

January
2019
BOARD MEETING
for
Yakima Regional Clean
Air Agency



January 10, 2019
Regular Board Meeting
2:00 p.m.

AGENDA
Regular Meeting

- 1. Call to Order**
- 2. Roll Call**
- 3. Additions or Deletions to the Agenda**
- 4. Public Comments**

If you wish to address the Board you may do so now. Please approach the podium, state your name and the agenda item you wish to address. Please limit your comments to three (3) minutes.

5. Approval of Consent Agenda

- 5.1 Board Meeting Minutes – December 2018
- 5.2 Accept YRCAA December 2018 Monthly Activity Report

6. Regular Agenda

- 6.1 Executive Director's Report

7. Action Items

- 7.1 Fiscal Vouchers and Payroll Authorization Transfers for November 2018
- 7.2 Election of Board Chair and Vice-Chair

8. Other business

9. Adjournment

CONSENT AGENDA ITEMS



Yakima Regional Clean Air Agency
 186 Iron Horse Court, Suite 101
 Yakima, WA 98901
 (509) 834-2050, Fax (509) 834-2060
yakimacleanair.org

**SUMMARY OF THE GOVERNING
 BOARD OF DIRECTORS
 REGULAR BOARD MEETING**

December 13, 2018

Location and Time:

Yakima City Hall Council Chambers

2:00 pm

REGULAR MEETING

1. Mr. Anderson *called the meeting to order at 2:00 p.m.*

2. Mary Wurtz, Clerk of the Board, *conducted roll call. There was a quorum.*

PRESENT WERE:	
BOARD MEMBERS: Steven Jones, Ph.D., County Representative Ranie Haas, Alternate, Member-at-Large Kay Funk, Alternate, Large City Representative Ron Anderson, County Commissioner ABSENT: Norm Childress, Small City Representative Jon DeVaney, Member-at-Large Carmen Mendez, Large City Representative	LEGAL COUNSEL: Gary Cuillier STAFF: Keith Hurley, Executive Director Mary Wurtz, Clerk of the Board

3. Additions or Deletions to the Agenda

None

4. Public Comment 4:27

None

5. Consider Approving the Consent Agenda Items 5.1, 5.2, 5.3 and 5.4

5.1 Board Meeting Minutes – November 2018

5.2 Accept YRCAA November 2018 Monthly Activity Report

5.3 2019 Board of Directors Meeting Dates

AGENDA ITEM NO. 5.1



5.4 2019 Agency Holiday Schedule

Mr. Jones motioned to approve
 Motion approved with no dissension.

Ms. Haas seconded.

6. Regular Agenda 5:20

Mr. Hurley referred to the last meeting and the subject of replacing Mr. Childress as the Small City Representative since he was elected to the position of County Commissioner. Mr. Hurley stated the nomination forms went out on December 11 with responses needed back by December 25. The ballots will be mailed on December 28 and votes will be due back by January 25, 2019. We should be able to issue the Certificate of Appointment by January 31, 2019. February 14, 2019 is the anticipated first meeting for the new director.

Mr. Jones questioned who makes up the city selection committee. Mr. Hurley replied the committee is made up of the mayors of the 13 small cities and towns in Yakima County.

Mr. Hurley stated Chair DeVaney and Ms. Mendez had asked him to supply the total number of permits that were issued in 2017. He stated that there were 1,728 total permits issued in 2017 and he projected a total of 1,718 total permits would be issued for 2018.

He reminded the board that on Monday, December 17 the agency will be conducting a Community Forum from 1:00 p.m. to 3:00 p.m. The public requested topic was for the agency to discuss the State Implementation Plan (SIP) process. The Forum will be held at the agency office located at 186 Iron Horse Court, Suite 101.

7. Action Items 11:16

7.1 Fiscal Vouchers and Payroll Authorization Transfers for October 2018

Mr. Jones motioned to approve
 Motion approved with no dissension.

Ms. Haas seconded

8. Other Business

Mr. Anderson announced this meeting of the Board of Directors would be his last meeting and Mr. Childress will be representing Yakima County on the Board. Mr. Anderson will be Mr. Childress' alternate. Mr. Anderson thanked everyone for the professional work that has been done and that we continue to do so. Mr. Hurley thanked Mr. Anderson for his service and dedication to the Board and to the County.

Mr. Anderson adjourned the meeting at 2:12 p.m.



*Yakima Regional Clean Air Agency
186 Iron Horse Court, Suite 101
Yakima, WA 98901
(509) 834-2050, Fax (509) 834-2060
yakimacleanair.org*

Jon DeVaney, Board Chairman

Mary Wurtz, Clerk of the Board

AGENDA ITEM NO. 5.1

Date of Release: January 3, 2019
Date of Consideration: January 10, 2019
To: Board of Directors
From: Office of the Executive Director
Subject: Monthly Activity Report

Activity	FY18 FY19 thru					
	FY18	Oct. 18	Nov. 18	Dec. 18	thru Dec.	Dec.
Minor Source Inspections	97	0	15	5	38	54
Complaints Received	166	10	20	7	97	63
NOVs Issued	74	2	13	10	30	31
AODs Issued	4	0	1	1	2	2
Warning Notices Issued	2	0	2	1	2	3
NOPs Issued	33	1	0	3	14	8
SEPA Reviews	275	14	31	15	121	157
AOP Applications Received	0	0	0	0	0	0
AOPs Issued or Renewed	0	0	0	0	0	0
Deviations/Upsets Reported	11	1	1	1	6	6
AOP Inspections	4	0	0	0	2	2
Public Workshops	1	0	0	0	1	0
Media Events	0	0	0	0	0	0
Media Contacts	18	0	0	0	14	11
Education Outreach Events	9	1	0	0	7	3
Sources Registered	343	0	0	0	2	0
NSR Applications Received	19	4	0	0	12	0
NSR Approvals Issued-Temporary	0	0	0	0	0	0
NSR Approvals Issued-Permanent	12	0	2	0	7	7
NODRs Received	236	14	20	20	106	109
Agricultural Burn Permits Issued	174	3	6	3	13	42
Conditional Use Permits Issued	8	0	0	0	0	10
Residential Burn Permits Issued	917	0	0	0	60	12
Burn Ban Days	66	0	19	5	54	48
Public Records Requests Fulfilled	26	3	4	0	16	16

Acronyms:

AOP - Air Operating Permit; **NODR** - Notification of Demolition and Renovation; **NOP** - Notice of Penalty;
NOV - Notice of Violation; **NSR** - New Source Review; **SEPA** - State Environmental Policy Act

AGENDA ITEM NO. 5.2

REGULAR AGENDA ITEMS



Executive Memorandum

Date of Release: January 3, 2019
Date of Consideration: January 10, 2019
To: The YRCAA Board of Directors
From: Office of the Executive Director
Subject: Executive Director's Report for January 2019

1. Small City Representative Replacement Update

The time line below reflects the current update on the City Selection Committee's efforts in selecting their new small city representative:

- December 28, 2018 Ballots mailed to committee members
- January 25, 2019 Last day to receive ballots
- January 31, 2019 Certificate of Appointment issued
- February 14, 2019 Anticipated first Board meeting for new director

2. Department of Ecology's Data Quality Assessment Report for 1st Quarter of 2018 (Attached)

Key Data Points:

- P. 10 – Fine Particulate Matter (FEM PM_{2.5}- Continuous) % Valid Data = 100
- P. 10 – Particulate Matter (PM₁₀ FEM- Continuous) % Valid Data = 100
- P. 12 – Fine Particulate Matter (PM_{2.5} FEM – Daily) % Valid Data = 100 (Formerly the PM_{2.5} FRM)
- P. 13 – PM_{2.5} Chemical Speciation Network;
 - SASS Audit % Flow = 3.13 (± 10 percent)
 - URG Audit % Flow = -7.82 (± 10 percent)

3. Community Forum

The agency held a community forum on Monday, December 17th, at the agency office. The forum summary is attached.

4. Compliance & Engineering

The following table itemizes, by type, the complaints received and the number of NOV's issued for the month of December 2018:

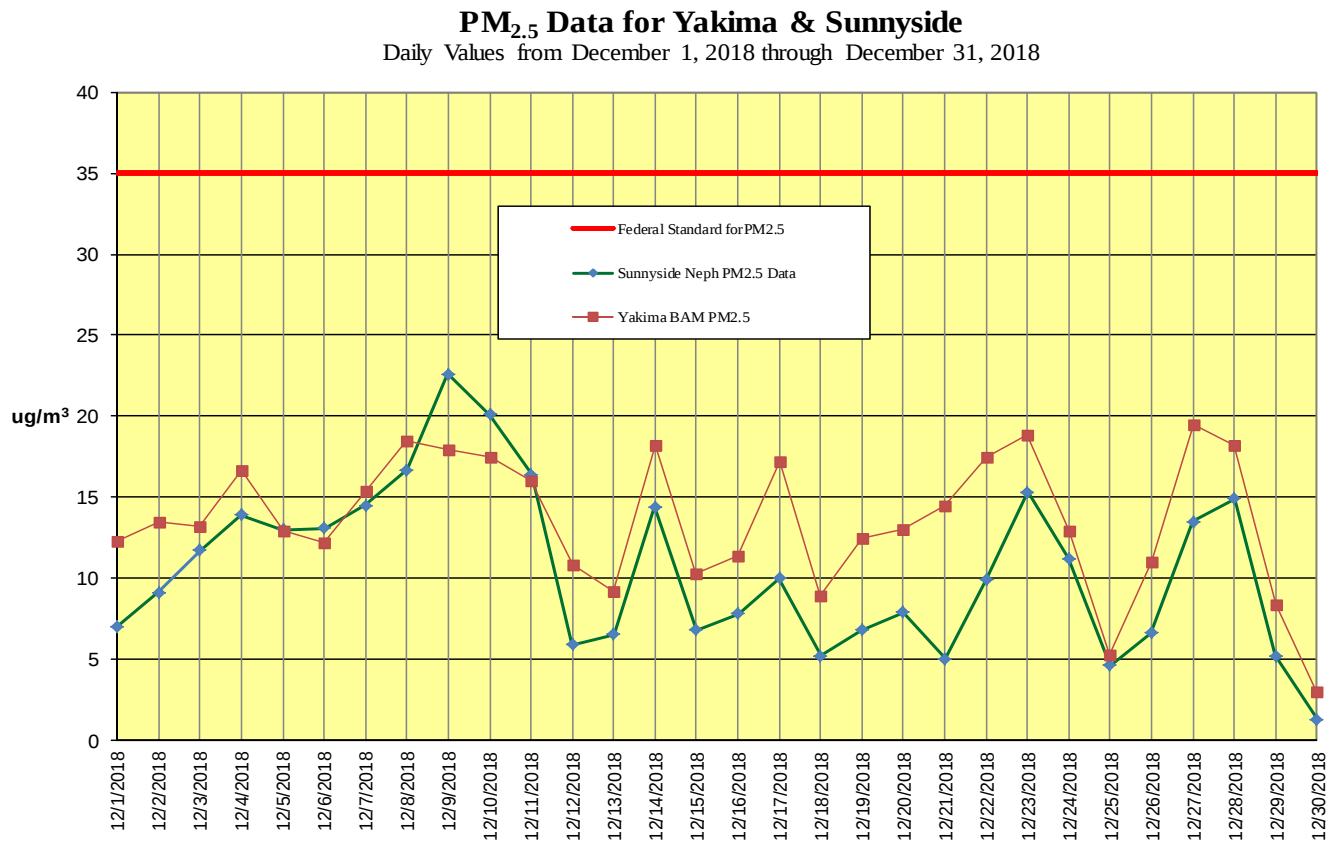
<u>Type of Complaint</u>	<u># of Complaints</u>	<u># of NOV's</u>	<u># of AODs</u>
Residential Burning	2	4	1
Agricultural Burning	2	3	0
Other Burning	1-SFBD*	1-PM**	0
Fugitive Dust	0	0	0

Agricultural Dust	0	0	0
Agricultural Odor	0	0	0
Surface Coating	0	0	0
Odor	0	0	0
Asbestos	0	0	0
Others	0	2-	0
		Industrial	
<u>TOTALS</u>	<u>5</u>	<u>10</u>	<u>1</u>

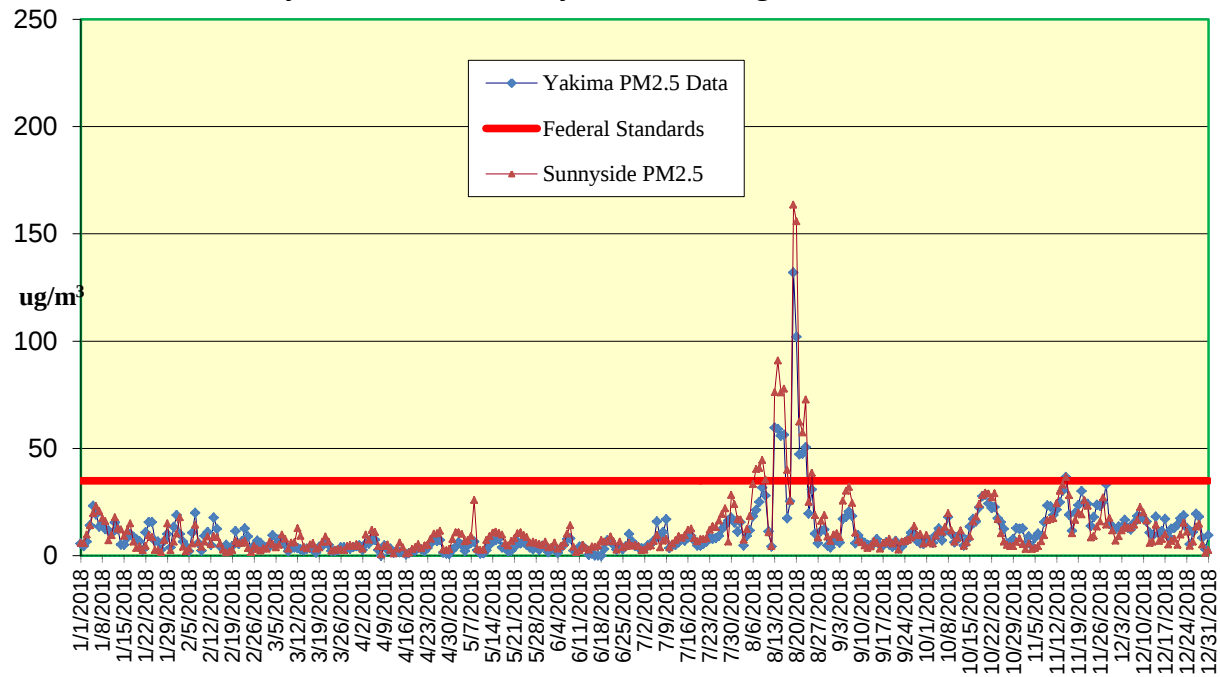
***SFBD** = Solid Fuel Burning Device

****PM** = Prohibited Materials

Air Monitoring Data:

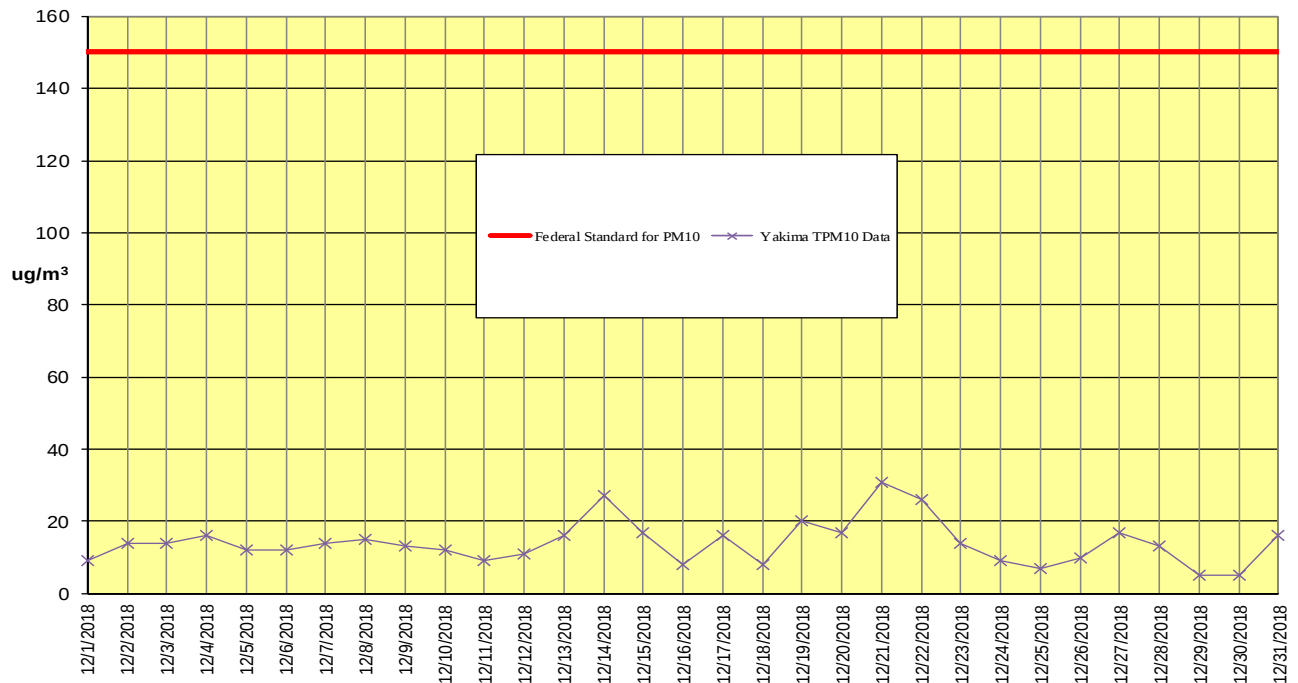


Annual PM_{2.5} Data, for Yakima & Sunnyside
Daily Values from January 1, 2018 through December 31, 2018



PM₁₀ Data for Yakima

Daily Values from December 1, 2018 through December 31, 2018





DEPARTMENT OF
ECOLOGY
State of Washington

Air Monitoring Data Quality Assessment Report

1st Quarter 2018

December 2018

Contact Information

For more information contact:

Anna Tai
Air Quality Program
P.O. Box 47600
Olympia, WA 98504-7600
Phone: 360-407-6819

Washington State Department of Ecology – www.ecology.wa.gov

- Headquarters, Olympia 360-407-6000
- Northwest Regional Office, Bellevue 425-649-7000
- Southwest Regional Office, Olympia 360-407-6300
- Central Regional Office, Union Gap 509-575-2490
- Eastern Regional Office, Spokane 509-329-3400

To request ADA accommodation including materials in a format for the visually impaired, call Ecology at 360-407-6800 or visit <https://ecology.wa.gov/accessibility>. People with impaired hearing may call Washington Relay Service at 711. People with speech disability may call TTY at 877-833-6341.

Air Monitoring Data Quality Assessment Report

1st Quarter 2018

Air Quality Program
Washington State Department of Ecology
Olympia, Washington

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Acronyms and Abbreviations

AQP	Air Quality Program
AQS	Air Quality System
CO	carbon monoxide
CV	Coefficient of Variation
DQI	Data Quality Indicator
DQO	Data Quality Objective
EPA	United States Environmental Protection Agency
FEM	Federal Equivalent Method
FRM	Federal Reference Method
MQO	Measurement Quality Objective
NAAQS	National Ambient Air Quality Standards
NCore	National Core Monitoring Network
NIST	National Institute of Standards and Technology
NO	nitric oxide
NO ₂	nitrogen dioxide
PE	Performance Evaluation
PQAO	Primary Quality Assurance Organization
PM ₁₀	particulate matter with diameter less than 10 microns
PM _{10-2.5}	particulate matter with diameter between 10 and 2.5 microns
PM _{2.5}	particulate matter with diameter less than 2.5 microns
ppb	parts per billion
QA	quality assurance
QAPP	Quality Assurance Project Plan
QC	quality control
SASS	Speciation Air Sampling System
SO ₂	sulfur dioxide
WAQA	Washington Air Quality Advisory

1. Introduction

The Washington State Ambient Air Monitoring Network (Washington Network) is designed to collect vital air quality information for use by federal, state, and local air agencies as well as tribes, the research community, and the public. These entities use the data collected within the Washington Network to make decisions that will have public health, economic, and political impacts. Air monitoring data are never error free and always contain some level of uncertainty. Therefore, it is critical that ambient air monitoring data collected within the Washington Network are of known, acceptable, and comparable quality. A firm understanding of the amount of inherent error associated with air monitoring data helps reduce the likelihood of decision errors by data users.

In order to provide decision makers with data of known and acceptable quality, the Washington State Department of Ecology (Ecology) implements a quality system that governs the Washington Network ambient air monitoring activities. This quality system, and Ecology's role as the Primary Quality Assurance Organization (PQAO) for the Washington Network, is described in Ecology's Quality Assurance Plan (QAP). Ecology's goal as the PQAO is to implement practices, such as consistency across measurement methods, which will help to reduce the amount of uncertainty associated with data collection. EPA's Quality Assurance Handbook, Volume II, provides principles that help PQAO's achieve this goal:

- Operation by a common team of field operators according to a common set of procedures.
- Use of common standard operating procedures.
- Common calibration facilities.
- Oversight by a common quality assurance organization.
- Support by a common management, laboratory, or headquarters.

The quality assurance regulations set forth in 40 CFR Part 58 Appendix A have been developed to ensure that monitoring programs are planned such that decision makers understand the data quality requirements in order to determine compliance with the National Ambient Air Quality Standards (NAAQS). Washington Network operations are carried out in accordance with these regulations for its Federal Equivalent Method (FEM), NAAQS-compliance monitoring. In addition, Ecology has a goal to implement guidance, whenever practical, from the United States Environmental Protection Agency (EPA), Office of Air Quality Planning and Standards for these and other monitoring efforts within the Washington Network.

The Air Monitoring Data Quality Assessment Report for the 1st Quarter 2018 describes the quality of the data collected from January 1 through March 31, 2018.

2. Data Quality

To provide decision makers with data of acceptable quality, EPA implemented the Data Quality Objective (DQO) process and established acceptance criteria for precision and bias. DQOs are a set of performance measures used in data collection that specifies the level of uncertainty (error) that the decision maker is willing to accept in the data. By knowing how much uncertainty is in the data, especially data collected at locations that are at risk of being declared “nonattainment” or are already in nonattainment, decision makers are provided additional confidence to make informed policy decisions regarding the protection of public health and the environment. DQOs are assessed using data quality indicators (DQIs), which are the quantitative statistics and the qualitative descriptors used to interpret the degree of acceptability or utility of data to the user. The DQIs are used to establish the Measurement Quality Objectives (MQOs). Data quality is assessed quarterly using the EPA’s AMP256 QA Data Quality Indicator Report, downloaded from EPA’s Air Quality System (AQS).

MQOs are based on confidence intervals. A confidence interval is a measurement of how accurate the measurement is. There is a difference between the biases being 5 percent $\pm$ 10 percent as compared to the bias being 5 percent $\pm$ 1 percent. Close attention to these intervals can be helpful in preventing data loss and providing decision makers greater confidence in the data and their decisions.

The assessment is divided into four categories: **Automated Data**, **Manual Data**, **Meteorological Data**, and **Washington Air Quality Advisory (WAQA) Data**, and subdivided into monitoring methods specifying allowable uncertainty levels required to meet the DQOs.

Automated, manual, and meteorological data are collected using EPA-tested and approved instruments that directly support rulemaking, enforcement, regulatory, or policy decisions. The data also support research projects of significant national interest requiring the most formal DQOs, including detailed and rigorous quality control (QC) and quality assurance (QA) for legal and scientific defensibility. Most instruments used in the collection of automated and manual data are listed as FEM or FRM.

Data used for the National Air Monitoring Strategy require, at a minimum, routine QC and QA checks as required in the CFR. Results from these checks are entered into the EPA AQS database and aggregated on quarterly, annual, and three-year intervals to assess precision and bias on a state and national level.

WAQA and Air Quality Index (AQI) data are collected with a mix of non-FRM/FEM instruments to report air quality to the public in near-real-time. However, one should use non-FRM/FEM data with caution when making decisions as there can be a greater degree of error inherent in the data.

2.1. Automated Data

Data collected by instruments that continuously measure the ambient air are referred to as Automated Data. Automated instruments are designed to measure specific pollutants, including ozone (O₃), carbon monoxide (CO), nitric oxide (NO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and fine and coarse particulate matter (PM_{2.5} and PM₁₀, respectively). Instrument

calibrations are checked on a routine basis and the results are used to determine the quality of the data.

Data Quality Indicators for Gaseous Pollutants

- One-Point QC Precision Estimate for Gaseous Pollutants (CV%)

On a routine basis, QC checks are performed on the station analyzer to determine the calibration drift of the instrument. The analyzer is challenged with gases traceable to National Institute of Standards and Technology (NIST) standards and the difference between the two is recorded by a data acquisition system and submitted to AQS.

To determine the measure of mutual agreement among the QC checks, the coefficient of variation CV% (precision estimate) is calculated every quarter as described in the Monitoring Rule to assess the precision of the instrument. Slight variations in the precision are acceptable provided the data is not biased too high or low. Large variations in precision are unacceptable and must be corrected.

- Bias Estimate (Bias)

The bias estimate is the systematic difference (or noticeable jump) of the expected concentrations and the measured concentrations over time, in percentage. As described in the Monitoring Rule, bias estimates are calculated to determine if there is a systematic or persistent distortion of the data, which causes error in one direction. A positive (+) bias indicates that the instrument is measuring above the actual (true) value. A negative (-) bias indicates that the instrument is measuring below the actual value. A “±” symbol represents the instrument “straddles the line” and is neither biased positive nor negative.

A continued bias in an instrument close to either side of “true value” is acceptable. However, a continued bias approaching the limits on the MQOs should be corrected before variations in the precision result in the instrument failing to meet the MQOs.

The one-point QC checks are submitted to AQS and aggregated by quarter, annual, and three-year periods to determine if the DQOs are being met on a national level.

- Completeness (% Valid Data)

Completeness is a term used to describe, in percentage, the actual amount of data (averaged in hours) collected compared to what was expected. The percentage of valid data is a critical measure of representativeness of the data obtained from a monitoring instrument in the calendar quarter or year to determine if the DQOs were met. Loss of data occurs on occasion and may be a result of a calibration error, malfunction, power loss, telemetry communications, or operator error. The AQP data completeness goal is that at least **80** percent of the expected data be collected each calendar quarter.

- Annual Performance Evaluations

Performance evaluations are independent evaluations of the monitoring site operations conducted by AQP QA personnel. Site evaluations are performed at all automated, manual, and meteorological monitoring sites and concerns noted. The primary purpose of the evaluation is to provide an independent check to determine if the checks made by QA personnel agree with previous QC checks made at the site by automated or manual checks. A large difference between the two may indicate an instrument or systematic problem.

2.1.1. Ozone (O₃)

The MQO for the measurement of ozone is the precision estimate (CV%) and bias be within ± 7 percent.

Table 1: DQI Results for Ozone Analyzers in Percentage

Location	AQS Number	CV%	Bias	% Valid Data
Anacortes	530570011	*	*	*
Cheeka Peak	530090013	1.36	- 1.46	91
Cheney	530630001	*	*	*
Custer	530730005	*	*	*
Enumclaw	530330023	*	*	*
Greenbluff	530630046	*	*	*
Issaquah	530330010	*	*	*
Kennewick, S. Clodfelter	530050003	*	*	*
Mt. Rainier, JVC	530530012	1.17	1.51	86
North Bend	530330017	*	*	*
Seattle, Beacon Hill (BH)	530330080	0.85	- 2.14	93
Vancouver	530110011	*	*	*
Yelm	530670005	*	*	*
* Seasonal monitor (May–September).				

Annual Performance Evaluations for Ozone

An evaluation involves an independent assessment by AQP QA personnel who use independent equipment to challenge the station analyzer with gas concentrations at levels that best reflect ambient concentrations observed at the monitoring site. The difference is compared between the actual ozone concentrations (generated by the QA personnel equipment) against the station analyzer response. Two independent assessments are performed each year and the observations at each test level are averaged by year.

The analyzers are challenged with independent gas concentrations (Levels 2–6) to best reflect ambient concentrations observed at the monitoring site. The MQO for audit results is that the difference be within ± 15 percent for Levels 3–6 and within ± 1.5 ppb or ± 15 percent for Levels 1–2.

Table 2: Performance Evaluation Results for Ozone Analyzers in Percentage

Location	Level 1 4–6 ppb	Level 2 6–20 ppb	Level 3 20–40 ppb	Level 4 40–70 ppb	Level 5 70–90 ppb	Level 6 90–120 ppb
Anacortes	*	*	*	*	*	*
Cheeka Peak	*	*	*	*	*	*
Cheney	*	*	*	*	*	*
Custer	*	*	*	*	*	*
Enumclaw	*	*	*	*	*	*
Greenbluff	*	*	*	*	*	*
Issaquah	*	*	*	*	*	*
Kennewick, S. Clodfelter	*	*	*	*	*	*
Mt. Rainier, JVC	*	*	*	*	*	*
North Bend	*	*	*	*	*	*
Seattle, BH	*	*	*	*	*	*
Vancouver	*	*	*	*	*	*
Yelm	*	*	*	*	*	*
* No evaluation performed during this quarter.						

2.1.2. Carbon monoxide (CO)

The MQO for the measurement of CO at the NCore (NC) sites is that the relative precision (CV%) and bias be within ± 15 percent. For instruments measuring CO for NAAQS attainment (Seattle, 10th & Weller), the relative precision (CV%) and bias must be within ± 10 percent. The table below represents the average precision and bias of the CO instruments in the Washington Network.

Table 3: DQI Results for CO Analyzers in Percentage

Location	AQS Number	CV%	Bias	% Valid Data
Cheeka Peak (NC)	530090013	2.22	± 1.62	75*
Seattle, BH (NC)	530330080	1.44	- 2.01	92
Seattle, 10th & Weller (near-road)	530330030	2.80	3.26	96
* Extended power outage. Power has been restored.				

Annual Performance Evaluations for CO

An evaluation involves an independent assessment by AQP QA personnel who use independent equipment to challenge the station analyzer with gas concentrations at levels that best reflect

ambient concentrations observed at the monitoring site. The difference is compared between the actual CO concentrations (generated by the QA personnel equipment) against the station analyzer response.

The NCore and near-road instruments are challenged with independent gas concentrations (Levels 1–5) to best reflect ambient concentrations observed at the monitoring sites. The MQO for performance evaluation results is that the difference be within ± 15 percent for Levels 3–8 and within ± 30 ppb or ± 15 percent for Levels 1–2.

Table 4: Performance Evaluation Results for CO Analyzers in Percentage

Location	Level 1 20–59 ppb	Level 2 60–199 ppb	Level 3 200–899 ppb	Level 4 900– 2999 ppb	Level 5 3000– 7999 ppb	Level 6 8000– 15999 ppb	Level 7 16000– 30999 ppb	Level 8 31000– 39999 ppb
Cheeka Peak (NC)	*	*	*	*	*	*	*	*
Seattle, BH (NC)	*	*	*	*	*	*	*	*
Seattle, 10th & Weller	*	*	*	*	*	*	*	*
* No evaluation performed during this quarter.								

2.1.3. Sulfur dioxide (SO₂)

The MQO for the measurement of SO₂ is the relative precision (CV%) and bias be within ± 10 percent.

Table 5: DQI Results for SO₂ Analyzers in Percentage

Location	AQS Number	CV%	Bias	% Valid Data
Anacortes	530570011	2.18	± 1.79	92
Cheeka Peak	530090013	1.20	2.49	88
Ferndale, Kickerville	530730013	2.33	± 2.19	89
Ferndale, Mtn. View Rd.	530730017	1.45	2.83	97
Malaga	530070012	1.83	- 5.32	96
Seattle, BH	530330080	2.71	5.31	89

Annual Performance Evaluations for SO₂

An evaluation involves an independent assessment by AQP QA personnel who use independent equipment to challenge the station analyzer with gas concentrations at levels that best reflect ambient concentrations observed at the monitoring site. The difference is compared between the actual SO₂ concentrations (generated by the QA personnel equipment) against the station analyzer response.

The analyzers are challenged with independent gas concentrations (Levels 1–6) to best reflect ambient concentrations observed at the monitoring site. The MQO for performance evaluation

results is that the difference be within ± 15 percent for Levels 3–6 and within ± 1.5 ppb or ± 15 percent for Levels 1–2.

Table 6: Performance Evaluation Results for SO₂ Analyzers in Percentage

Location	Level 1 0.3–2.9 ppb	Level 2 3–4.9 ppb	Level 3 5–7.9 ppb	Level 4 8–19.9 ppb	Level 5 20–49.9 ppb	Level 6 50–99.9 ppb
Anacortes	8.00	*	- 1.33	*	- 4.80	*
Cheeka Peak	†	†	†	†	†	†
Ferndale, Kickerville	*	*	*	- 4.67	- 2.01	- 3.20
Ferndale, Mtn. View Rd.	*	*	*	- 8.67	- 9.64	- 4.80
Malaga	*	*	*	2.00	0.40	3.07
Seattle, BH	†	†	†	†	†	†
* No evaluation performed at this level.						
† No evaluation performed during this quarter.						

2.1.4. Nitrogen dioxide (NO₂)

The MQO for the measurement of NO₂ is the relative precision (CV%) and bias be within ± 15 percent.

Table 7: DQI Results for NO₂ Analyzers in Percentage

Location	AQS Number	CV%	Bias	% Valid Data
Quincy	530251003	5.86	± 5.97	97
Seattle, 10th & Weller	530330030	2.30	3.09	90
Seattle, BH	530330080	1.09	± 1.00	95
Tacoma, S 36th St.	530530024	6.38	8.08	91

Annual Performance Evaluations for NO₂

An evaluation involves an independent assessment by AQP QA personnel who use independent equipment to challenge the station analyzer with gas concentrations at levels that best reflect ambient concentrations observed at the monitoring site. The difference is compared between the actual NO₂ concentrations (generated by the QA personnel equipment) against the station analyzer response.

The analyzers are challenged with independent gas concentrations (Levels 1–6) to best reflect ambient concentrations observed at the monitoring site. The MQO for performance evaluation results is that the difference be within ± 15 percent for Levels 3–7 and within ± 1.5 ppb or 15 percent for Levels 1–2.

Table 8: Performance Evaluation Results for NO₂ Analyzers in Percentage

Location	Level 1 0.3–2.9 ppb	Level 2 3–4.9 ppb	Level 3 5–7.9 ppb	Level 4 8–19.9 ppb	Level 5 20–49.9 ppb	Level 6 50–99.9 ppb	Level 7 100–299.9 ppb
Quincy	*	*	*	*	*	*	*
Seattle, 10th & Weller, near-road	*	*	*	*	*	*	*
Seattle, BH	*	*	*	*	*	*	*
Tacoma, S 36th St.	*	*	*	*	*	*	*
* No evaluation performed during this quarter.							

2.1.5. Trace nitric oxide (trace NO)

The MQO for the measurement of trace NO is the relative precision (CV%) and bias be within ± 15 percent. Note that the sites listed here use reactive nitrogen oxides (NO_y) analyzers to measure low ambient NO and NO_y concentrations as part of the NCore network. Reported CV% and bias are based on the NO channel of the NO_y analyzer per EPA requirements.

Table 9: DQI Results for NO_y Analyzers in Percentage

Location	AQS Number	CV%	Bias	% Valid Data
Cheeka Peak	530090013	3.16	± 2.32	89
Seattle, BH	530330080	1.12	1.67	96

Annual Performance Evaluations for trace NO

The MQO for performance evaluation results is that the difference within ± 15 percent for Levels 3–7 and within ± 1.5 ppb or ± 15 percent for Levels 1–2.

Table 10: Performance Evaluation Results for NO_y Analyzers in Percentage

Location	Level 1 0.3–2.9 ppb	Level 2 3–4.9 ppb	Level 3 5–7.9 ppb	Level 4 8–19.9 ppb	Level 5 20–49.9 ppb	Level 6 50–99.9 ppb	Level 7 100–300 ppb
Cheeka Peak	*	*	*	*	*	*	*
Seattle, BH	*	*	*	*	*	*	*
* No evaluation performed during this quarter.							

Data Quality Indicators for Particulate Pollutants

- One-Point QC Precision Estimate for Particulate Pollutants (Average % D)

Every 30 days, a one-point flow rate verification (QC check) is performed on particulate instruments by measuring the actual and indicated flow of the instrument. The actual instrument

flow is measured by the station operator using NIST-traceable standards. The difference between the actual flow and the indicated instrument flow is calculated and recorded by the station operator and submitted to the AQS.

- One-Point Flow Rate Bias Estimate (Bias)

The bias estimate is the systematic difference of the expected flows and the measured flows over time, in percentage. As described in the Monitoring Rule, bias estimates are calculated to determine if there is a systematic or persistent distortion of the data, which causes error in one direction.

Instrument flow rates can fluctuate over time. Therefore, a one-point flow rate verification (QC check) on the instrument is required every 30 days. The objective of the QC check is to measure the true flow rate of the instrument, using NIST traceable standards, while recording the indicated flow rate of the instrument. A positive (+) bias indicates that the instrument flow rates are operating above the actual (true) value while a negative (-) bias indicates that the instruments flow rate is below the actual value. A “±” symbol indicates that the instrument “straddles the line” and is neither positively nor negatively biased. The checks are aggregated by quarter, annual, and 3-year periods.

- Semi-Annual Flow Rate Audits (Audit % D)

In addition to monthly QC checks, QA personnel on a semi-annual basis perform an independent flow rate audit. The objective of the auditor is to measure the actual flow rate of the instrument using an independent, NIST-traceable standard, while recording the indicated flow rate of the instrument. The deviation between the two flows is calculated, recorded, and submitted to AQS.

2.1.6. Fine particulate matter (PM_{2.5} FEM – Continuous)

The MQO for the measurement of PM_{2.5} using an FEM instrument is that bias and precision (Average % D) be within ± 4 percent. Audit results (Audit % D) must be within ± 4 percent and the Design Flow must be within ± 5 percent.

Table 11: DQI Results for Continuous FEM PM_{2.5} Monitors in Percentage

Location	AQS Number	Average % D	Bias	Audit % D	% Valid Data
Anacortes (BAM 1020)	530570011	- 0.59	- 0.99	- 1.76	98
Bellingham (BAM 1020)	530730019	0.82	± 2.01	0.00	95
Bremerton (8500 TEOM)	530350007	0.22	± 0.45	- 2.60	99
Darrington (8500 TEOM)	530610020	0.15	± 1.84	*	98
Ellensburg (BAM 1020)	530370002	- 0.98	± 2.49	1.21	98
Kent (8500 TEOM)	530332004	0.07	± 1.15	- 2.28	99
Lynnwood (8500 TEOM)	530610005	- 1.45	- 1.62	- 2.91	99
Marysville (1405F TEOM)	530611007	0.78	± 1.75	- 1.64	96
Omak (BAM 1020)	530470013	0.00	± 0.00	*	100
Seattle, 10th & Weller (BAM 1020)	530330030	- 0.59	± 1.59	*	96
Seattle, BH (NC) (8500 TEOM)	530330080	- 0.65	± 2.46	0.33	87

Location	AQS Number	Average % D	Bias	Audit % D	% Valid Data
Seattle, Duwamish (8500 TEOM)	530330057	0.56	± 1.24	- 2.28	66 [†]
Spokane, Augusta (BAM 1020)	530630021	0.00	± 0.00	*	100
Tacoma, S. 36th St. (BAM 1020)	530530024	- 0.19	± 1.59	- 0.60	96
Tacoma, S. L St. (8500 TEOM)	530530029	0.45	± 0.98	- 2.91	72 [‡]
Toppenish (BAM 1020)	530770015	0.00	± 0.00	*	63 [†]
Vancouver 84th Ave. (BAM 1020)	530110024	- 1.18	- 1.18	0.60	100
Yakima S. 4th Ave. (BAM 1020)	530770009	1.22	± 3.29	0.60	100
* No evaluation performed during this quarter. † Leak check failures. The leaks have been addressed. ‡ Broken v-seals. The seals have been replaced.					

2.1.7. Particulate matter (PM₁₀ FEM – Continuous)

The MQO for the measurement of PM₁₀ using an FEM instrument is that total bias be within ± 10 percent; precision (Average % D) and performance evaluation results (Audit % D) be within ± 4 percent.

Table 12: DQI Results for Continuous FEM PM₁₀ Monitors in Percentage

Location	AQS Number	Average % D	Bias	Audit % D	% Valid Data
Burbank	530710006	- 3.72	- 5.91	*	100
Colville, E. 1st St.	530650005	2.83	5.61	*	100
Kennewick	530050002	- 1.57	- 2.97	*	100
Spokane, Augusta	530630021	- 0.57	± 1.45	*	100
Yakima S. 4th Ave.	530770009	- 0.08	± 0.77	- 1.88	100
* No evaluation performed during the quarter.					

2.2. Manual Data

Manual data refers to filter-based monitoring methods, which require an operator to physically install and retrieve sample filters. Particulate matter is collected on a sample filter over a 24-hour period. After sampling has been completed, sample filters are collected by the operator and sent to the Manchester Environmental Laboratory for gravimetric analysis. Depending on the method used at the monitoring site, the instrument is designed to selectively collect particulate matter at a specific flow rate on scheduled days. Note that this method for PM_{2.5} monitoring is now designated as Class I FEM with the configuration of a BGI VSCC™ PM_{2.5} size separator per CFR 40 Part 50 Appendix L.

- One-Point QC Precision Estimate for Particulate Pollutants (Average % D)

Monthly QC checks are performed on the instrument by monitoring personnel. The difference between the actual flow and the indicated instrument flow is calculated, recorded, and submitted into the AQS.

- One-Point Flow Rate Bias Estimate (Bias)

Manual data monitoring methods require accurate flow rate measurements in order to accurately determine pollutant concentrations. Particulate matter concentrations are calculated by the mass of the sample on a filter divided by the volume of air. The volume of air is calculated by the flow rate of the instrument over the elapsed sampling time. Instruments are calibrated to operate at a designed flow rate. Differences in flow rates affect actual concentrations. Figure 1 illustrates how a four percent difference in flow rate impacts the actual concentration of a PM_{2.5} sample.

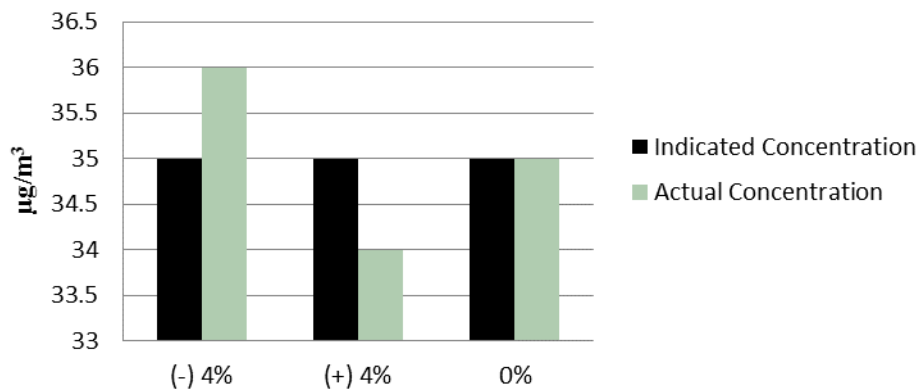


Figure 1: Graph illustrating how flows impact actual concentrations

Instrument flow rates can fluctuate over time. Therefore, a one-point flow rate verification (QC check) on the instrument is required every 30 days. The objective of the check is to measure the true flow rate of the instrument using NIST-traceable standards while recording the indicated flow rate of the instrument. The difference between the two is calculated in percentage to determine how “true” the indicated flow is. A positive (+) bias indicates that the instrument flow rate over time is operating above the actual (true) value. A negative (-) bias represents the instrument's flow rate is below the actual value. A “±” symbol represents the instrument “straddles the line” and is neither positively nor negatively biased.

- Semi-Annual Flow Rate Audits (Audit % D)

In addition to monthly QC checks, QA personnel on a semi-annual basis perform an independent flow rate check. The objective of the auditor is to measure the actual flow rate of the instrument using independent NIST traceable standards while recording the indicated flow rate of the instrument. The deviation between the two flows is then calculated and submitted to the AQS.

2.2.1. Fine particulate matter (PM_{2.5} Class I FEM – 24-hour)

The MQO for the measurement of PM_{2.5} using Class I FEM manual, filter-based sampling is that total bias be within ± 10 percent; precision (Average % D) and performance evaluation results (Audit % D) be within ± 4 percent.

Table 13: DQI Results for FEM PM_{2.5} Samplers in Percentage

Location	AQS Number	Average % D	Bias	Audit % D	% Valid Data
Seattle, BH	530330080	- 1.88	- 2.61	- 1.48	100
Tacoma, S. L St.	530530029	- 0.65	- 0.66	- 1.36	98
Tacoma, S. L St. (collocated)	530530029	- 0.86	- 2.54	- 1.89	100
Yakima, S. 4th Ave.	530770009	0.45	2.17	0.73	100

Precision Estimate for Manual and Continuous Collocated Samples (PM_{2.5})

Precision for manual and automated particulate method sampling is estimated using collocated sampling. Unlike the gaseous criteria, pollutants where one can use a standard of a known concentration to estimate instrument precision, duplicate measurements are made on-site for comparison. The precision (CV %) should be within ± 10 percent. Note that the relatively low ambient PM_{2.5} concentrations and the limited number of collected samples (every 12 days) at Tacoma South L St. may yield high imprecision that can be challenging to meet the recommended acceptance range.

Table 14: Precision Estimates for Collocated Samplers in Percentage

Location	EPA Method-Parameter	AQS Number	CV%
Tacoma, S. L St.	145 - FEM (24-hour) PM _{2.5}	530530029	5.29

2.2.2. PM_{2.5} Chemical Speciation Network

The Chemical Speciation Network (CSN) is a national network of sites used to determine, over a period of several years, trends in concentration levels of selected ions, metals, carbon species, and organic compounds in PM_{2.5}. Flow checks are performed by station operators every 30 days and submitted to a national repository contracted by OAQPS.

In addition to monthly QC checks, QA personnel on a semi-annual basis perform an independent flow rate audit. The primary objective of the audit is to measure the true flow rate of the instrument using independent, NIST-traceable, standards while recording the indicated flow rate of the instrument. The deviation between the two flows is calculated. The MQO for the CSN is that the results be within ± 10 percent. Note that the Beacon Hill station is equipped with a Super SASS sampler that has two extra flow channels.

Table 15: Audit Results for Speciation Samplers in Percentage

Location	AQS Number	SASS CH 1 Audit % D	SASS CH 2 Audit % D	SASS CH 3 Audit % D	SASS CH 4 Audit % D	URG Audit % D
Seattle, 10th & Weller	530330030	*	*	*	*	*
Seattle, BH	530330080	- 3.46	- 2.47	- 3.79	- 2.33	0.78
Tacoma, S. L St.	530530029	1.21	1.52	---	---	1.01
Yakima S. 4th Ave.	530770009	- 1.71	3.13	---	---	- 7.82
* No evaluation performed during this quarter.						

2.3. Meteorological Data

To ensure data of sufficient quality for modeling applications and permitting use, EPA guidelines for continuous monitoring for Prevention of Significant Deterioration (PSD) are followed for wind speed (WS), wind direction (WD), ambient temperature, ambient pressure (PA) and relative humidity (RH).

Table 16: Data Capture for Meteorological Parameters

Location	AQS Number	WS	WD	AT	PA	RH
Burbank, established on 3/1/18	530710006	100	100	100	---	---
Cheeka Peak	530090013	93	93	96	96	96
Colville, E 1st St.	530650005	72*	72*	100	---	---
Enumclaw	530330023	0 [†]	0 [†]	100	---	---
Ferndale, Mtn. View Rd.	530730017	100	100	100	---	---
Kennewick	530050002	100	100	100	---	---
Malaga	530070012	100	100	100	---	---
North Bend	530330017	100	100	100	---	---
Omak	530470013	100	100	100	---	---
Quincy	530251003	97	97	100	---	---
Seattle, 10th & Weller	530330030	100	100	100	---	---
Seattle, BH	530330080	100	100	100	100	100
Spokane, Augusta	530630021	99	99	100	---	---
Tacoma, 36th St.	530530024	87	87	99	---	---
Tacoma, Tower Dr.	530531016	100	100	100	---	---
Toppenish	530770015	100	100	100	---	---
Vancouver, Blairmont	530110011	100	100	100	---	---
Wenatchee	530070011	94	94	94	---	---

Location	AQS Number	WS	WD	AT	PA	RH
White Swan	530770016	98	98	99	---	---
* Abnormal wind data in March likely due to signal interference. The issue is currently under investigation.						
† Vane misalignment. The vane alignment has been corrected.						

2.4. Washington Air Quality Advisory Data

2.4.1. Light scattering of fine particulates (nephelometer)

The AQP uses a large network of instruments to report PM_{2.5} air pollution information to the public in near real-time via its WAQA that can be found on its public website. The majority of these instruments (nephelometers) measure light scattering of particulates, not PM_{2.5} directly. Ecology and its partners follow EPA guidance to use nephelometers to report “FRM-like” PM_{2.5} data. Because nephelometers are not an FRM or FEM, PM_{2.5} data collected using nephelometers cannot be used for NAAQS compliance determinations. The data are displayed in near real-time on Ecology and EPA websites for public information.

Table 17: Completeness Results for Nephelometers

Location	AQS Number	% Valid Data
Aberdeen	530272002	100
Bellevue, 12th St.	530330031	100
Cheeka Peak	530090013	96
Chehalis	530410004	100
Chelan	530070007	100
Clarkston	530030004	99
Colville, E 1st St.	530650005	100
Dayton	530130002	90
Kennewick	530050002	100
Lacey	530670013	99
LaCrosse	530750005	60*
Lake Forest Park	530330024	96
Leavenworth	530070010	100
Longview	530150015	100
Mesa	530210002	100
Moses Lake	530251002	100
Mount Vernon	530570015	100
Neah Bay	530090015	99

Location	AQS Number	% Valid Data
North Bend	530330017	100
Okanogan	530470004	100
Pomeroy	530230001	100
Port Angeles	530090017	100
Pt. Townsend	530310003	100
Pullman	530750003	100
Puyallup, 128th Ave.	530531018	98
Quincy	530251003	49 [†]
Ritzville	530010003	84
Rosalia	530750006	94
Seattle, South Park	530331011	100
Shelton	530450007	100
Spokane, Monroe	530630047	100
Sunnyside	530770005	100
Tacoma, Alexander Ave.	530530031	99
Taholah	530270011	100
Tukwila	530330069	100
Twisp	530470009	82
Walla Walla	530710005	100
Wellpinit	530650002	100
Wenatchee, 5th St.	530070011	94
White Swan	530770016	99
Winthrop	530470010	100
Yacolt	530110022	100
* Nephelometer malfunction. A replacement nephelometer has been installed and calibrated. † QC check failures. The nephelometer has been recalibrated. Note: No QA evaluations are performed on nephelometers. The quality of the data is not assessed.		

Yakima Regional Clean Air Agency

December 17, 2018

Community Forum

Attendees:

Jean Mendoza, Friends of Toppenish Creek
Sandy Braeden, Friends of Toppenish Creek
Steve George, Dairy Federation
Keith Hurley, Executive Director, YRCAA
Hasan Tahat, Engineering Manager, YRCAA
Mark Edler, Facilitator, YRCAA
Mary Wurtz, YRCAA

Mark Edler opened the forum at 1:00 p.m.

Keith Hurley welcomed the attendees. The topic discussed, as requested by Jean Mendoza, was the State Implementation Plan (SIP) process.

Jean wishes to strengthen the air quality in Yakima County but the SIP documents are frustrating and hard to follow. She inquired which part of the regulation is in the SIP. Keith replied it would generally be anything tied to PM₁₀ or Carbon Monoxide (CO).

Keith mentioned the SIP is made up of many different state documents which inform the federal government of how Washington State is implementing the Federal Clean Air Act (FCAA). YRCAA has Regulation 1, which deals with PM_{2.5} as well as limited maintenance plans for PM₁₀ and CO.

Jean pointed out that Table 10 of the SIP on the EPA's website includes YRCAA Regulation 1 and she wants to be looking at rules that just have relevance to the feds.

Keith stated we have not gone through a SIP process since 1995. Jean wondered how we know what will stay in Reg 1. Keith explained that Table 10 from the EPA website does not have an explanation of what is and what is not included. Our current rule has five articles, whereas Table 10 showed thirteen articles. The agency must adhere to the state rule process. The SIP process is administered by the state and is coordinated with the EPA for approval.

Hasan stated that parts of the Washington State Clean Air Act will not be included in the SIP. For example WAC 173-460 is not a part of the SIP and may not be in the future because the (FCAA) does not specifically address the many Washington State identified Toxic Air Pollutants (TAPs).

Keith stated that YRCAA must work closely with both agencies in the process to ensure the rule update is accomplished according to the SIP process and the state Administrative Procedures Act. There is risk in getting too far ahead in the process and not having communicated with the EPA and DOE. We have submitted the changes to Ecology and the EPA for preliminary review. We will follow the State Administrative Rules as they are written.

Hasan added that the seven local clean air agencies make their own regulations and then work with the EPA and DOE to get the appropriate sections placed into the SIP. Jean said she was frustrated with the bureaucracy.

Keith said Regulation 1 needs to be updated in accordance with the rules contained within the State Administrative Procedure Act. The public will be given the opportunity to make comments on the changes. In the future the agency will also be required to update the PM₁₀ and CO maintenance plans.

Hasan informed Jean that the FCAA and the Washington State Clean Air Act have health based criteria. Every five years the EPA is required by the FCAA to re-evaluate health standards. The EPA has a Scientific Advisory Committee (SAC) with public health and medical experts that evaluate the criteria.

Jean feels the agency has the option of being more stringent since YRCAA has identified 188 compounds. Hasan said he never said 188 compounds. Hasan stated that he was referring to TAPs. Originally the EPA identified five Hazardous Air Pollutants (HAPs) in 1970 and now the EPA has a list of approximately 185 HAPs. Washington State, being more stringent, has further identified almost 500 individual TAPs, which also include the EPA, identified HAPs. In identifying TAPs, the state promulgated WAC 173-460, which is not currently in the SIP.

Jean added that the purpose of the Clean Air Agency is to keep the air as clean as possible. Hasan agreed and said the FCAA has a primary standard and a secondary standard for all National Ambient Air Quality Pollutants. The primary standard is based on health effects, while the secondary standard is based on providing public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation and buildings.

Jean wants more of a say in the changes to the SIP and has strong ideas on how to change the SIP. Keith explained to Jean that the public will be provided multiple opportunities to comment on the proposed updates to the regulation. He acknowledged Jean's frustration with the process and stated that it is an arduous and costly process. YRCAA is not the only agency that is subject to the SIP process and Keith suggested to Jean that she may want to speak to the Yakama Nation's Tribal Air Program representatives, as the tribe must also go through a Tribal Implementation Process (TIP) or a Federal Implementation Process (FIP).

The Forum was dismissed at 3:00 pm.

ACTION

ITEMS



Yakima Regional Clean Air Agency
186 Iron Horse Court, Suite 101
Yakima, WA 98901
(509) 834-2050, Fax (509) 834-2060
yakimacleanair.org

Executive Memorandum

Date of Release: January 3, 2019
Date of Consideration: January 10, 2019
To: YRCAA Board of Directors
From: Office of the Executive Director
Subject: Fiscal Program Report

A handwritten signature in blue ink, appearing to read "David M. Hurley", written over a horizontal line.

Issue:
Fiscal Reports

Discussion:

December 2018 Accounts Payable (AP) and Payroll Authorizations are enclosed for your approval. The Budget Verification Analysis (BVA) and Supplemental Income documents are included as informational items.

Recommendation:

Accept and approve by minute action the December 2018 AP Fiscal Vouchers, totaling \$68,923.34, and the December Payroll Authorization, totaling \$51,904.55.

Encl. 2

AUTHORIZATION FOR ELECTRONIC FUNDS TRANSFER**Direct Deposit Payroll & Payroll Taxes**Date: 12/28/2018District: Yakima Regional Clean Air AgencyContact Person: Christa OwenAddress: 329 North First Street, Yakima, WA 98901Telephone No. **834-2050 ext 104** Telefax No. **834-2060**

Authorization is given for the Yakima County Treasurer to electronically transfer the amounts listed below:

Name of Bank: Key Bank of WashingtonABA Routing Number: XXXXXXXXXXBank Account Number: XXXXXXXXXXPayroll Date: January 2, 2019Transfer Amount(s): \$ 51,904.55Total Amount of Electronic Transfer: \$ 51,904.55**Authorizing Signatures (No facsimile signatures accepted.):**


Auditing Officer

Chairman Board of Directors

Date December 28, 2018
 Alternate Auditing Officer

Note: The Yakima County Treasurer's Office must receive the completed authorization by 12:00 noon, two (2) business days prior to payroll date. An original must be provided to the County Treasurer's Office if a telefax is sent. *Do not consider a telefax delivered until you have verified with the Treasurer's Office that it has been received.*

Contact Persons at County Treasurer's Office: **Cindy**Telephone Number: 509-574-2780
(01-2008)

Telefax Number: 509-574-2801



December 13, 2018

Fund 614-614 YRCAA**Fund 614-141 Enterprise**

<u>Name</u>	<u>Warrant/MICR #</u>	<u>GL #</u>	<u>Amount</u>	<u>Date</u>
Absolute Comfort Technology, LLC*	33694	4101	\$ 15,000.00	12/14/2018
Alliant Communications	33695	4101	\$ 1,566.82	12/14/2018
Armstrong's Stove & Spa*	33696	4101	\$ 5,000.00	12/14/2018
BIAS Software	33697	4101	\$ 3,435.31	12/14/2018
CI Information Management	33698	4101	\$ 156.88	12/14/2018
Cascade Natural Gas Corporation	33699	4701	\$ 142.57	12/14/2018
Coleman Oil Company	33700	3201	\$ 215.71	12/14/2018
Jason Couch*	33701	4101	\$ 250.00	12/14/2018
Cuillier Law Office	33702	4101	\$ 196.00	12/14/2018
Farwest Climate Control, Inc.*	33703	4101	\$ 5,691.32	12/14/2018
Andrew Granitto*	33704	4101	\$ 1,000.00	12/14/2018
KIMA-TV*	33705	4101	\$ 271.00	12/14/2018
KUNW-TV*	33706	4101	\$ 144.00	12/14/2018
Leaf	33707	4501	\$ 204.68	12/14/2018
Menke Jackson Law Firm	33708	4101	\$ 225.00	12/14/2018
Pitney Bowes Global Financial Services	33709	4501	\$ 255.69	12/14/2018
Pitney Bowes Reserve Account	33710	4202	\$ 499.61	12/14/2018
Rose Risley*	33711	4101	\$ 250.00	12/14/2018
Thurston County Fair Complex**	33712	4501	\$ 100.00	12/14/2018
Verizon Wireless	33713	4201	\$ 337.80	12/14/2018
YRCAA	33714	4901	\$ 369.37	12/14/2018
Yakima County Printing Department	33715	3101	\$ 122.59	12/14/2018
Yakima County Public Services-Utility Division	33716	4701	\$ 20.80	12/14/2018
Yakima Herald Republic	33717	4401	\$ 206.31	12/14/2018
			\$ 35,661.46	

Reimbursement from Grant***NOC/Enterprise**

This is to certify that the invoices and warrants above for the Yakima Regional Clean Air Agency have been examined, audited and approved by the Alternate Auditing Officer for payment.

Total Amount: **\$ 35,661.46**

Jon DeVaney, Board Chairman

1/10/2019

Keith M. Hurley, Auditing Officer

12/14/2018



December 28, 2018

Fund 614-614 YRCAA**Fund 614-141 Enterprise**

<u>Name</u>	<u>Warrant/MICR #</u>	<u>GL #</u>	<u>Amount</u>	<u>Date</u>
Abadan Reprographics	33718	4801	\$ 66.87	12/31/2018
Alliant Communications	33719	4101	\$ 230.92	12/31/2018
Bradley A. Mellotte	33720	4501	\$ 3,801.40	12/31/2018
Cascade Sign & Fabrication	33721	4101	\$ 2,691.66	12/31/2018
Charter Communications	33722	4201	\$ 660.90	12/31/2018
Coastal Farm and Ranch*	33723	4101	\$ 3,852.59	12/31/2018
Ron Duffield*	33724	4101	\$ 1,925.41	12/31/2018
Farwest Climate Control, Inc.*	33725	4101	\$ 5,000.00	12/31/2018
Fosseen's Home & Hearth*	33726	4101	\$ 3,900.00	12/31/2018
Ronald Frank*	33727	4101	\$ 500.00	12/31/2018
Inland Awning of Yakima*	33728	4101	\$ 3,018.48	12/31/2018
Inland Contracting*	33729	4101	\$ 3,035.47	12/31/2018
KeyBank	33730	Various	\$ 2,945.12	12/31/2018
Pacific Power	33731	4701	\$ 192.60	12/31/2018
Ron's Office Equipment	33732	3101	\$ 155.46	12/31/2018
Regina Sanderson*	33733	Various	\$ 750.00	12/31/2018
Skaggs Carpet & Furniture Cleaners	33734	4802	\$ 285.00	12/31/2018
Delores St. George*	33735	4101	\$ 250.00	12/31/2018

\$ 33,261.88***Reimbursement from Grant******NOC/Enterprise**

This is to certify that the invoices and warrants above for the Yakima Regional Clean Air Agency have been examined, audited and approved by the Alternate Auditing Officer for payment.

Total Amount: **\$ 33,261.88**

Jon DeVaney, Board Chairman

1/10/2019

Keith M. Hurley, Auditing Officer

12/31/2018

FY 2019 Monthly BVA

December 2018 Report Date: January 10, 2019		Budget	Actual Current	Actual Year to Date	Year to Date % of Budget
REVEUNE					
REVENUE 614 YRCAA Base Operations					
Stationary Source Permit Fees					
614-32190001	Minor Sources	\$ 162,000	\$ -	\$ 453	0.3%
614-32190008	Synthetic Minor Sources	\$ 19,950	\$ -	\$ -	0.0%
614-32190006	Complex Sources	\$ 20,300	\$ -	\$ -	0.0%
614-32290001	Title V Sources	\$ 122,500	\$ -	\$ 150,292	122.7%
614-32190002	New Source Review	\$ 31,500	\$ 5,878	\$ 25,643	81.4%
<i>Subtotal, Stationary Source Permit Fees</i>		<i>\$ 356,250</i>	<i>\$ 5,878</i>	<i>\$ 176,388</i>	<i>49.5%</i>
Burn Permit Fees					
614-32290005	Residential Burn Permits	\$ 60,500	\$ -	\$ 11,232	18.6%
614-32290007	Agricultural Burn Permits	\$ 30,500	\$ 388	\$ 8,801	28.9%
614-32290011	Conditional Use Burn Permits	\$ 2,000	\$ -	\$ -	0.0%
<i>Subtotal, Burn Permit Fees</i>		<i>\$ 93,000</i>	<i>\$ 388</i>	<i>\$ 20,033</i>	<i>21.5%</i>
Compliance Fees					
614-32190005	Asbestos Removal Fees	\$ 31,000	\$ 3,389	\$ 15,375	49.6%
614-32190009	Construction Dust Control Fees	\$ 8,200	\$ -	\$ 1,429	17.4%
<i>Subtotal, Compliance Fees</i>		<i>\$ 39,200</i>	<i>\$ 3,389</i>	<i>\$ 16,804</i>	<i>42.9%</i>
<i>Subtotal, All Permit Fee Revenue</i>		<i>\$ 488,450</i>	<i>\$ 9,655</i>	<i>\$ 213,225</i>	<i>43.7%</i>
Base Grants					
614-33366001	EPA, Core Grant	\$ 107,395	\$ -	\$ 53,699	50.0%
614-33403101	DOE, Core Grant	\$ 76,800	\$ -	\$ 38,409	50.0%
<i>Subtotal, Base Grants</i>		<i>\$ 184,195</i>	<i>\$ -</i>	<i>\$ 92,107</i>	<i>50.0%</i>
Fines & Penalties					
614-35990001	Civil Penalty	\$ 2,500	\$ -	\$ 6,545	
614-35990001	Other Fines	\$ -	\$ -	\$ -	
<i>Subtotal, Fines & Penalties</i>		<i>\$ 2,500</i>	<i>\$ -</i>	<i>\$ 6,545</i>	
Supplemental Income					
614-33831001	Supplemental Income	\$ 100,789	\$ -	\$ 39,963	39.7%
<i>Subtotal, Supplemental Income</i>		<i>\$ 100,789</i>	<i>\$ -</i>	<i>\$ 39,963</i>	<i>39.7%</i>
Other Income					
614-36111001	Interest	\$ 2,100	\$ 703	\$ 3,741	178.1%
614-36990014	Miscellaneous Income	\$ 200	\$ 5,000	\$ 17,767	8883.4%
<i>Subtotal, Other Income</i>		<i>\$ 2,300</i>	<i>\$ 5,703</i>	<i>\$ 21,507</i>	<i>935.1%</i>
<i>Total YRCAA Base Operations Revenue</i>		<i>\$ 778,234</i>	<i>\$ 15,358</i>	<i>\$ 373,347</i>	<i>48.0%</i>
REVENUE 614 YRCAA Grant Operations					
614-33403105	Wood Stove Ed	\$ 5,331	\$ -	\$ 5,331	100.0%
614-33403108	PM 2.5	\$ 21,050	\$ -	\$ 10,525	50.0%
614-33403107	Woodstove Change-out	\$ 550,000	\$ 93,376	\$ 294,993	53.6%
<i>Total YRCAA Grant Operations Revenue</i>		<i>\$ 576,381</i>	<i>\$ 93,376</i>	<i>\$ 310,849</i>	<i>53.9%</i>
REVENUE Enterprise Operations					
614-34317001	VE Certification Fees	\$ 80,000	\$ 6,700	\$ 32,300	40.4%
614-34317002	Other Enterprise Revenue	\$ 100	\$ -	\$ -	0.0%
<i>Subtotal, Enterprise Revenue</i>		<i>\$ 80,100</i>	<i>\$ 6,700</i>	<i>\$ 32,300</i>	<i>40.3%</i>
<i>Total Base, Grant and Enterprise Revenue</i>		<i>\$ 1,434,715</i>	<i>\$ 115,434</i>	<i>\$ 716,495</i>	<i>49.9%</i>

FY 2019 Monthly BVA

December 2018	Budget	Actual Current	Actual Year to Date	Year to Date % of Budget
Report Date: January 10, 2019				

EXPENSES	614 YRCAA Base Operations
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Salaries

614-1001	Salaries	\$	484,932	\$	31,813	\$	208,400	43.0%
614-2002	Benefits	\$	183,571	\$	11,178	\$	73,222	39.9%
614-1003	Overtime	\$	-	\$	-	\$	-	-
<i>Subtotal, Salaries</i>		\$	668,503	\$	42,991	\$	281,622	42.1%

Supplies

614-3101	Office Supplies	\$	6,500	\$	1,813	\$	6,909	106.3%
614-3101	Safety Equipment	\$	500	\$	-	\$	-	-
614-3201	Vehicles, Gas	\$	2,500	\$	216	\$	1,020	40.8%
614-3501	Small Tools/Equipment	\$	200	\$	-	\$	-	-
614-3502	Computer Network	\$	4,000	\$	361	\$	1,693	42.3%
<i>Subtotal, Supplies</i>		\$	13,700	\$	2,389	\$	9,622	70.2%

Services

614-4101	Professional Services	\$	35,000	\$	8,503	\$	42,506	121.4%
614-4101	Laboratory Analyses	\$	200	\$	-	\$	70	35.0%
614-4125	Treasurer, Yakima County	\$	1,014	\$	85	\$	338	33.3%
614-4201	Communications, Phones/Internet	\$	12,800	\$	999	\$	6,332	49.5%
614-4202	Postage	\$	3,500	\$	611	\$	1,515	43.3%
614-4301	Travel & Transportation	\$	3,200	\$	-	\$	1,361	42.5%
614-4401	Public Education	\$	4,000	\$	-	\$	-	0.0%
614-4401	Publications, Legal Notices	\$	2,000	\$	381	\$	381	19.1%
614-4501	Rents & Leases, Equipment	\$	3,282	\$	460	\$	1,666	50.8%
614-4501	Rents & Leases, Space	\$	52,659	\$	3,801	\$	31,715	60.2%
614-4601	Insurance	\$	12,600	\$	-	\$	13,397	106.3%
614-4701	Utilities	\$	-	\$	356	\$	1,047	#DIV/0!
614-4801	Maintenance, Motor Vehicles	\$	2,400	\$	-	\$	370	15.4%
614-4801	Maintenance, Equipment	\$	2,000	\$	769	\$	1,888	94.4%
614-4801	Maintenance, Computers	\$	250	\$	-	\$	-	0.0%
614-4801	Maintenance, Building	\$	1,500	\$	285	\$	285	19.0%
614-4901	Memberships	\$	920	\$	-	\$	549	59.7%
614-4901	Training	\$	2,500	\$	(225)	\$	1,020	40.8%
614-4901	Service Chgs & Interest	\$	5,000	\$	369	\$	2,393	47.9%
614-4901	Miscellaneous Services	\$	6,750	\$	562	\$	2,400	35.6%
614-4901	DOE Oversight Fees	\$	4,787	\$	-	\$	-	0.0%
<i>Subtotal, Services</i>		\$	156,362	\$	16,955	\$	109,018	69.7%

Capital Out-Lay & Fixed Assets

614-6401	Capital Out-Lay/Fixed Assets	\$	-	\$	-	\$	-	#DIV/0!
<i>Total YRCAA Base Operations Expenses</i>		\$	838,565	\$	62,335	\$	400,262	47.7%

EXPENSES	614 YRCAA Grant Operations
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614-33403105 Wood Stove Ed

Salaries

614-1001	Salaries	\$	3,867	\$	305	\$	1,769	-
614-2002	Benefits	\$	1,464	\$	107	\$	622	-
614-1003	Overtime	\$	-	\$	-	\$	-	-
<i>Subtotal, Salaries</i>		\$	5,331	\$	412	\$	2,390	-

Supplies

614-3101	Office Supplies	\$	-	\$	-	\$	-	-
<i>Subtotal, Supplies</i>		\$	-	\$	-	\$	-	-

FY 2019 Monthly BVA

December 2018 Report Date: January 10, 2019		Budget	Actual Current	Actual Year to Date	Year to Date % of Budget
Services					
614-4139	Professional Services	\$ 120	\$ -	\$ -	-
614-4202	Postage	\$ -	\$ -	\$ -	-
<i>Subtotal, Services</i>		<i>\$ 120</i>	<i>\$ -</i>	<i>\$ -</i>	<i>-</i>
<i>Subtotal, Woodstove Grant Expenses</i>		<i>\$ 5,451</i>	<i>\$ 412</i>	<i>\$ 2,390</i>	<i>-</i>
614-33403108 PM2.5					
Salaries					
614-1001	Salaries	\$ 15,270	\$ 1,390	\$ 7,164	46.9%
614-2002	Benefits	\$ 5,780	\$ 488	\$ 2,517	43.6%
614-1003	Overtime	\$ -	\$ -	\$ -	-
<i>Subtotal, Salaries</i>		<i>\$ 21,050</i>	<i>\$ 1,878</i>	<i>\$ 9,682</i>	<i>46.0%</i>
Supplies					
614-3101	Office Supplies	\$ -	\$ -	\$ -	#DIV/0!
<i>Subtotal, Supplies</i>		<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>#DIV/0!</i>
Services					
614-4101	Professional Services	\$ -	\$ -	\$ -	#DIV/0!
<i>Subtotal, Services</i>		<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>#DIV/0!</i>
Capital Out-Lay & Fixed Assets					
614-6401	Capital Out-Lay/Fixed Assets	\$ -	\$ -	\$ -	-
<i>Subtotal, PM 2.5 Grant Expenses</i>		<i>\$ 21,050</i>	<i>\$ 1,878</i>	<i>\$ 9,682</i>	<i>46.0%</i>
614-33403107 Woodstove Change-out					
Salaries					
614-1001	Salaries	\$ 59,845	\$ 4,901	\$ 24,038	40.2%
614-2002	Benefits	\$ 22,655	\$ 1,722	\$ 7,131	31.5%
614-1003	Overtime	\$ -	\$ -	\$ -	-
<i>Subtotal, Salaries</i>		<i>\$ 82,500</i>	<i>\$ 6,623</i>	<i>\$ 32,484</i>	<i>39.4%</i>
Supplies					
614-3101	Office Supplies	\$ 50	\$ -	\$ 185	-
<i>Subtotal, Supplies</i>		<i>\$ 50</i>	<i>\$ -</i>	<i>\$ 185</i>	<i>-</i>
Services					
614-4101	Professional Services	\$ 467,500	\$ 48,647	\$ 357,142	76.4%
<i>Subtotal, Services</i>		<i>\$ 467,500</i>	<i>\$ 48,647</i>	<i>\$ 357,142</i>	<i>76.4%</i>
Capital Out-Lay & Fixed Assets					
614-6401	Capital Out-Lay/Fixed Assets	\$ -	\$ -	\$ -	-
<i>Subtotal, Woodstove Change-out Grant Expenses</i>		<i>\$ 550,050</i>	<i>\$ 55,270</i>	<i>\$ 389,812</i>	<i>70.9%</i>
<i>Total, Grant Operations Expenses</i>		<i>\$ 576,551</i>	<i>\$ 57,561</i>	<i>\$ 401,884</i>	<i>69.7%</i>
EXPENSES 141 Enterprise Operations					
Salaries					
141-1001	Salaries	\$ 11,810	\$ -	\$ 6,326	53.6%
141-2002	Benefits	\$ 4,470	\$ -	\$ 2,223	49.7%
141-1003	Overtime	\$ -	\$ -	\$ -	-
<i>Subtotal, Salaries</i>		<i>\$ 16,280</i>	<i>\$ -</i>	<i>\$ 8,548</i>	<i>52.5%</i>

FY 2019 Monthly BVA

December 2018 Report Date: January 10, 2019		Budget	Actual Current	Actual Year to Date	Year to Date % of Budget
Supplies					
141-3101	Office Supplies	\$ 200	\$ -	\$ 445	222.4%
141-3201	Vehicles, Gas	\$ 1,000	\$ -	\$ 568	56.8%
141-3501	Small Tools/Equipment	\$ 200	\$ -	\$ -	0.0%
<i>Subtotal , Supplies</i>		<i>\$ 1,400</i>	<i>\$ -</i>	<i>\$ 1,013</i>	<i>72.4%</i>
Services					
141-4101	Professional Services	\$ -	\$ -	\$ -	#DIV/0!
141-4202	Postage	\$ -	\$ -	\$ -	-
141-4301	Travel & Transportation	\$ 3,000	\$ -	\$ 2,936	-
141-4501	Rents & Leases, Space	\$ 2,000	\$ 100	\$ 857	42.9%
141-4801	Maintenance, Motor Vehicles	\$ 200	\$ -	\$ 177	88.6%
141-4801	Maintenance, Equipment	\$ 500	\$ -	\$ -	0.0%
141-4901	Miscellaneous Services	\$ -	\$ -	\$ -	-
<i>Subtotal, Services</i>		<i>\$ 5,700</i>	<i>\$ 100</i>	<i>\$ 3,970</i>	<i>69.6%</i>
Capital Out-Lay & Fixed Assets					
141-4500	Capital Out-Lay/Fixed Assets	\$ -	\$ -	\$ -	-
<i>Total Enterprise Operations Expenses</i>		<i>\$ 23,380</i>	<i>\$ 100</i>	<i>\$ 13,532</i>	<i>57.9%</i>
Summary of Revenue vs Expenses:					
<i>Prior-Year Carry Over Funds</i>		<i>\$ 125,000</i>	<i>\$ -</i>	<i>\$ 125,000</i>	
<i>Total Revenue, Base, Grants & Enterprise</i>		<i>\$ 1,559,715</i>	<i>\$ 115,434</i>	<i>\$ 841,495</i>	<i>54.0%</i>
<i>Total Expenses, Base, Grants & Enterprise</i>		<i>\$ 1,438,496</i>	<i>\$ 119,996</i>	<i>\$ 815,678</i>	<i>56.7%</i>
<i>Fund Balance</i>		<i>\$ 121,219</i>	<i>\$ (4,562)</i>	<i>\$ 25,818</i>	
<i>Operating Reserves</i>		<i>\$ (3,781)</i>			
<i>Estimated Available Fund Balance</i>		<i>\$ 125,000</i>			

YAKIMA REGIONAL CLEAN AIR AGENCY
SUPPLEMENTAL INCOME STATUS for CY 2018 on December 31, 2018
CY 2018 \$.40 PER CAPITA (Rounded Amounts)

City/Town	Past Due	Assessment Amount	Total Amt Due	Date Received	Amount Received	Balance Due	Responses
Grandview	\$ -	\$ 4,464	\$ 4,464	1/11/2018	\$ 4,464	\$ -	Paid in full
Granger	\$ -	\$ 1,552	\$ 1,552	1/26/2018; 4/16/2018; 7/2/2018; 10/1/2018	\$ 1,552	\$ -	Paid in full
Harrah	\$ -	\$ 260	\$ 260	1/30/2018	\$ 260	\$ -	Paid in full
Mabton	\$ -	\$ 926	\$ 926	1/12/2018	\$ 926	\$ -	Paid in full
Moxee	\$ -	\$ 1,582	\$ 1,582	1/16/2018	\$ 1,582	\$ -	Paid in full
Naches	\$ -	\$ 338	\$ 338	1/11/2018	\$ 338	\$ -	Paid in full
Selah	\$ -	\$ 3,012	\$ 3,012	1/12/2018	\$ 3,012	\$ -	Paid in full
Sunnyside	\$ -	\$ 6,616	\$ 6,616	1/19/2018; 4/13/2018; 7/12/2018; 10/12/2018	\$ 6,616	\$ -	Paid in full
Tieton	\$ -	\$ 514	\$ 514	1/25/2018	\$ 514	\$ -	Paid in full
Toppenish	\$ -	\$ 3,620	\$ 3,620	1/25/2018	\$ 3,620	\$ -	Paid in full
Union Gap	\$ -	\$ 2,480	\$ 2,480	1/25/2018	\$ 2,480	\$ -	Paid in full
Wapato	\$ -	\$ 2,016	\$ 2,016	1/22/2018	\$ 2,016	\$ -	Paid in full
City of Yakima	\$ -	\$ 37,364	\$ 37,364	1/19/2018; 4/16/2018; 7/16/2018; 10/15/2018	\$ 37,364	\$ -	Pd 3/4
Zillah	\$ -	\$ 1,258	\$ 1,258	1/22/2018	\$ 1,258	\$ -	Paid in full
Yakima Co.	\$ -	\$ 34,358	\$ 34,358	1/1/2018; 4/1/2018; 7/1/2018; 10/1/2018	\$ 34,394	\$ (36)	Paid in full
Totals:	\$ -	\$ 100,360	\$ 100,360		\$ 100,396	\$ (36)	