilicate glass (e.g., Pyrex) for reactive gases.		X		
	(c) Sampling probes for reactive gas monitors at NCore must have a sample residence time less than 20 seconds.		X****		
Are there any changes that might compromise original siting criteria? If so, provide detail in comment section.					

Other Comments:

*Probe inlet is approximately 1 meter from tree branch. The City of Boise has worked with DEQ to keep the tree trimmed, but cutting the tree down is not favored.

**Trees are on North and South sides of probe inlet and not the West side where the traffic (CO source) occurs.

***A further analysis of this site revealed a “no parking” area immediately in front of the probe inlet. If one takes this space into account and then measures to the edge of the nearest traffic lane, the probe inlet is greater than 2 meters away.

****This site is not an N-Core site. Its sample residence time is longer than 20 seconds.

PART 58 APPENDIX E SITE EVALUATION FORM FOR CO					
SITE NAME__**N-Core**_____ SITE ADDRESS__**Eagle Road & I-84, Meridian ID 83642** AQS ID__**160010010**_____ EVALUATION DATE__**4/27/2018**_____ EVALUATOR___**Ed Jolly – Idaho DEQ**_____					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	For neighborhood or larger spatial scale sites the probe must be located 2-15 meters above ground level and must be at least 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood scale avoid placing the monitor probe inlet near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the probe inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet (exception is street canyon or source-oriented sites where buildings and other structures are unavoidable).		X		
	(b) The probe inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the probe inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	2. (b) Microscale CO monitor probes in downtown areas or urban street canyon locations shall be located a minimum distance of 2 meters and a maximum distance of 10 meters from the edge of the nearest traffic lane.				X
	2. (c) Microscale CO monitor inlet probes in downtown areas or urban street canyon locations shall be located at least 10 meters from an intersection and preferably at a midblock location.				X
9. PROBE MATERIAL & RESIDENCE TIME	(a) Sampling train material must be FEP Teflon or borosilicate glass (e.g., Pyrex) for reactive gases.		X		
	(c) Sampling probes for reactive gas monitors at NCore must have a sample residence time less than 20 seconds.		X		
Are there any changes that might compromise original siting criteria? If so, provide detail in comment section. No.					
Other Comments:					

Roadway average daily traffic, vehicles per day	Minimum distance[1] (meters)
≤10,000	10
15,000	25
20,000	45
30,000	80
40,000	115
50,000	135
≥60,000	150

[1] Distance from the edge of the nearest traffic lane. The distance for intermediate traffic counts should be interpolated from the table values based on the actual traffic count.

PART 58 APPENDIX E SITE EVALUATION FORM FOR NO, NOx, NO2, and NOy					
SITE NAME_ **N-Core** SITE ADDRESS__**Eagle Road & I-84, Meridian ID 83642** AQS ID__**160010010**_____ EVALUATION DATE__**4/27/2018**_____ EVALUATOR__**Ed Jolly – Idaho DEQ**_____					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	For neighborhood or larger spatial scale sites the probe must be located 2-15 meters above ground level and must be at least 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. Microscale near-road NO_2 monitoring sites are required to have sampler inlets between 2 and 7 meters above ground level. If located near the side of a building or wall, then locate the sampler probe on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood scale and larger avoid placing the monitor probe inlet near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the probe inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The probe inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential.		X		
	(d) For near-road NO_2 monitoring stations, the monitor probe shall have an unobstructed air flow, where no obstacles exist at or above the height of the monitor probe, between the monitor probe and the outside nearest edge of the traffic lanes of the target road segment.				X
5. SPACING FROM TREES	(a) To reduce possible interference the probe inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	See spacing requirements table below		X		
9. PROBE MATERIAL & RESIDENCE TIME	(a) Sampling train material must be FEP Teflon or borosilicate glass (e.g., Pyrex).		X		
	(c) Sampling probes for reactive gas monitors at NCore and at NO_2 sites must have a sample residence time less than 20 seconds.		X		
Are there any changes that might compromise original siting criteria? If so, provide detail in comment section. No.					
Other Comments:					

Roadway average daily traffic, vehicles per day	Minimum distance[1] (meters)	Minimum distance[1,] (meters)
≤1,000	10	10
10,000	10	20
15,000	20	30
20,000	30	40
40,000	50	60
70,000	100	100
≥110,000	250	250

[1]Distance from the edge of the nearest traffic lane. The distance for intermediate traffic counts should be interpolated from the table values based on the actual traffic count.

PART 58 APPENDIX E SITE EVALUATION FORM FOR O3					
SITE NAME__**N-Core**_____ SITE ADDRESS__**Eagle Road & I-84, Meridian, ID 83642**_____ AQS ID__**160010010**_____EVALUATION DATE__**4/27/2018**_____EVALUATOR__**Ed Jolly – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood scale avoid placing the monitor probe inlet near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site.		X		
	(b) To minimize scavenging effects, the probe inlet must be away from furnace or incineration flues or other minor sources of SO_2 or NO.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the probe inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The probe inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the probe inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.				X*
6. SPACING FROM ROADWAYS	See spacing requirements table below		X		
9. PROBE MATERIAL & RESIDENCE TIME	(a) Sampling train material must be FEP Teflon or borosilicate glass (e.g., Pyrex).		X		
	(c) Sampling probes for reactive gas monitors at NCore must have a sample residence time less than 20 seconds.		X		
Are there any changes that might compromise original siting criteria? If so, provide detail in comment section. No.					
Other Comments: *Not a microscale site.					

Roadway average daily traffic, vehicles per day	Minimum distance[1] (meters)	Minimum distance[1, 2] (meters)
≤1,000	10	10
10,000	10	20
15,000	20	30
20,000	30	40
40,000	50	60
70,000	100	100
≥110,000	250	250

[1]Distance from the edge of the nearest traffic lane. The distance for intermediate traffic counts should be interpolated from the table values based on the actual traffic count.

[2]Applicable for ozone monitors whose placement has not already been approved as of December 18, 2006.

PART 58 APPENDIX E SITE EVALUATION FORM FOR O3					
SITE NAME__**White Pine Elementary**_____ SITE ADDRESS_**401 E. Linden St., Boise ID 83706** AQS ID__**160010017**_____EVALUATION DATE__**4/27/2018**___EVALUATOR__**Ed Jolly/Leah Arnold – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood scale avoid placing the monitor probe inlet near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site.		X		
	(b) To minimize scavenging effects, the probe inlet must be away from furnace or incineration flues or other minor sources of SO_2 or NO.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the probe inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The probe inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the probe inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.				X*
6. SPACING FROM ROADWAYS	See spacing requirements table below		X		
9. PROBE MATERIAL & RESIDENCE TIME	(a) Sampling train material must be FEP Teflon or borosilicate glass (e.g., Pyrex).		X		
	(c) Sampling probes for reactive gas monitors at NCore must have a sample residence time less than 20 seconds.		X		
Are there any changes that might compromise original siting criteria? If so, provide detail in comment section. No.					
Other Comments: *Not a microscale site.					

Roadway average daily traffic, vehicles per day	Minimum distance[1] (meters)	Minimum distance[1, 2] (meters)
≤1,000	10	10
10,000	10	20
15,000	20	30
20,000	30	40
40,000	50	60
70,000	100	100
≥110,000	250	250

[1]Distance from the edge of the nearest traffic lane. The distance for intermediate traffic counts should be interpolated from the table values based on the actual traffic count.

[2]Applicable for ozone monitors whose placement has not already been approved as of December 18, 2006.

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Pocatello**_____ SITE ADDRESS__**Corner of Garrett and Gould Streets, Pocatello ID 83204** AQS ID__**160050015**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Marshall Magee – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Boise Fire Station**_____ SITE ADDRESS__**16th and Front Street, Boise ID 83702** AQS ID__**160010009**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Leah Arnold – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Cottonwood**_____ SITE ADDRESS__**BLM Field Office – 1 Butte Dr., Cottonwood ID 83522** AQS ID__**N/A**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Zac Bishop – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.			X*	
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.			X**	
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments: * A tree is located 6 meters away from the monitor. The tree height is 7 meters above the height of the inlet. This monitor (e-sampler) is operated seasonally and is not a SLAMS site. The predominant wind direction during the season of highest pollutant concentration is not impeded by the tree. **The monitor is approximately 6 meters from the drip line of a tree.					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Garden Valley**_____ SITE ADDRESS__**946 Banks Lowman Rd., Garden Valley ID 83622** AQS ID__**160150002**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Leah Arnold – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Grangeville**_____ SITE ADDRESS__**USFS Compound – Grangeville ID 83530** AQS ID__**160490002**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Zac Bishop – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Idaho City**_____ SITE ADDRESS__**3851 Hwy 21, Idaho City ID 83631** AQS ID__**160150001**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Leah Arnold – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Idaho Falls**_____ SITE ADDRESS__**Hickory and Sycamore Streets, Idaho Falls ID 83402** AQS ID__**160190011**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Ryan Rossi – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Juliaetta**_____ SITE ADDRESS__**3rd Street, Juliaetta, ID 83535** AQS ID__**N/A**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Zac Bishop – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Ketchum**_____ SITE ADDRESS__**111 West 8th Street, Ketchum ID 83340** AQS ID__**160130004**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Drew Jones – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Lancaster**_____ SITE ADDRESS__**West Lancaster Rd., Hayden, ID 83835** AQS ID__**160550003**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Jacob Odekirk – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X*		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments: *The Water and Sewer District installed a backup generator near the site. The generator only runs once per week for a short dedicated time as part of its maintenance run schedule. Impacts are expected to be minimal.					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Lewiston**_____ SITE ADDRESS__**1200 29th Street, Lewiston ID 83501** AQS ID__**160690012**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Zac Bishop – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**McCall**_____ SITE ADDRESS__**500 N. Mission Street, McCall ID 83638** AQS ID__**160850002**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Leah Arnold – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.			X*	
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments: *Small tree is located at 8.7 meters away from monitor.					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Moscow**_____ SITE ADDRESS__**1025 Plant Sciences Rd., Moscow ID 83843** AQS ID__**160570005**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Zac Bishop – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Mt. Hall**_____ SITE ADDRESS__**1275 Idaho 1, Bonners Ferry ID 83805** AQS ID__**N/A**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Jacob Odekirk – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Nampa**_____ SITE ADDRESS__**Nampa Fire Station – 923 1st Street South, Nampa ID 83651** AQS ID__**160270002**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Leah Arnold – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**N-Core**_____ SITE ADDRESS__**Eagle Road & I-84, Meridian ID 83642** AQS ID__**160010010**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Ed Jolly – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Paul**_____ SITE ADDRESS__**201 N. 1st Street West, Paul ID 83347** AQS ID__**N/A**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Drew Jones – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.			X*	
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.			X**	
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? See below.					
Other Comments: *Tree stands 5.1 meters taller than probe inlet. Tree is only located 5.2 meters away from probe inlet. **Tree is located 5.2 meters away from probe inlet. Higher branches overhang probe inlet. DEQ will contact the school where the monitor is located to try to get approval for tree to be trimmed.					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Porthill**_____ SITE ADDRESS__**Tavern Farm Rd., Porthill ID 83853** AQS ID__**N/A**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Jacob Odekirk – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Potlatch**_____ SITE ADDRESS__**510 Elm Street, Potlatch ID 83855** AQS ID__**N/A**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Zac Bishop – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Preston**_____ SITE ADDRESS__**450 East 800 South Preston, ID 83263** AQS ID__**160410002**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Marshall Magee – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Rexburg**_____ SITE ADDRESS__**Madison Middle School – 575 W. 7th Street, Rexburg ID 83440** AQS ID__**N/A**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Ryan Rossi – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Salmon**_____ SITE ADDRESS__**N. Charles Street, Salmon ID 83467** AQS ID__**160590004**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Ryan Rossi – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Sandpoint**_____ SITE ADDRESS__**U of I Research Center – 2105 N. Boyer Ave., Sandpoint ID 83864** AQS ID__**160170003**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Jacob Odekirk– Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Soda Springs**_____SITE ADDRESS__**Caribou Hospital – 300 S. 3rd Street West, Soda Springs ID 83276** AQS ID__**N/A**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Marshall Magee – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**St. Maries**_____ SITE ADDRESS__**USFS Building - St. Maries ID, 83666** AQS ID__**160090010**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Jacob Odekirk – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Twin Falls**_____ SITE ADDRESS__**650 W. Addison, Twin Falls ID 83301** AQS ID__**160830007**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Drew Jones – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Weiser**_____ SITE ADDRESS__**690 W. Indianhead Rd., Weiser ID 83672** AQS ID__**N/A**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Ed Jolly – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR PM2.5, PM10, PM10-2.5,and Pb					
SITE NAME__**Pinehurst**_____ SITE ADDRESS__**106 Church Street, Pinehurst ID 83850** AQS ID__**160790017**_____ EVALUATION DATE__**4/27/2018** EVALUATOR__**Jacob Odekirk – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level (AGL) for neighborhood or larger spatial scale, 2-7 meters for microscale spatial scale sites and middle spatial scale $PM_{10-2.5}$ sties. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood or larger spatial scales avoid placing the monitor near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential. For particle sampling, a minimum of 2 meters of separation from walls, parapets, and structures is required for rooftop site placement.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	Spacing from roadways is dependent on the spatial scale and ADT count. See section 6.3(b) and figure E-1 for specific requirements.		X		
Are there any changes that might compromise original siting criteria? No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR SO2					
SITE NAME__**N-Core**_____ SITE ADDRESS__**Eagle Road & I-84, Meridian ID 83642**_____ AQS ID__**160010010**_____ EVALUATION DATE__**4/27/2018**_____EVALUATOR__**Ed Jolly – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood scale avoid placing the monitor probe inlet near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site.		X		
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the probe inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The probe inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the probe inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.	Not a microscale site			X
6. SPACING FROM ROADWAYS	There are no roadway spacing requirements for SO2.				X
9. PROBE MATERIAL & RESIDENCE TIME	(a) Sampling train material must be FEP Teflon or borosilicate glass (e.g., Pyrex).		X		
	(c) Sampling probes for reactive gas monitors at NCore must have a sample residence time less than 20 seconds.		X		
Are there any changes that might compromise original siting criteria? If so, provide detail in comment section. No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR SO2					
SITE NAME__**Pocatello Sewage Treatment Plant**_____SITE ADDRESS__**Batiste Chubbuck Rd., Pocatello ID 83204** AQS ID__**160050004**_____ EVALUATION DATE__**4/27/2018**_____EVALUATOR__**Marshall Magee – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood scale avoid placing the monitor probe inlet near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site.	Site is Middle Scale.			X
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the probe inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The probe inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the probe inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.		X		
6. SPACING FROM ROADWAYS	There are no roadway spacing requirements for SO2.				X
9. PROBE MATERIAL & RESIDENCE TIME	(a) Sampling train material must be FEP Teflon or borosilicate glass (e.g., Pyrex).		X		
	(c) Sampling probes for reactive gas monitors at NCore must have a sample residence time less than 20 seconds.		X		
Are there any changes that might compromise original siting criteria? If so, provide detail in comment section. No.					
Other Comments:					

PART 58 APPENDIX E SITE EVALUATION FORM FOR SO2					
SITE NAME__**Soda Springs**_____SITE ADDRESS__**5-mile Road, Soda Springs ID 83276** AQS ID__**160290031**_____ EVALUATION DATE__**4/27/2018**_____EVALUATOR__**Marshall Magee – Idaho DEQ**					
APPLICABLE SECTION	REQUIREMENT	COMMENTS	CRITERIA MET?		
			YES	NO	N/A
2. HORIZONTAL AND VERTICLE PLACEMENT	2-15 meters above ground level. 1 meter vertically or horizontally away from any supporting structure, walls, *etc.*, and away from dusty or dirty areas. If located near the side of a building or wall, then locate on the windward side relative to the prevailing wind direction during the season of highest concentration potential.		X		
3. SPACING FROM MINOR SOURCES	(a) For neighborhood scale avoid placing the monitor probe inlet near local, minor sources. The source plume should not be allowed to inappropriately impact the air quality data collected at a site.	Site is Middle-Micro Scale.			X
4. SPACING FROM OBSTRUCTIONS	(a) To avoid scavenging, the probe inlet must have unrestricted airflow and be located away from obstacles. The separation distance must be at least twice the height that the obstacle protrudes above the probe inlet.		X		
	(b) The probe inlet must have unrestricted airflow in an arc of at least 180 degrees. This arc must include the predominant wind direction for the season of greatest pollutant concentration potential.		X		
5. SPACING FROM TREES	(a) To reduce possible interference the probe inlet must be at least 10 meters or further from the drip line of trees.		X		
	(c) No trees should be between source and probe inlet for microscale sites.		X		
6. SPACING FROM ROADWAYS	There are no roadway spacing requirements for SO2.				X
9. PROBE MATERIAL & RESIDENCE TIME	(a) Sampling train material must be FEP Teflon or borosilicate glass (e.g., Pyrex).		X		
	(c) Sampling probes for reactive gas monitors at NCore must have a sample residence time less than 20 seconds.		X		
Are there any changes that might compromise original siting criteria? If so, provide detail in comment section. See below.					
Other Comments: Site was originally placed in its current location as a result of a combination of monitoring and modeling. Some recent wind roses have shown some variations compared to the original wind roses.					

Appendix E. Public Comments and Responses

IDAHO CONSERVATION LEAGUE

208.345.6933 • PO Box 844, Boise, ID 83702 • www.idahoconservation.org

6/28/18

Ben Seely
DEQ State Office
Air Quality Division
1410 N. Hilton
Boise, ID 83706

Submitted via email: ben.seely@deq.idaho.gov

RE: Draft 2018 Annual Air Quality Monitoring Network Plan

Dear Mr. Seely:

Thank you for the opportunity to comment on the draft 2018 Ambient Air Quality Monitoring Network Plan (Plan).

Since 1973, the Idaho Conservation League has been Idaho's leading voice for clean water, clean air and wilderness—values that are the foundation for Idaho's extraordinary quality of life. The Idaho Conservation League works to protect these values through public education, outreach, advocacy and policy development. As Idaho's largest state-based conservation organization, we represent over 25,000 supporters, many of whom have a deep personal interest in protecting Idaho's air quality.

Our detailed comments are provided following this letter. Please do not hesitate to contact me at 208-345-6933 ext. 23 or ahopkins@idahoconservation.org if you have any questions regarding our comments or if we can provide you with any additional information on this matter.

Sincerely,

Austin Hopkins
Conservation Associate

Coordination with VW Settlement Projects

DEQ is at the onset of a years-long endeavor to mitigate air pollution impacts resulting from the deceitful NOx emissions from VW diesel vehicles. The State of Idaho has received approximately $17 million as part of the legal settlement with VW, and DEQ has been selected to manage the allocation of these funds to projects seeking to offset NOx emissions.

We are curious if there has been any collaboration amongst DEQ staff that work on the statewide monitoring network with those in charge of the VW funds. Is the proposed air monitoring network sufficient to detect reductions in emissions from projects being funded by the VW money? If not, are more monitors needed, or are changes to monitor locations necessary?

Statewide Ozone Monitoring

Page 22 of the draft plan states, "DEQ will conduct an assessment to determine locations in eastern Idaho where ozone monitoring may be required and determine resources for additional monitoring." We support DEQ's efforts to research this matter; however, we request that DEQ provide more details as to what this assessment would ultimately look like and their timeline for completing said assessment and ultimately installing ozone monitors in cities.

Table D-2 of Appendix D in 40 CFR 58 outlines the minimum requirements for where ozone monitors should be located based on population size and 3-year design value concentrations for ozone. Pursuant to Table D-2, cities with a population greater than 50,000 where 3-year average ozone concentrations exceed 85 percent of the NAAQS are required to have, at a minimum, one ozone monitor. DEQ currently does not monitor for ozone outside the Treasure Valley, so it is difficult to assess whether 3-year average ozone concentrations in areas exceed 85% of the NAAQS; nonetheless, the most recent census data demonstrates that the following Idaho cities meet the population minimums stipulated in Table D-2[1]:

- Boise (pop. 218,281)
- Meridian (90,739)
- Nampa (89,839)
- Idaho Falls (59, 184)
- Pocatello (54,441)
- Caldwell (51,686)

There are additional cities that warrant consideration as well. The cities of Coeur d'Alene (49,122) and Twin Falls (47,468) are close to the threshold of requiring an ozone monitor; however, this census data is now 8 years old, so there is a high likelihood that

[1] Data obtained from U.S. Census Bureau

both of these cities currently exceed the 50,000-population threshold. We encourage DEQ to expand their consideration beyond eastern Idaho cities to include cities across the state such as Twin Falls and Coeur d'Alene.

The EPA's Environmental Justice Screening and Mapping tool, EJSCREEN, provides further support to installing more ozone monitors throughout the state. According to EJSCREEN, cities in eastern Idaho such as Pocatello and Idaho Falls are in the 80th-100th percentile for ozone concentrations relative to the rest of the state (Figure 1 and 2).

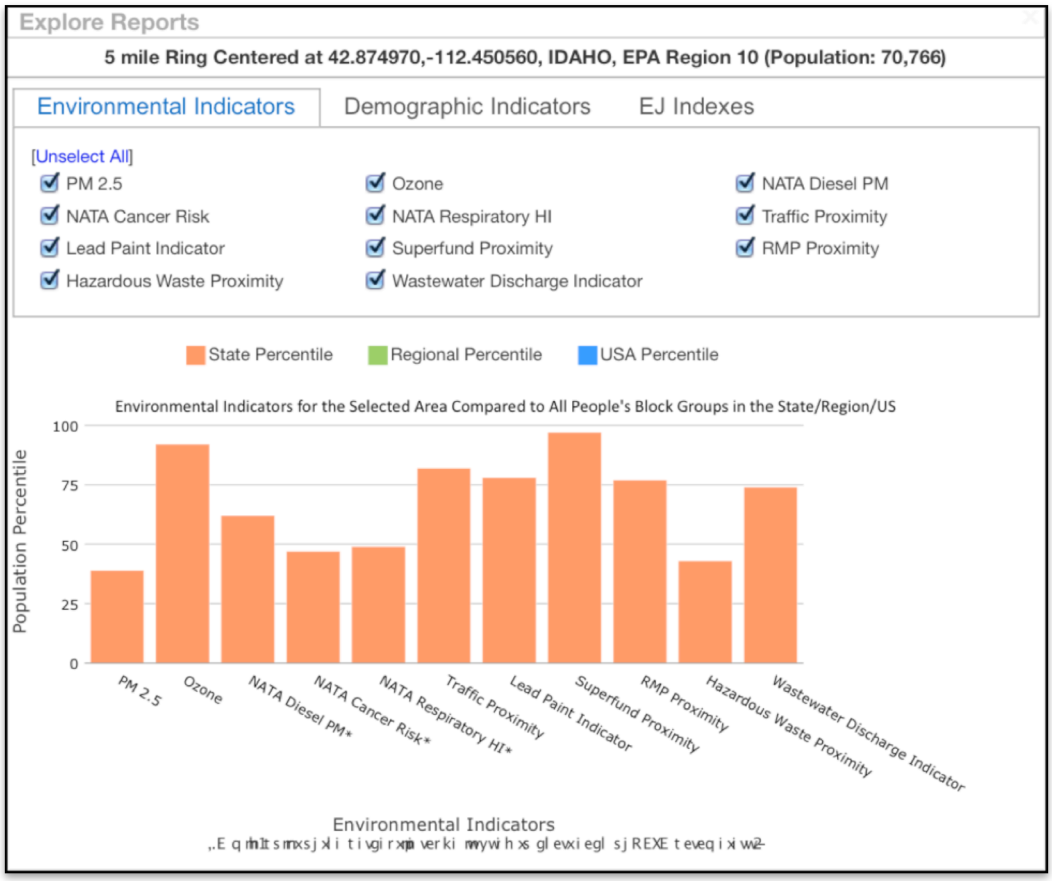


Figure 1: EJSCREEN Environmental Indicators for Pocatello, ID.

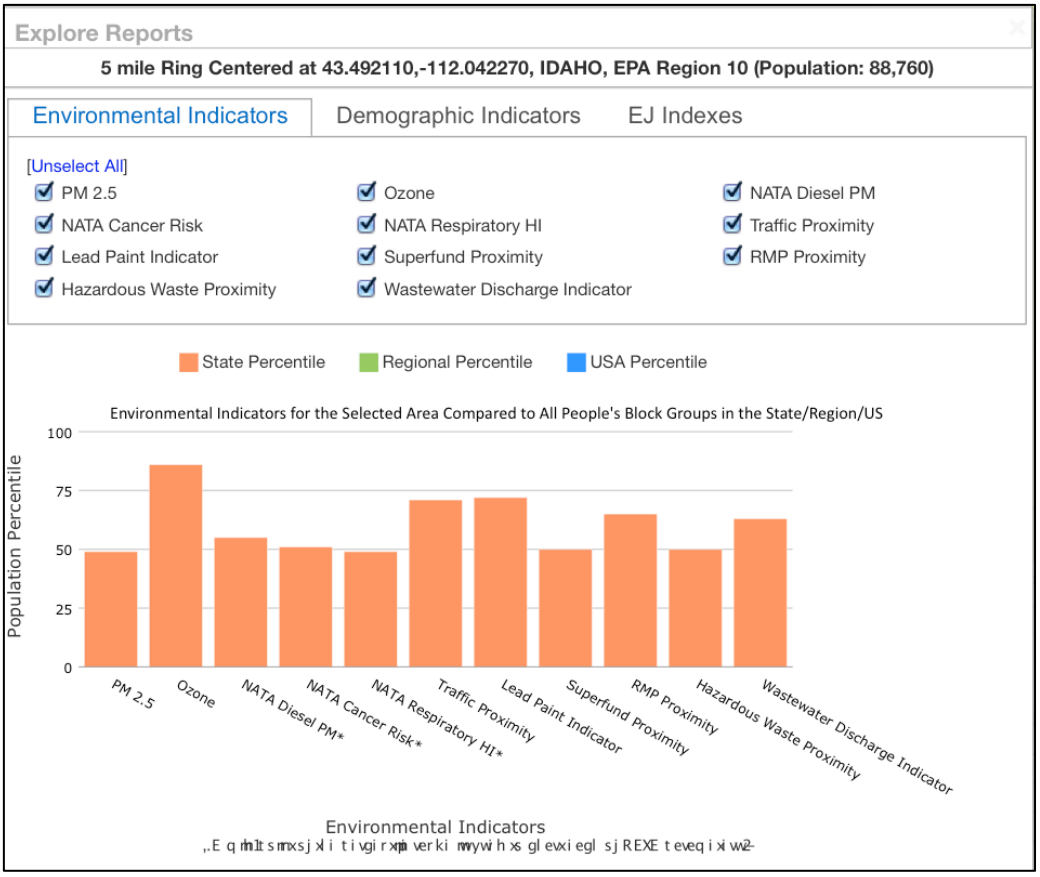


Figure 2:EJSCREEN Environmental Indicators for Idaho Falls, ID.

There appears to be ample evidence supporting the installation of ozone monitors throughout the state, especially in Pocatello and Idaho Falls. After completing their assessment, we request that DEQ publish for the public to review whatever report or final product is produced summarizing their assessment, conclusions, and path forward including a timeline of when ozone monitors will be installed.

Identification and Consideration of Susceptible Individuals

When assessing an ambient air quality monitoring network, a state is required consider the following:

> *The network assessment must consider the ability of existing and proposed sites to support air quality characterization for areas with relatively high populations of susceptible individuals (e.g., children with asthma), and, for any sites that are being proposed for discontinuance, the effect on data users other than the agency itself, such as nearby States and Tribes or health effects studies.*
>
> *40 CFR 58.10(e).*

DEQ acknowledged in section 3.2 of the Plan that that one of the purposes of this monitoring network is to evaluate the effects of air pollution levels on public health. However, outside of this statement it does not appear that DEQ put forth an effort to either identify or consider whether the current network and proposed changes are sufficient at protecting areas with high populations of susceptible individuals. We request that DEQ perform this type of analysis prior to submitting this network plan to the EPA.

Monitoring Locations near Recreation Areas

On page 3 of the Plan DEQ explains that monitoring sites vary in design in order to meet the information needs of airshed managers. One such type of monitoring site is designed to provide information on air pollution impacts to visibility, vegetation damage, or other welfare-based impacts (6th bullet point at bottom of page 3).

With regards to the final item, "welfare-based impacts," we are curious as to the level of consideration DEQ has given to active communities and their monitoring needs. Many Idahoans lead active lifestyles, and are frequently engaged in activities such as cycling, running, hiking, or some other activity that generally elevates respiratory activity. These activities frequently occur on the periphery of towns, where the terrain can differ greatly from the larger city (i.e. – recreating in the foothills adjacent to an otherwise relatively flat urban environment). This change in terrain likely changes the micro-scale meteorology of an area, and thus, the air pollution levels.

With this in mind, we are curious if DEQ has considered this in the placement of any monitoring site. For example, many people frequently recreate in the foothills of Boise, yet the closest monitor is miles away. If DEQ has yet to consider these facts than we encourage them to do so in future siting considerations. If this fact is part of DEQ's considerations, we request that any analysis or consideration be included in future documents for the public to review.

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502
www.deq.idaho.gov

C.L. "Butch" Otter, Governor
John H. Tippets, Director

July 13, 2018

Austin Hopkins
Conservation Associate
Idaho Conservation League
P.O. Box 844
Boise, ID 83702

Subject: Response to Idaho Conservation League (ICL) comments on 2018 draft Ambient Air Quality Monitoring Network Plan

Dear Mr. Hopkins:

Thank you for taking the time and effort to comment on Idaho Department of Environmental Quality's (DEQ) 2018 Ambient Air Quality Monitoring Network Plan. Below are DEQ's responses arranged under the headings provided by ICL in their comments.

Coordination with VW Settlement Projects

Concerning the VW settlement funds, DEQ has been coordinating internally and with other state agencies as well as actively soliciting input from the general public. On May 1, 2018 DEQ submitted the final Beneficiary Mitigation Plan (BMP) to the Wilmington Trust, details of which can be found at http://www.deq.idaho.gov/air-quality/vw-diesel-settlement/.

The funds are being used to support potential eligible mitigation actions (EMAs), with a very specific requirement for implementing projects that offset or reduce emissions. While the individual EMA projects have not yet been selected, the plan outlines some selection metrics. The plan focuses on emission reductions, using technologies that produce quantifiable results. Therefore, additional ambient air quality monitoring will not be required. Furthermore, the VW trust does not allow the state to use funds to purchase monitors.

Statewide Ozone Monitoring

DEQ considers current population estimates when evaluating the state of the monitoring network. The current Census Bureau estimates have been provided in Appendix D of the ANP. Table D-2 does specify a requirement of one monitor for MSA's with a population between 50,000 and 350,000 when design values are ≥ 85% of the NAAQS, but it also specifies that zero monitors are required for these MSA's in the absence of a design value (see footnote 4).

Specific details regarding ozone monitoring in eastern Idaho are not available at this time as this work is still in the beginning stages. The initial process will include the review of potential sources of existing ozone data. Any changes to the network, such as additional monitors (including timelines and justification) or the determination of no additional monitoring would be subject to inclusion in the Annual Network Plan. These plans will continue to be made available for public comment and EPA approval.

Identification and Consideration of Susceptible Individuals

This level of assessment is outside the scope of the ANP. Rather, in accordance with CFR 58.13(d) below, DEQ does perform this level of analysis during the 5-year assessment. DEQ's most recent 5-year assessment can be found at: http://www.deq.idaho.gov/air-quality/monitoring/monitoring-network/ . The next scheduled assessment will be due in 2020. During this process DEQ uses a variety of resources to assess the network in detail including modeling, emission review, GIS tools, and meteorological data.

(d) The state, or where applicable local, agency shall perform and submit to the EPA Regional Administrator an assessment of the air quality surveillance system every 5 years to determine, at a minimum, if the network meets the monitoring objectives defined in appendix D to this part, whether new sites are needed, whether existing sites are no longer needed and can be terminated, and whether new technologies are appropriate for incorporation into the ambient air monitoring network. The network assessment must consider the ability of existing and proposed sites to support air quality characterization for areas with relatively high populations of susceptible individuals (e.g., children with asthma), and, for any sites that are being proposed for discontinuance, the effect on data users other than the agency itself, such as nearby states and tribes or health effects studies. The state, or where applicable local, agency must submit a copy of this 5-year assessment, along with a revised annual network plan, to the Regional Administrator. The assessments are due every five years beginning July 1, 2010.

40 CFR 58.13(d)

Monitoring Locations near Recreation Areas

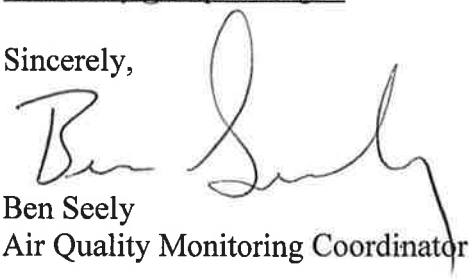
DEQ's network has been designed to meet the monitoring requirements as outlined in 40 CFR Parts 50, 53, and 58. The 5-year assessment provides the opportunity to further assess monitor location. In addition, a Real-Time Air Monitoring map is maintained to share monitoring data with the public as it becomes available. DEQ also provides an Air Quality Index (AQI) and a forecasted AQI in order to help people make more informed, individualized decisions about their activity level. The AQI forecast utilizes both monitoring and meteorological data.

DEQ appreciates that people enjoy outdoor activities in a variety of locations throughout the state. Establishing a network of monitors to capture any potential micro-scale gradient changes in air quality is limited not just by funding but also technological advances. There is a growing market of next generation air sensor technologies being marketed to local citizens and communities. The technology is not currently mature enough to be used for regulatory decisions. The EPA has developed an online resource called the Air Sensor Toolbox. This is a valuable resource for understanding this emerging technology, examining the limitations of the sensors,

and recognizing any advancement made to establish performance standards. The site can be found at: https://www.epa.gov/air-sensor-toolbox.

Please let me know if you have any questions. I can be reached at (208)373-0454, or at Ben.Seely@deq.idaho.gov.

Sincerely,



Ben Seely
Air Quality Monitoring Coordinator

Ben Seely

From: Watch Man <watchman484@gmail.com>
Sent: Monday, June 04, 2018 9:15 AM
To: Ben Seely
Cc: John Tippets; LAWRENCE WASDEN
Subject: COMMENT ON DEQ AIR QUALITY MONITORING PLAN

RE:
http://www.deq.idaho.gov/news-archives/air-monitoring-network-plan-comment-052918/

The DEQ network map of monitoring stations lacks at least two vital stations. As the prevailing winds in southern Idaho are from the west and southwest there should be one east of and one northeast of Jerome County. The concentration of cattle there emits ammonia, hydrogen sulfide, pulverized fecal matter, air borne liquid fecal matter and particulate matter (PM 2.5) that is unhealthy. East of Gooding County would also be a good monitoring site.

When I lived southwest of Jerome surrounded by 15,000 dairy cows that moved in on me I not only videoed visible particulate matter borne by the wind onto my property from these operations, as well as the liquids, but conducted petri dish tests as well. Recognizing ammonia and hydrogen sulfide infiltration is a simple matter for anyone with a nose though a short exposure to the H2S kills the sense of smell. Additionally, in conjunction with an associate, we traveled around Gooding and Jerome Counties with a certified sniffer machine which proved these allegations and more. Submission of these data with "officials" went nowhere.

My private well testing data from the late 1980's through the mid 2000's is part of DEQ's Ground Water Quality Technical Report No. 14 as well as the 2 year NRCS Scott's Pond report and one of three wells intensely tested by USGS. When air and water are subject to continuous pollution sources and not addressed by those agencies responsible for their protection, dereliction of duty is the kindest descriptive.

As the State's primary Constitutional duty is to protect the health, safety and welfare of the public, NOT monitoring the air in these locales is to not do what is legally required by DEQ. For the people, do you job.

Thank you.

Lee Halper

Hagerman, ID

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502
www.deq.idaho.gov

C.L. "Butch" Otter, Governor
John H. Tippets, Director

July 13, 2018

Lee Halper
Hagerman, ID
Watchman484@gmail.com

Subject: Response to comments on 2018 draft Ambient Air Quality Monitoring Network Plan

Dear Mr. Halper:

The Idaho Department of Environmental Quality (DEQ) received your correspondence via email on Monday, June 4, 2018 Thank you for taking the time and effort to comment on the 2018 Annual Ambient Air Quality Monitoring Network Plan (ANP).

The focus of your comments is on the air quality impact from dairy cows in the Gooding and Jerome county area, both the odor produced and the generation of $PM_{2.5}$. As we discussed during our July 3, 2018 phone call, additional air monitors to manage localized impacts from dairy and agricultural practices are outside the scope of the ANP. Rather, certain sized dairies are required to be registered under a permit by rule which requires best management practices for the control of ammonia emissions (IDAPA 58.01.01.760). Also, dairy odor and $PM_{2.5}$ complaints can be directed to the DEQ's Twin Falls Regional Office at (208)736-2190 or the Idaho Department of Agriculture Animal Industries complaint line at (866)435-0490 or using the online complaint form https://agri.idaho.gov/main/animals/animal-industries-complaint-form/.

As identified during our discussion, the Twin Falls $PM_{2.5}$ monitor is near the area of concern and would be beneficial in tracking air quality trends in the region. As per your request, DEQ is providing you with a link to view the air quality data from that monitor. The current air quality conditions are made available to the public on the Real-Time Air Monitoring webpage which can be found at: http://airquality.deq.idaho.gov/. The historic monitor data requested can also be accessed from this webpage under the *Get Access to Data* tab on the sidebar.

Please let me know if you have any questions. I can be reached at (208)373-0454, or at Ben.Seely@deq.idaho.gov.

Sincerely,

Ben Seely
Air Quality Monitoring Coordinator