



NOTICE AND AGENDA OF THE YAKIMA REGIONAL CLEAN AIR AGENCY BOARD OF DIRECTORS' REGULAR MEETING

NOTICE

NOTICE is hereby given that the Yakima Regional Clean Air Agency Board of Directors' Study Session will be held at the Yakima City Hall, City Council Chambers on Thursday, March 9, 2017 at 1:30 p.m. to discuss the Ammonia Project. The Regular Meeting will follow at 2:00pm.

STUDY SESSION @ 1:30 p.m.

Ammonia Project

Keith Hurley

PUBLIC COMMENTS

This is a public meeting. If you wish to address the Board concerning any air quality matter, you may do so now. Please come forward to the podium, stating your name for the record. The Chair has the right to place a time limit on each person asking to be heard.

AGENDA

REGULAR MEETING @ 2:00 p.m.

1. 2:00 P.M. Call to Order
2. Roll Call
3. Additions or Deletions to Agenda

*Board Chair
Quatandra Jarvis
Board Chair*

CONSENT AGENDA

4. Consider Approving the Consent Agenda, Items for action 4.1 through 4.4. The Board may approve the Consent Agenda by single motion in whole or in part, with or without further discussion.
 - 4.1 By consent, approve January 5, 2017 Special Meeting Summary;
 - 4.2 By consent, approve January 12, 2017 Special Meeting Summary;
 - 4.3 By consent, approve January 12, 2017 Board Meeting Summary ;
 - 4.4 By consent approve February 1, 2017 Special Board Meeting Summary;
 - 4.5 By consent accept and file, YRCAA January, 2017 Monthly Activity Report; and
 - 4.6 By consent accept and file. YRCAA February, 2017 Monthly Activity Report.

Action Requested: Approve Consent Agenda Items 4.1 through 4.6.



REGULAR AGENDA

5. Receive YRCAA Director's Report. *Keith Hurley*
Action Requested:

ACTION ITEMS

6. Appoint Keith Hurley Air Pollution Control Officer *Keith Hurley*
Action Requested: Approve Resolution Number 2017-04
7. Approve Ammonia Project *Keith Hurley*
Action Requested: Approve Resolution Number
8. Accept Fiscal Reports. *Christa Owen*
 - Approve Fiscal Vouchers and Payroll Authorization Transfers;
 - BVA(s) – FYI;
 - Supplemental Income Status Report for CY 2016; and**Action Requested:** Approve Fiscal Vouchers, Payroll Authorization Transfers, Accept and File Fiscal Reports.
9. 2017 Board Officers *Quatandra Jarvis*
Action Requested: Nominate and Select Board Chair and Vice-Chair
10. Small Cities Representative *Quatandra Jarvis*
Action Requested: No action required.

DIVISION REPORTS

11. Engineering, Compliance and Planning Division *Hasan Tahat*
Accept Engineering, Compliance & Planning Division Report
Action Requested: Accept and file Report – No action required
12. Executive Division Report *Mark Edler*
Accept Executive Division Report
Action Requested: Accept and file Report – No action required

OTHER BUSINESS

13. Other Business and Adjournment *Board Chair*

The Next Board of Directors Meeting is scheduled for Thursday, April 13, 2017 at the City of Yakima Council Chambers, 129 N Second Street, Yakima.

Public Comment Received for
Proposed Ammonia Research Project Plan:

From Kathleen Rogers;

February 6, 2017

To whom this may concern:

The following is the description of why we need to proceed with the Ammonia Study at YRCAA. It has been brought to my attention that the Dairy Industry and the Board of Directors feel that they need to know "Why we are doing the study; what is it we hope to obtain with the study; and what purpose will the data be used for?"

This objective below absolutely answers those questions.

This YRCAA Board of Directors has known exactly what the complaints have been for several years. Our pleas have fallen once more on deaf ears even though it was requested of me to "Provide the Data" by our own Keith Hurley and Hasan Tahat during several Community Forum meetings I attended.

At hand we have the opportunity to finally give you the data so I implore you to agree to this plan and do a service to the citizens in the Lower Yakima Valley and Moxee and provide us this equipment so "YOU" the board of directors of YRCAA can have the data of what it is we are breathing.

It will, if completed properly, either prove there is truly a health issue with ammonia or it will prove that there is nothing here and its all in our heads which we know is not the truth.

Objective:

It is hoped that the resulting data will illustrate the degree to which ammonia contributes to the formation of aerosol nitrates, and subsequently to what extent aerosol nitrites contribute to the formation of PM_{2.5} concentrations during days of elevated PM_{2.5} values. It is also anticipated that the data will provide YRCAA staff with a better estimate of total nitrogen inputs to the Yakima County Air Shed and a more thorough understanding of the county's emission inventory.

Kathleen Rogers

From Sandy Braden;

Hi Mark,

So what about those two monitors that were supposed to go in at the Rogers' place and the Dyjaks' place? Is YRCAA going to put them in or not? Is the proposal still trapped in discussion mode courtesy of Rand Elliot or will it actually happen in our lifetime.

Mr. Elliot asked us for a reason for the money to be spent on these monitors. Here are a couple: After, over 16 years of complaints concerning air quality issues at Jim Dyjak's place and only one response from the agency to check it out, that sounds like that might be one reason to place the monitor there to gather needed information.

A second reason might be that there is a comprehensive research study done by Dr. Stacy Sneeringer (Feb. 2009) entitled "Does Animal Feeding Operation Pollution Hurt Public Health?--" This study showed there is a 7.4% increase in infant mortality due to breathing difficulties in young children who live near animal production facilities. This translates to the more cows, the more breathing issues, especially in the young.

The Yakima Health Department tells us that there has been an increase in breathing issues, as well as, pre-term birth issues in the lower valley that did not exist 30 years ago. Maybe that would do for reason number three for the monitors?

If the reason for YRCAA's existence is to monitor the air quality in the Yakima Valley so that its citizens can live a healthier, more disease free life, then these much needed monitors would give your agency the opportunity to fulfill your mission statement in an effective and expedient manner.

Just saying.

Sandy Braden

FOTC

Mark Edler response to MS. Braden;

Hello Sandy,

In response to your email dated 2/11/2017, the YRCAA is proposing four passive ammonia samplers, not two. The proposed plan would place one sampler near the Dyjak residence and one sampler at the current ECY monitor site located on the Comprehensive Mental Health building in Yakima, for the purpose of representative sampling between urban and rural ambient ammonia levels in the upper Yakima Valley. The agency also proposed to place one sampler located near the Rodgers residence and one sampler located at the Harrison Middle School in Sunnyside for the purpose of representative sampling between urban and rural ambient ammonia levels in the lower Yakima Valley.

The proposal was tabled at the January Board Meeting for further discussion due to some board members having questions they wanted answered. We have posted the proposed project on the agency website for public comment or questions. All comments or questions will be answered or addressed. They will then be provided to the board members for public discussion during the March board meeting study session. The proposed project is also being placed on the agenda for possible board action.

I will include your questions in the response document I am preparing for the board members concerning the public comments/questions. Please do not hesitate to contact me with any further comments or questions prior to March 3, 2017.

Best Regards;

Mark Edler
Executive Division Supervisor

From Steven E. George

WA State Dairy Federation

YRCAA Board members: A proposal to monitor ammonia emissions from dairies was presented to you at your January Board meeting. It was tabled till the February meeting, but that meeting was cancelled. I assume it may come up again at your March board meeting.

I recently had the agency's proposed dairy ammonia study reviewed by two expert's, Dr. Joe Harrison with WSU and Dr. April Leytem with USDA. Both indicate the proposed ammonia study with sample sites at two Yakima valley dairies is inadequate to gather meaningful information. Their comments about the proposal are below. Their responses are in line with the concerns that I already provided to you.

While the dairy industry appreciates the thoughts and work that YRCAA staff put into the proposal, we are concerned about how limited data generated may be twisted and used by dairy opponents. Therefore I request that you do NOT authorize the implementation of this proposal.

Thank you for the opportunity to provide input.

Steve

Steven E. George

WA State Dairy Federation

Greetings

Comments as requested:

1. Insufficient monitoring - Seems that a few monitoring sites are being proposed for making decisions about a large geographical area
2. Insufficient description of methods - Without further information on methodology it is hard to comment on sufficiency of temporal data collection
3. Location of monitoring – multiple potential sources of NH₃ should be assessed

Joe

Joe Harrison

Professor - Nutrient Management Specialist, PAS

Washington State University

2606 West Pioneer, Puyallup, WA 98371

Phone 253-445-4638

Cell phone 253-906-2906

Fax 253-445-4569

e-mail: jhharrison@wsu.edu

Well alright then. Here are my main concerns:

The objective of the project is to determine the extent that NH₃ contributes to aerosol nitrates which then form PM_{2.5}. Setting up four stations to measure ambient NH₃ will only give you four data points with NH₃ concentrations. It is my understanding that in order to understand the formation of aerosols and PM_{2.5} that you also have to do detailed aerosol sampling and analysis. Just measuring the NH₃ will not tell you if this NH₃ is reacting to form aerosols and if those aerosols form PM_{2.5}. They also state that they want to use the data to better understand total N inputs into the airshed. I don't see how this can be accomplished by monitoring ambient NH₃. These measurements will be heavily influenced by the surrounding sources and will provide some indication of how NH₃ emissions are varying spatially. However, in order to understand total N inputs, it would be better to use an inventory approach that identifies sources and estimates an NH₃ emissions rate from the sources to then determine the N inputs into the airshed. These stations could be used to see how ambient concentrations are changing throughout the year and spatially (provided they are set up appropriately, there was no map so I can't comment on that), but I can't see that they would provide much more information than that. To try and extrapolate from this could result in misleading information.

I'm not sure I can say much more as there is really not much to comment on. Let me know if you need anything else!

April

I should have added.

More detail would be needed regarding the locations of the monitoring stations along with a detailed description of the data that will be collected at each site, analyses that will be performed and how the data will be used to better assess the potential success for meeting the project objectives.

April B. Leytem, Ph.D.

Research Soil Chemist

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Summary of the Governing Board of Directors Special Meeting

Location, Date and Time:

Yakima City Hall Council Chambers,

January 5, 2017

Time: 10:00 a.m.

Jon DeVaney, Board Chair, convened the special meeting at 10:00 a.m.

10 a.m. Special Meeting:

- Board Chair, Jon DeVaney convened the Special Meeting at 10:00 a.m. The purpose of the meeting was to allow the Board to go into Executive Session to interview candidates and review their qualifications;
- Board will be interviewing the six (6) candidates that Yakima determined met the qualifications of the position. Board will take turns asking questions;
- Score sheets will be turned into Yakima County tomorrow morning;
- Finalists will be selected by Monday and will have a meet and greet on Thursday;
- When going into open session again at 4pm today will informally pick 1-3 finalists. Went into Executive Session at 10:11 a.m. will reconvene at 4:00 p.m.

BOARD MEMBERS:	Present	STAFF:	Present
Jon DeVaney, Representative-At-Large	x	Executive Director	
Norm Childress, Small Cities Representative	x	Quatandra Jarvis, Clerk of the Board	x
Steven Jones, Ph.D., County Representative	x	Mark Edler, Executive Supervisor	
Bill Lover, Largest City Representative		Christa Owen, Fiscal Manager	
Rand Elliott, Yakima County Commissioner	x	Hasan Tahat, Engineering and Planning Supervisor	
		Keith Hurley, Compliance and Enforcement Supervisor	
LEGAL COUNSEL: Gary Cuillier, Board Counsel			
MEDIA: YPAC			

4 p.m. Special Meeting:

AGENDA ITEM NO. 4.1

- Board has been in Executive Session since about 10:12 a.m.to interview candidates for the Executive Director's position with the YRCAA;
- Closed at 3:45 p.m., Special Meeting reconvened at 4:00 p.m.;
- Finalist will informally meet during the lunch hour on January 12th and will give brief presentations during the Study Session.

Move to adjourn made by Steve Jones, Ph.D., seconded by Mayor Norm Childress.

Jon DeVaney, Board Chair

Quatandra Jarvis, Clerk of the Board

Audio CD of this meeting is available at the YRCAA.
Meeting Summary submitted to Board for approval.



**Summary of the Governing Board of Directors Special Meeting
(Meet and Greet)**

Location, Date and Time:

Yakima City Hall Council Chambers,

January 12, 2017

Time: 10:00 a.m.

Jon DeVaney, Board Chair, *convened the special meeting at 10:00 a.m.*

10 a.m. Special Meeting:

Jon convened the Special session at 9:55 and went into Executive Session at 10:00 a.m. to conduct 2nd interviews for the Executive Directors position. The Executive Session will close at 12 p.m. Executive Session ended at 11:40 a.m.

BOARD MEMBERS:	Present	STAFF:	Present
Jon DeVaney, Representative-At-Large	x	Executive Director	
Norm Childress, Small Cities Representative	x	Quatandra Jarvis, Clerk of the Board	x
Steven Jones, Ph.D., County Representative	x	Mark Edler, Executive Supervisor	
Bill Lover, Largest City Representative		Christa Owen, Fiscal Manager	
Rand Elliott, Yakima County Commissioner	x	Hasan Tahat, Engineering and Planning Supervisor	
		Keith Hurley, Compliance and Enforcement Supervisor	
LEGAL COUNSEL: Gary Cuillier, Board Counsel			
MEDIA: YPAC			

Jon DeVaney, Board Chair

Quatandra Jarvis, Clerk of the Board

Audio CD of this meeting is available at the YRCAA.

Meeting Summary submitted to Board for approval.

AGENDA ITEM NO. 4.2



Summary of the Governing Board of Directors Meeting

Location, Date and Time:

Yakima City Hall Council Chambers,

January 12, 2017

Time: 1:30 p.m.

Jon DeVaney, Board Chair, called the Study Session to order at 1:30 p.m.

Study Session:

Chair reminded candidates that they would be limited to 10 minutes.

- Hasan Tahat:
 - Discussed the Federal Clean Air Act.
- Keith Hurley:
 - No change to the Agency's vision, philosophy and values;
 - Discussed how the Agency would implement the current mission statement.
 - Near Term-immediate
 - Audit in January;
 - Internal budgeting;
 - Past due Dairy Progress Report;
 - EPA response to FOTC Complaint; and
 - Attorney General's response regarding Dr. Jones' position on the Board
 - Short term- 0-2 years
 - Continue to identify and develop new partnerships with other Agencies;
 - Continue to identify ways to expand the Education and Outreach program;
 - Develop operational capital reserves policy; and
 - Hire one additional compliance agent.
 - Long Term -3-5 years
 - Continue to keep costs down and maintain sustainability in budget;
 - Rewrite regulation 1 and submit for SIP inclusion;
 - Explore hiring a grant writer;
 - Incorporate promulgated emissions factors for beef cattle and animal feeding; and
 - DC circuit court decision in incorporating ammonia emissions into law.
 - Mr. DeVaney questioned how Mr. Hurley would reconcile the budget with hiring an additional compliance agent and staying within the budget. Answer- Have to look into the budget before giving a more definitive answer, however, would not do it if it did not fit in the budget.
- Sanjay Barik
 - Education complemented by 20 years work experience;
 - Did not see strategic plan for the Yakima Regional Clean Air Agency on the Agency website. Should capture the vision of the Agency should he become the Executive Director.
 - Came up with three (3) goals:
 - Protect public health and environment-
 - Meet national air quality standard;
 - More focus on PM10 and PM2.5 in highly affected areas;
 - Emphasis on Ozone and NO2, O3 and SO2;
 - Manage and reduce non-point source pollutants; and
 - Manage and reduce point source pollutants
 - Increase compliance by providing technical assistance and include public communication;

AGENDA ITEM NO. 4.3

- Become one of the most Air Quality friendly regions in the Pacific Northwest;
 - Strategic modeling practices;
 - Continually updating emissions inventory;
 - Reduce inequities in air pollution exposure; and
 - Build partnerships with community organizations.
- Excellence and action.
 - Customer service based approach;
 - Building long term accountability; and
 - Seeking new funding opportunities.
- Mr. DeVaney asked how much Mr. Barik believes he can accomplish within the existing Agency budget. Answer- Share and collaborate with State Agencies.

1. **Jon DeVaney, Board Chair, called the Meeting to order at 2:00 p.m.**
2. **Quatandra Jarvis, Clerk of the Board conducted roll call. There was a quorum**

BOARD MEMBERS:	Present	STAFF:	Present
Jon DeVaney, Representative-At-Large	x	Executive Director	
Norm Childress, Small Cities Representative	x	Quatandra Jarvis, Clerk of the Board	x
Steven Jones, Ph.D., County Representative	x	Mark Edler, Executive Supervisor	
Bill Lover, Largest City Representative	x	Christa Owen, Fiscal Manager	x
Rand Elliott, Yakima County Commissioner	x	Hasan Tahat, Engineering and Planning Supervisor	x
		Keith Hurley, Compliance and Enforcement Supervisor	x
LEGAL COUNSEL: Gary Cuillier, Board Counsel			
MEDIA: YPAC	x		

3. **Additions and Deletions to Agenda:**
 - Other Business-Selection of preferred candidate for Executive Director Position
Mr. DeVaney provided a brief update of the selection process prior to going into the Public Comment Period.

Public Comment:

- Sandy Braden-
 - Questioned whether or not the Agency has heard from the Attorney General's Office regarding her concern of a conflict of interest with Dr. Jones's position on the Board. Answer-Have not heard back, however Mr. DeVaney contacted Representative Johnson's Office to reiterate the question. Have not yet heard back.
- Jim Dyjak-
 - Regarding ammonia project and passed out a document that Dr. Pias co-authored;
 - Believes the complaint forms should include process as to how the inspector came to his/her conclusions.
 - Would like the Board to allow the Agency to conduct the Ammonia Project.

Regular Agenda:**4. Consent Agenda**

- Includes two (2) items, December, 2016 Summary and December, 2016 monthly activities.

Motion to approve consent Agenda in its entirety made by Rand Elliott seconded by Steve Jones, Ph.D.

5. Director's Report

- No report this month.

Action Items:**6. Fiscal Report:**

- Payroll for December was \$53,892.59 ;
- A/P was \$16,720.27;
- Out of A/P, Wood Stove Change-Out was \$2,790.00 and Enterprise was \$0.00.

Motion to approve made by Norm Childress seconded by Steven Jones, Ph.D.

7. Proposed Ammonia Project:

- Seeking approval for the Ammonia project we presented last month.
- Mr. DeVaney advised there are a number of questions regarding the numbers and the methodology that have not been resolved. He questioned the Agency as to whether or not there was a report. Answer-No, Mark will provide a report next month.
- There was a question as to what the decision points would be and what would be generated that is actualable.
- Will table until a future meeting.
- Dr. Jones asked if Mr. Edler would accept some written comments from the Board. Mr. DeVaney advised Mr. Edler to incorporate any public concerns into the report before the next Board meeting as well.

8. Dismiss Uncollectable Debts:

- Move to approve resolution 2017-02 for the dismissal of uncollectable debts totaling \$2,770.

Motion to approve made by Rand Elliott and seconded by Norm Childress. Motion passed.

DIVISION/PROGRAM REPORTS
(See written reports for complete details.)

9. Engineering and Planning Division Report:

- Discussed EPA's Proposed Refinements to the Clean Air Act Section 105 Grant allocation Methodology for FY 2017. Clean Air Agencies not happy with the 2.5% decrease in funding;
- The Department Ecology and local air agencies provided comments on the proposed methodology expressing their disagreement;
- Registration program started;
- Attended two (2) days of the Northwest Air Directors Meeting;
- Issued three (3) New Source Reviews;
- Two (2) burn bans called in December; and
- Expect two (2) exceedances.
- Mr. DeVaney had a clarifying question – Would the existing allocations within the regions stay roughly the same with the reduction or would there be disproportionate reductions among state and local agencies. Answer- Mr. Tahat believes it will be equal among the state.

10. Compliance and Enforcement Division Report:

- Two (2) AODs issued.

11. Executive Division Report:

- Wood stove change-out program doing well;
- With what is out now, grant funds are low and waiting list started;
- Air Quality Forum included three (3) participants.
 - Main topic of discussion was the ammonia project and will be included in next month's report.
- Mr. DeVaney asked if there were coalitions of regional air agencies that were talking to the Legislature regarding funding levels for the Wood Stove Change-Out Program. Answer- Yes, it would go through the Department of Ecology, however, have not yet heard from them. Mr. Edler advised he would contact them and have an answer to the Board by the next Board meeting.
- Mr. Edler confirmed Mayor Childress's questions regarding people on the waiting list would go on next year's appropriation assuming the Agency receives the funding.

12. Other Business and Adjournment

- Mr. DeVaney stated there was a large pool of candidates, three finalists with extensive knowledge. Should delegate someone for employment agreement and cannot be discussed until HR consultant at the County reviews the scoring;
- Bill Lover request to be recused from discussion;
- Mayor Childress thought process was fair and well done. Thanked Yakima County HR Department.
- Interviews were good. Offer support to Keith Hurley;
- Steven Jones advised there were great candidates, however also supports Keith;
- Rand Elliot-two rounds of interviews; Good candidates; supports Keith Hurley.

Motion to select Keith Hurley as new Executive Director made by Rand Elliott and seconded by Norm Childress. Motion granted.

Jon DeVaney, Board Chair

Quatandra Jarvis, Clerk of the Board

Audio CD of this meeting is available at the YRCAA.
Meeting Summary submitted to Board for approval.



Summary of the Governing Board of Directors Special Meeting

Location, Date and Time:

Yakima City Hall Council Chambers,

February 1, 2017

Time: 2:00 p.m.

2 p.m. Special Meeting:

1. Jon DeVaney, Board Chair, called the Special Meeting to order at 2:00 p.m.
2. Quatandra Jarvis, Clerk of the Board conducted roll call. There was a quorum

BOARD MEMBERS:	Present	STAFF:	Present
Jon DeVaney, Representative-At-Large	x	Keith Hurley Executive Director	x
Norm Childress, Small Cities Representative	x	Quatandra Jarvis, Clerk of the Board	x
Steven Jones, Ph.D., County Representative	x	Mark Edler, Executive Supervisor	
Bill Lover, Largest City Representative		Christa Owen, Fiscal Manager	
Rand Elliott, Yakima County Commissioner	x	Hasan Tahat, Engineering and Planning Supervisor	
LEGAL COUNSEL: Gary Cuillier, Board Counsel			
MEDIA: YPAC			

3. Approve Executive Director Employment Agreement:

- Mr. DeVaney opened the meeting to discuss employment offer and agreement with Keith Hurley as new Executive Director (Director);
- Mr. DeVaney and Mr. Hurley had lengthy conversations in January regarding terms that were prepared by Agency counsel Gary Cuillier;
- Annual salary and health insurance the same as previous Director Gary Pruitt with health insurance including Mr. Hurley's three daughters;
- As position is an "at will" position, the Board and Mr. Hurley agreed Mr. Hurley could draw a cash payment of any accrued sick and annual leave at time of departure;
- Accrual would be along the same lines as the rest of the Agency staff; and
- Current leave carries over to new position.
- Questions, concerns or comments:
 - Concern regarding maximum terminal leave taken versus payout;
 - This would create an incentive to take the payout versus taking an extended vacation at end of career;

AGENDA ITEM NO. 4.4

- Another concern, there is no policy regarding Director taking an extended leave being approved by the Board. Mr. DeVaney suggested formulating a policy on leave over a week should get permission from at least one Board Member/Chair of the Board;
- Another concern, determining who is in charge when the Director is on vacation/leave;
- Both issues should be written in policy for Board Action at a later meeting;
- Mr. Cuillier presented two copies of Mr. Hurley's Employment agreement updated with the current date.

Motion to pass the Employment Agreement was made by Mayor Norm Childress and seconded by Commissioner Ron Anderson.

4. Appoint Keith Hurley Custodian and Auditing Officer:

- Move to approve resolution 2017-03 appointing Keith Hurley Custodian, Auditing, and Investment Officer.

Motion to approve made by Mayor Norm Childress, seconded by Commissioner Ron Anderson. Motion passed.

Jon DeVaney, Board Chair

Quatandra Jarvis, Clerk of the Board

Audio CD of this meeting is available at the YRCAA.

Meeting Summary submitted to Board for approval.

Date of Release: March 2, 2017
Date of Consideration: March 9, 2017
To: Board of Directors
From: Office of the Executive Director
Subject: Monthly Activity Report

Activity	FY16					
	FY16	Dec.16	Jan. 17	Feb. 17	thru Feb.	FY17 thru Feb.
Minor Source Inspections	107	6	6	16	50	77
Complaints Received	201	17	35	30	115	171
NOVs Issued	85	6	14	21	54	67
AODs Issued	0	2	5	1	0	12
Warning Notices Issued	7	2	5	1	6	12
NOPs Issued	60	4	4	5	36	175
SEPA Reviews	245	13	14	20	175	140
AOP Applications Received	1	0	0	0	0	0
AOPs Issued or Renewed	3	0	0	1	1	3
Deviations/Upsets Reported	12	1	1	1	7	8
AOP Inspections	8	1	1	0	6	3
Public Workshops	0	0	0	0	0	0
Media Events	0	0	0	0	0	0
Media Contacts	19	5	1	1	14	9
Education Outreach Events	8	0	0	0	2	4
Sources Registered	381	3	121	174	302	303
NSR Applications Received	10	5	3	2	6	19
NSR Approvals Issued-Temporary	1	0	0	0	1	0
NSR Approvals Issued-Permanent	13	3	2	2	8	16
NODRs Received	189	7	16	21	110	123
Agricultural Burn Permits Issued	206	6	14	12	110	86
Conditional Use Permits Issued	11	0	0	0	1	1
Residential Burn Permits Issued	240	0	0	0	163	234
Burn Ban Days	90	17	24	19	79	63
Public Records Requests Fulfilled	26	2	3	1	12	34

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. 4.5

Date of Release: February 2, 2017
Date of Consideration: March 9, 2017
To: Board of Directors
From: Office of the Executive Director
Subject: Monthly Activity Report

Activity	FY16	Nov.16	Dec. 16	FY17		
				Jan. 17	FY16 thru Jan.	FY17 thru Jan.
Minor Source Inspections	107	5	6	6	48	87
Complaints Received	201	22	17	35	108	141
NOVs Issued	85	8	6	14	51	46
AODs Issued	0	1	2	5	0	11
Warning Notices Issued	7	1	2	5	5	11
NOPs Issued	60	7	4	4	25	30
SEPA Reviews	245	9	13	8	183	114
AOP Applications Received	1	0	0	0	0	0
AOPs Issued or Renewed	3	0	0	0	1	0
Deviations/Upsets Reported	12	1	1	1	7	7
AOP Inspections	8	0	1	1	6	3
Public Workshops	0	0	0	0	0	0
Media Events	0	0	0	0	0	0
Media Contacts	19	0	5	1	17	8
Education Outreach Events	8	1	0	0	2	3
Sources Registered	381	0	3	121	118	132
NSR Applications Received	10	1	5	3	4	17
NSR Approvals Issued-Temporary	1	0	0	0	1	0
NSR Approvals Issued-Permanent	13	3	3	2	11	14
NODRs Received	189	24	7	16	101	102
Agricultural Burn Permits Issued	206	12	6	14	67	63
Conditional Use Permits Issued	11	1	0	0	1	1
Residential Burn Permits Issued	240	0	0	0	189	234
Burn Ban Days	90	3	17	24	90	44
Public Records Requests Fulfilled	26	7	2	3	13	33

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 4.6



Executive Memorandum

Date of Release: March 2, 2017
Date of Consideration: March 9, 2017
To: The YRCAA Board of Directors
From: Office of the Executive Director
Subject: Director's Report

Keith M. Hurley

I. Revisions to Administrative Code Part B

On February 1, 2017 The Board of Directors (Board) identified a need to require the Executive Director to notify and obtain approval by the Board prior to taking a significant amount of annual leave. The Board also identified a need for the Executive Director to appoint an individual as the Acting Director during any extended periods of absence. A subsequent review of the Administrative Code verified there is currently no specific policy or procedure addressing either the use of annual leave by the Executive Director or the appointing of an Acting Director.

Recommendations:

1. Revise Administrative Code Part B, Section 9, paragraph 9.7.2 (b) by adding the following sub-paragraphs:

“vi. For extended leave periods taken by the Executive Director that will exceed ten days, the Director shall submit a written request for approval to the Chairman of the Board no later than two weeks prior to the anticipated leave dates. During instances of retirement, where an Executive Director wishes to use any remaining leave balance and will be discontinuing normal office duties, a written request must be furnished to the Chairman of the Board for approval no later than 90 days prior to the proposed dates of leave. This advanced notice is required to ensure that the Board of Directors has the appropriate amount of time for announcing, recruiting, and hiring a replacement.

vii. To ensure continuity of leadership and daily operations, the Executive Director will appoint an Acting Director prior to any anticipated absence greater than two days. Generally, the Executive Director will appoint either the Administrative Division Supervisor or the Compliance and Engineering Division Supervisor as the Acting Director. The Executive Director reserves the right to appoint any employee as the Acting Director whom they believe has the potential for greater responsibility and would benefit by the professional development.”

II. Streamline Agency Reports to the Board

Board Meetings are the primary means of keeping the Board updated on activities conducted by the agency. It is in the best interest of the Board, the Agency, and the public to conduct the meetings as efficiently as possible. Currently, Division Supervisors present monthly reports to the Board in addition to the Executive Director's Report. This practice reduces the available staff at the office by 50% on Board days.

Recommendations:

1. Eliminate individual division reports. The Director's Report can consolidate and convey all key information to the Board. If the need arises, staff can be made available at scheduled board meetings for the Board to ask work specific or technical questions. The quarterly Community Forum is best used for members of the public who desire to have in-depth technical discussions concerning any topic. As part of the agency Public Outreach program, members of the public also have the option to schedule meetings with staff at any time for technical discussions or general air pollution questions.

III. Agency Restructure

The agency has restructured its organizational layout by merging the Compliance & Air Monitoring Division with the Engineering & Planning Division. This change significantly reduces agency cost by eliminating one Division Supervisor position. The new division will be named the Compliance & Engineering Division and will be headed by Dr. Tahat. The agency will also be renaming the Executive Division the Administrative Division. These changes will require revising the appropriate sections of the Administrative Code. All Administrative Code changes will be brought to the Board for formal adoption.

IV. Agricultural Task Force

The task force is scheduled to meet on March 13, 2017 at 1:30 pm. The meeting will be held at the old Pizza Hut Building. Focus will be on the biennial update of the Air Quality Management Policy and Best Management Practices for Dairy Operations.

V. Fiscal Programs Audit

The State Auditor's Office conducted an accountability audit of the agency's Air Operating Permit (AOP) program and general fiscal processes for the period of July 1, 2014 through June 30, 2016. The audit involved performing procedures to obtain evidence about the Agency's uses of public resources, compliance with state laws and regulations and its own procedures, and internal controls over such matters. The audit resulted in no Findings or Management Letters. The Audit Report may be found at <http://portal.sao.wa.gov/ReportSearch>

VI. Budget Preparation Process

The Agency has initiated the Budget Preparation process and looks forward to offering a proposed budget in early may for board review and public comment.



Executive Memorandum

Date of Release: March 2, 2017
Date of Consideration: March 9, 2017
To: The YRCAA Board of Directors
From: Office of the Executive Director
Subject: Air Pollution Control Officer

Keith M. Hurley

ISSUE:

Appointment of the Yakima County Air Pollution Control Officer

RECOMMENDATION(S):

Appoint Keith Hurley as the Yakima County Air Pollution Control Officer

DISCUSSION:

Section 70.94.170 of the Revised Code of Washington (RCW) requires the appointment of a full time control officer, whose sole responsibility shall be to observe and enforce the provisions of the chapter and all orders, ordinances, resolutions, or rules and regulations of such activated authority pertaining to the control and prevention of air pollution. YRCAA Regulation 1, Article 1, subsection 1.05, paragraph C requires the Board of Directors to appoint the Air Pollution Control Officer

AGENDA ITEM NO. 6

RESOLUTION NO.: 2017-04
BEFORE THE GOVERNING BOARD OF THE
YAKIMA REGIONAL CLEAN AIR AGENCY (YRCAA)

Appoint Keith M. Hurley as Air Pollution Control Officer

WHEREAS, the YRCAA is a statutorily created municipal corporation per section 70.94.081 of the Revised Code of Washington; and

WHEREAS, section 70.94.170 of the Revised Code of Washington requires the appointment of a full time control officer, whose sole responsibility shall be to observe and enforce the provisions of the chapter and all orders, ordinances, resolutions, or rules and regulations of such activated authority pertaining to the control and prevention of air pollution; and

WHEREAS YRCAA Regulation 1, Article 1, subsection 1.05, paragraph C requires the Board of Directors to appoint the Air Pollution Control Officer;

NOW THEREFORE BE IT RESOLVED that:

1. Keith M. Hurley, Executive Director of the YRCAA, shall be appointed as Air Pollution Control Officer for the county of Yakima, in the state of Washington; and
2. That this appointment shall apply from February 1, 2017 through June 30, 2018, unless revised; and

On motion of _____, seconded by _____, the foregoing resolution is hereby PASSED AND ADOPTED by the Yakima Regional Clean Air Agency Board of Directors on this 9th day of March, 2017.

Jon DeVaney, Chair

Ron Anderson, Director

Steven Jones, Director

Bill Lover, Director

Norm Childress, Director

Quatandra Jarvis, Clerk of the Board



329 North First Street
Yakima WA 98901
(509) 834-2050
(509) 834-2060
yakimacleanair.org

Yakima Regional Clean Air Agency (YRCAA) Ammonia Research Project Draft Work Plan

Project Description:

The YRCAA proposes the establishment of four ammonia (NH_3) gas sampling sites to assess short-term trends (one year) in ambient NH_3 concentrations. Two sites are to be established in the upper county, with one located at the Washington State Department of Ecology's (WADOE) air monitoring site located on top of the Yakima Mental Health facility while the other will be located at a field site located north of Highway 24, and no closer than 500m (1,640') from the Devries Family Farm LLC Dairy Facility. Two additional sites will be placed in the lower county, with one sampler located on top of Harrison Middle School in Sunnyside and the other being located at a field site located at 1320 Braden Road, Grandview, WA 98953.

Objective:

It is hoped that the resulting data will illustrate the degree to which ammonia contributes to the formation of aerosol nitrates, and subsequently to what extent aerosol nitrites contribute to the formation of $\text{PM}_{2.5}$ concentrations during days of elevated $\text{PM}_{2.5}$ values. It is also anticipated that the data will provide YRCAA staff with a better estimate of total nitrogen inputs to the Yakima County Air Shed and a more thorough understanding of the county's emission inventory.

Discussion:

NH_3 is a gas readily released into the air from a variety of biological sources, as well as from industrial and combustion processes. It is also the most prevalent base gas in the atmosphere. While it has many beneficial uses, NH_3 can detrimentally affect the air quality by contributing to the formation of aerosol nitrites, which are a major contributor to the formation of $\text{PM}_{2.5}$. Possible health effects of ammonia gas in the atmosphere include short-term irritation of the eyes and lungs, and the long-term effects on the cardiovascular system through inhalation of fine particulate matter formed from ammonia in the atmosphere.

The Yakima Air Wintertime Nitrate Study (YAWNS) was conducted in January 2013, with measurements made mostly in the upper Yakima valley. The objective of the study was to investigate the scientific reasons behind high aerosol nitrate content in $\text{PM}_{2.5}$ in the area. The YAWNS study found that ammonia emissions from agricultural operations combined with NO_x from vehicles under the right meteorological conditions to produce aerosol nitrate. One of the limitations of the study was that no representative measurements of nitrate were conducted in the lower Yakima valley, in spite of most ammonia sources being located in the lower Yakima valley. To address this limitation, Ecology collected several gravimetric samples using Federal Reference Method (FRM) $\text{PM}_{2.5}$ samplers in Sunnyside and Toppenish, between November 2015 and January 2016. The Teflon filters were analyzed for nitrate at Ecology's Manchester Environmental Laboratory. The analysis of the FRM samples indicated, on average, nitrate accounted for about a quarter of the $\text{PM}_{2.5}$ mass at Yakima and a third at Sunnyside. Elevated nitrate levels occurred in both valleys simultaneously, on days with high relative humidity, low temperatures and low winds. This suggests common sources of aerosol nitrate precursors in both valleys.

AGENDA ITEM NO. 7

Work/Duties:

The YRCAA project team will consist of the following personnel and duties:

Keith Hurley (Compliance & Enforcement Division Supervisor) - Project Manager, overseeing all work conducted by YRCAA.

Kelsey Sanford (Compliance & Enforcement Division Air Monitoring Technician) - Primary Air Monitoring Technician, conducting all day-to-day operations including Quality Control (QC) checks, sampler maintenance checks and services, setup and collection of bi-weekly samples, and sample shipment to the National Atmospheric Deposition Program (NADP) at the Illinois State Water Survey (ISWS).

Dustin Harrington (Compliance & Enforcement Division Field Agent) - Secondary/Backup Air Monitor Technician, conducting all duties above during the absence of the Primary Technician.

Hasan Tahat (Engineering Division Supervisor) - Conducts agency review of all collected data, writes comprehensive data review/interpretation for presentation to the YRCAA Board of Directors upon completion of project.

Proposed Budget:

Funding in the amount of \$14,404.44 will be provided by the YRCAA. The following table provides an estimate of costs to conduct the project.

YRCAA Ammonia Gas Research Project Draft Work Plan Summary of Estimated Costs				
Expenditure	Cost / Unit	Cost	Hours	Cost
Initial Setup & Familiarization Training (Harrington)	Billing Rate / Hour	\$38.33	8	\$ 306.64
Initial Setup & Familiarization Training (Sanford)	Billing Rate / Hour	\$29.86	8	\$ 238.88
One year Operational Support & Maintenance (Sanford)	Billing Rate / Hour	\$29.86	52	\$1,552.72
Contracted Costs: Four AMoN Sites 27 Samples per site Chemical Analysis Set Up Costs Coordination	N/A	N/A	N/A	\$11,208.00
Data review & Report (Tahat)	Billing Rate / Hour	\$59.82	10	\$598.20
Vehicle Fuel & Maintenance	Per year	\$500.00	Annual	\$500.00
Total Costs				\$14,404.44

General:

NADP Data Policy- The ISWS is responsible for managing the information presented on the NADP database and on the NADP Website, <http://nadp.isws.illinois.edu>. Information presented on the NADP Website is in the public domain, except for those images and graphics created by third parties and used by permission. NADP data and Information Use Conditions are posted online at <http://nadp.isws.illinois.edu/NADP/useConditions.aspx>.

RESOLUTION NO: 2017-01
BEFORE THE GOVERNING BOARD OF THE
YAKIMA REGIONAL CLEAN AIR AGENCY (YRCAA)

Adopt the proposed YRCAA Ammonia Research Project

WHEREAS, the Board believes it to be in the interest of the public to establish four passive ammonia gas sampling sites to assess short-term trends (one year) in ambient ammonia concentrations.

NOW THEREFORE BE IT RESOLVED that:

1. The proposed Ammonia Research Project is hereby approved by the Governing Board of Directors of the YRCAA on this 9th day of March, 2017

On motion of _____, seconded by _____, the foregoing resolution is hereby PASSED AND ADOPTED by the Yakima Regional Clean Air Agency Board of Directors.

Jon DeVaney, Chair

Ron Johnson, Director

Steven Jones, Director

Bill Lover, Director

Norm Childress, Director

Quatandra Jarvis, Clerk of the Board



Executive Memorandum

Date of Release: March 2, 2017

Date of Consideration: March 9, 2017

To: YRCAA Board of Directors

From: Office of the Director

Christa Owen

Subject: Fiscal Program Report

Issue: Consider Fiscal Reports, forms, and vouchers.

Recommendation(s): Accept, and approve by minute action, January and February 2017 AP Fiscal Vouchers (21,350.62 and 49,390.39, respectively), and January and February Payroll Authorizations (\$53,890.29 and \$56,454.56, respectively). Out of A/P, \$12,199.99 in January and \$29,201.97 in February was for Wood Stove Change-out Expenses, and \$395.00 in January and \$1,208.75 in February was for Enterprise expenses.

Discussion: January and February Accounts Payable and Payroll Authorizations are enclosed for your approval. BVA and Supplemental Income are included as informational items.

Enclosures

AGENDA ITEM NO. 8

AUTHORIZATION FOR ELECTRONIC FUNDS TRANSFER

Direct Deposit Payroll & Payroll Taxes

Date: 2/24/2017

District: Yakima Regional Clean Air Agency

Contact Person: Christa Owen

Address: 329 North First Street, Yakima, WA 98901

Telephone 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 Washington

ABA Routing Number: XXXXXXXXXX

Bank Account Number: XXXXXXXXXX

Payroll Date: March 1, 2017

Transfer Amount(s): \$ 56,454.56

Total Amount of Electronic Transfer: \$ 56,454.56

Authorizing Signatures (*No facsimile signatures accepted.*):


Auditing Officer

Chairman Board of Directors


Alternate Auditing Officer

Date February 24, 2017

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



February 24, 2017

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	33030	4801	\$ 89.40	2/27/2017
Alliant Communications	33031	4201	\$ 370.58	2/27/2017
Bradley A. Mellotte	33032	4501	\$ 3,480.00	2/27/2017
Crystal Springs	33033	3101	\$ 8.02	2/27/2017
KeyBank**	33034	Various	\$ 2,224.76	2/27/2017
Nth Degree Environmental Engineering	33035	4101	\$ 375.00	2/27/2017
Pitney Bowes Reserve Account	33036	4202	\$ 500.00	2/27/2017
Washington State Auditor	33037	4101	\$ 6,175.24	2/27/2017

Total:

\$ 13,223.00

***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: **\$ 13,223.00**

Jon DeVaney, Board Chairman

3/9/2017

Keith M. Hurley

Keith Hurley, Executive Director

2/27/2017



February 13, 2017

Fund 614-614 YRCAA

Fund 614-141 Enterprise

<u>Name</u>	<u>Warrant/MICR #</u>	<u>GL #</u>	<u>Amount</u>	<u>Date</u>
Armstrong's Stove & Spa*	33012	4101	\$ 8,475.00	2/14/2017
Central Mechanical Services	33013	4802	\$ 838.55	2/14/2017
Charter Communications	33014	4201	\$ 724.94	2/14/2017
Coastal Farm and Ranch*	33015	4101	\$ 9,254.16	2/14/2017
Coleman Oil Company	33016	3201	\$ 187.72	2/14/2017
Cuillier Law Office	33017	4101	\$ 924.00	2/14/2017
Ketsiri De Bord	33018	3502	\$ 54.02	2/14/2017
Engravings Unlimited, Inc.	33019	3101	\$ 41.66	2/14/2017
Five K Technologies	33020	3502	\$ 25.00	2/14/2017
Inland Awning of Yakima*	33021	4101	\$ 5,774.05	2/14/2017
Inland Contracting*	33022	4101	\$ 4,948.76	2/14/2017
Invisible Ink	33023	4101	\$ 2,125.00	2/14/2017
Leaf	33024	4801	\$ 186.07	2/14/2017
Hunter Lescoe*	33025	4101	\$ 750.00	2/14/2017
Nth Degree Environmental Engineering	33026	4101	\$ 750.00	2/14/2017
Verizon Wireless	33027	4201	\$ 328.76	2/14/2017
YRCAA	33028	4901	\$ 734.70	2/14/2017
Yakima County Sheriff's Department	33029	4101	\$ 45.00	2/14/2017

Total:

\$ 36,167.39

***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: **\$ 36,167.39**

Jon DeVaney, Board Chairman

3/9/2017

Keith Hurley, Executive Director

2/14/2017



January 26, 2017

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	33000	4801	\$ 135.73	1/27/2017
Bradley A. Mellotte	33001	4501	\$ 3,480.00	1/27/2017
Crystal Springs	33002	3101	\$ 22.04	1/27/2017
EES Environmental Consulting, Inc.	33003	4901	\$ 453.00	1/27/2017
Engravings Unlimited, Inc.	33004	3101	\$ 40.03	1/27/2017
KCYU*	33005	4401	\$ 500.00	1/27/2017
KeyBank**	33006	Various	\$ 1,452.96	1/27/2017
Platte Heating & Air Conditioning, Inc.	33007	4802	\$ 97.38	1/27/2017
Quill Corporation	33008	3101	\$ 54.51	1/27/2017
Ron's Office Equipment	33009	3101	\$ 235.36	1/27/2017
Washington Cities Insurance Authority	33010	4901	\$ 140.00	1/27/2017
Yakima County Printing Department	33011	3101	\$ 37.87	1/27/2017

Total: **\$ 6,648.88**

***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: **\$ 6,648.88**

Jon DeVaney, Board Chairman

2/9/2017

Christa Owen, Alternate Auditing Officer

1/27/2017



January 11, 2017

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*	32979	4101	\$ 4,499.99	1/12/2017
Bustos Media, LLC*	32980	4101	\$ 500.00	1/12/2017
Charter Communications	32981	4201	\$ 724.94	1/12/2017
Coastal Farm and Ranch*	32982	4101	\$ 3,119.34	1/12/2017
Coleman Oil Company*	32983	3201	\$ 139.63	1/12/2017
Cuillier Law Office	32984	4101	\$ 308.00	1/12/2017
Eagle Signs	32985	4401	\$ 183.94	1/12/2017
Five K Technologies	32986	3502	\$ 25.00	1/12/2017
Inland Contracting*	32987	4101	\$ 880.66	1/12/2017
Leaf	32988	4501	\$ 186.07	1/12/2017
Dennis Lester*	32989	4101	\$ 750.00	1/12/2017
Radio Yakima*	32990	4101	\$ 1,000.00	1/12/2017
Splash Express	32991	4801	\$ 10.15	1/12/2017
Steve Sziebert*	32992	4101	\$ 750.00	1/12/2017
Telemundo*	32993	4101	\$ 200.00	1/12/2017
Verizon Wireless	32994	4201	\$ 328.76	1/12/2017
WAPRO	32995	4901	\$ 25.00	1/12/2017
WFOA	32996	4901	\$ 50.00	1/12/2017
YRCAA	32997	4901	\$ 206.64	1/12/2017
Yakima County Printing Department	32998	Various	\$ 729.48	1/12/2017
Yakima County Sheriff's Department	32999	4101	\$ 84.14	1/12/2017

Total:

\$ 14,701.74

***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: **\$ 14,701.74**

Jon DeVaney, Board Chairman

2/9/2017

Christa Owen
Christa Owen, Alternate Auditing Officer

1/12/2017

AUTHORIZATION FOR ELECTRONIC FUNDS TRANSFER

Direct Deposit Payroll & Payroll Taxes

Date: 1/30/2017

District: Yakima Regional Clean Air Agency

Contact Person: Christa Owen

Address: 329 North First Street, Yakima, WA 98901

Telephone 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 Washington

ABA Routing Number: XXXXXXXXXX

Bank Account Number: XXXXXXXXXX

Payroll Date: February 1, 2017

Transfer Amount(s): \$ 53,890.29

Total Amount of Electronic Transfer: \$ 53,890.29

Authorizing Signatures (No facsimile signatures accepted.):

Auditing Officer

Chairman Board of Directors

Christa Owen
Alternate Auditing Officer

Date January 30, 2016

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

YAKIMA REGIONAL CLEAN AIR AGENCY
SUPPLEMENTAL INCOME STATUS for 2017 on February 28, 2017
CY 2017 \$.40 PER CAPITA (Rounded Amounts)

City/Town	Past Due	Assessment Amount	Total Amt Due	Date Received	Amount Received	Balance Due	Responses
Grandview	\$ -	\$ 4,480	\$ 4,480	1/27/2017	\$ 4,480	\$ -	Pd in full
Granger	\$ 350	\$ 1,456	\$ 1,806	1/31/2017; 2/22/2017	\$ 714	\$ 1,092	Pd 1/4
Harrah	\$ -	\$ 260	\$ 260	1/27/2017	\$ 260	\$ -	Pd in full
Mabton	\$ -	\$ 924	\$ 924	1/19/2017	\$ 924	\$ -	Pd in full
Moxee	\$ -	\$ 1,524	\$ 1,524	1/19/2017	\$ 1,524	\$ -	Pd in full
Naches	\$ -	\$ 332	\$ 332	1/12/2017	\$ 332	\$ -	Pd in full
Selah	\$ -	\$ 2,998	\$ 2,998	1/12/2017	\$ 2,998	\$ -	Pd in full
Sunnyside	\$ -	\$ 6,512	\$ 6,512	1/25/2017	\$ 1,628	\$ 4,884	Pd 1/4
Tieton	\$ -	\$ 502	\$ 502	1/27/2017	\$ 502	\$ -	Pd in full
Toppenish	\$ -	\$ 3,586	\$ 3,586	1/26/2017	\$ 3,586	\$ -	Pd in full
Union Gap	\$ -	\$ 2,460	\$ 2,460	1/26/2017	\$ 2,460	\$ -	Pd in full
Wapato	\$ -	\$ 2,016	\$ 2,016	1/26/2017	\$ 2,016	\$ -	Pd in full
City of Yakima	\$ -	\$ 37,288	\$ 37,288	1/19/2017	\$ 9,322	\$ 27,966	Pd 1/4
Zillah	\$ -	\$ 1,256	\$ 1,256	1/24/2017	\$ 1,256	\$ -	Pd in full
Yakima Co.	\$ -	\$ 34,394	\$ 34,394	1/1/2017	\$ 8,599	\$ 25,796	Pd 1/4
Totals:	\$ 350	\$ 99,988	\$ 100,338		\$ 40,600	\$ 59,738	

FY 2017 Monthly BVA

January 2017	Budget	Actual Current	Actual Year to Date	Year to Date % of Budget
Report Date: February 9, 2017				

EXPENSES
EXPENSES 614 YRCAA Base Operations

Salaries					
614-1001	Salaries	\$ 507,693	\$ 37,984	\$ 288,377	56.8%
614-2002	Benefits	\$ 187,777	\$ 13,346	\$ 101,322	54.0%
614-1003	Overtime	\$ -	\$ -	\$ -	#DIV/0!
Subtotal, Salaries		\$ 695,470	\$ 51,329	\$ 389,699	56.0%

Supplies

614-3101	Office Supplies	\$ 7,450	\$ 516	\$ 3,221	43.2%
614-3101	Safety Equipment	\$ -	\$ -	\$ -	#DIV/0!
614-3201	Vehicles, Gas	\$ 3,325	\$ 140	\$ 1,002	30.1%
614-3501	Small Tools/Equipment	\$ -	\$ -	\$ -	#DIV/0!
614-3502	Computer Network	\$ 10,466	\$ 233	\$ 7,553	72.2%
Subtotal, Supplies		\$ 21,241	\$ 888	\$ 11,776	55.4%

Services

614-4101	Professional Services	\$ 15,000	\$ 392	\$ 19,616	130.8%
614-4101	Laboratory Analyses	\$ 157	\$ -	\$ 40	25.5%
614-4125	Treasurer, Yakima County	\$ 1,679	\$ 44	\$ 953	56.8%
614-4201	Communications, Phones/Internet	\$ 12,444	\$ 1,054	\$ 7,387	59.4%
614-4202	Postage	\$ 3,900	\$ -	\$ 1,260	32.3%
614-4301	Travel & Transportation	\$ 3,650	\$ -	\$ 254	7.0%
614-4401	Public Education	\$ 4,000	\$ 873	\$ 1,444	36.1%
614-4401	Publications, Legal Notices	\$ 526	\$ -	\$ -	0.0%
614-4501	Rents & Leases, Equipment	\$ 1,982	\$ 186	\$ 1,815	91.6%
614-4501	Rents & Leases, Space	\$ 41,760	\$ 3,480	\$ 24,360	58.3%
614-4601	Insurance	\$ 13,398	\$ -	\$ 12,662	94.5%
614-4801	Maintenance, Motor Vehicles	\$ 2,229	\$ 735	\$ 2,304	103.4%
614-4801	Maintenance, Equipment	\$ 1,853	\$ 136	\$ 1,803	97.3%
614-4801	Maintenance, Computers	\$ 150	\$ -	\$ 357	238.0%
614-4801	Maintenance, Building	\$ 520	\$ 97	\$ 596	114.7%
614-4901	Memberships	\$ 230	\$ 75	\$ 130	56.5%
614-4901	Training	\$ 2,898	\$ 140	\$ 2,702	93.2%
614-4901	Service Chgs & Interest	\$ 4,600	\$ 207	\$ 1,895	41.2%
614-4901	Miscellaneous Services	\$ 2,600	\$ 493	\$ 1,401	53.9%
614-4901	DOE Oversight Fees	\$ 4,787	\$ -	\$ -	0.0%
Subtotal, Services		\$ 118,363	\$ 7,911	\$ 80,980	68.4%

Capital Out-Lay & Fixed Assets

614-6401	Capital Out-Lay/Fixed Assets	\$ -	\$ -	\$ -	#DIV/0!
Total YRCAA Base Operations Expenses		\$ 835,074	\$ 60,129	\$ 482,455	57.8%

EXPENSES 614 YRCAA Grant Operations
614-33403105 Wood Stove Ed

Salaries					
614-1001	Salaries	\$ 3,956	\$ -	\$ 636	16.1%
614-2002	Benefits	\$ 1,462	\$ -	\$ 223	15.3%
614-1003	Overtime	\$ -	\$ -	\$ -	#DIV/0!
Subtotal, Salaries		\$ 5,418	\$ -	\$ 859	15.9%

Supplies

614-3101	Office Supplies	\$ -	\$ -	\$ -	#DIV/0!
Subtotal, Supplies		\$ -	\$ -	\$ -	#DIV/0!

FY 2017 Monthly BVA

January 2017 Report Date: February 9, 2017		Budget	Actual Current	Actual Year to Date	Year to Date % of Budget
Services					
614-4139	Professional Services	\$ -	\$ -	\$ -	#DIV/0!
614-4202	Postage	\$ -	\$ -	\$ -	#DIV/0!
<i>Subtotal, Services</i>		<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>#DIV/0!</u>
<i>Subtotal, Woodstove Grant Expenses</i>		\$ 5,418	\$ -	\$ 859	15.9%
614-33403108 PM2.5					
Salaries					
614-1001	Salaries	\$ 15,367	\$ 916	\$ 6,826	44.4%
614-2002	Benefits	\$ 5,683	\$ 322	\$ 2,050	36.1%
614-1003	Overtime	\$ -	\$ -	\$ -	#DIV/0!
<i>Subtotal, Salaries</i>		<u>\$ 21,050</u>	<u>\$ 1,238</u>	<u>\$ 9,224</u>	<u>43.8%</u>
Supplies					
614-3101	Office Supplies	\$ -	\$ -	\$ -	#DIV/0!
<i>Subtotal, Supplies</i>		<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>#DIV/0!</u>
Services					
614-4101	Professional Services	\$ -	\$ -	\$ -	#DIV/0!
<i>Subtotal, Services</i>		<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>#DIV/0!</u>
Capital Out-Lay & Fixed Assets					
614-6401	Capital Out-Lay/Fixed Assets	\$ -	\$ -	\$ -	#DIV/0!
<i>Subtotal, PM 2.5 Grant Expenses</i>		<u>\$ 21,050</u>	<u>\$ 1,238</u>	<u>\$ 9,224</u>	<u>43.8%</u>
614-33403107 Woodstove Change-out					
Salaries					
614-1001	Salaries	\$ 11,357	\$ 493	\$ 10,596	93.3%
614-2002	Benefits	\$ 4,201	\$ 173	\$ 3,114	74.1%
614-1003	Overtime	\$ -	\$ -	\$ -	#DIV/0!
<i>Subtotal, Salaries</i>		<u>\$ 15,558</u>	<u>\$ 666</u>	<u>\$ 14,320</u>	<u>92.0%</u>
Supplies					
614-3101	Office Supplies	\$ -	\$ -	\$ 43	#DIV/0!
<i>Subtotal, Supplies</i>		<u>\$ -</u>	<u>\$ -</u>	<u>\$ 43</u>	<u>#DIV/0!</u>
Services					
614-4101	Professional Services	\$ 123,607	\$ 12,200	\$ 55,051	44.5%
<i>Subtotal, Services</i>		<u>\$ 123,607</u>	<u>\$ 12,200</u>	<u>\$ 55,051</u>	<u>44.5%</u>
Capital Out-Lay & Fixed Assets					
614-6401	Capital Out-Lay/Fixed Assets	\$ -	\$ -	\$ -	#DIV/0!
<i>Subtotal, Woodstove Change-out Grant Expenses</i>		<u>\$ 139,165</u>	<u>\$ 12,866</u>	<u>\$ 69,413</u>	<u>49.9%</u>
<i>Total, Grant Operations Expenses</i>		<u>\$ 165,633</u>	<u>\$ 14,105</u>	<u>\$ 79,496</u>	<u>48.0%</u>
EXPENSES 141 Enterprise Operations					
Salaries					
141-1001	Salaries	\$ 12,776	\$ 486	\$ 6,209	48.6%
141-2002	Benefits	\$ 4,722	\$ 171	\$ 2,103	44.5%
141-1003	Overtime	\$ -	\$ -	\$ -	#DIV/0!
<i>Subtotal, Salaries</i>		<u>\$ 17,498</u>	<u>\$ 657</u>	<u>\$ 8,391</u>	<u>48.0%</u>

FY 2017 Monthly BVA

January 2017				
Report Date: February 9, 2017	Budget	Actual Current	Actual Year to Date	Year to Date % of Budget

Supplies

141-3101	Office Supplies	\$ 400	\$ -	\$ 4	1.1%
141-3201	Vehicles, Gas	\$ 1,700	\$ -	\$ 392	23.0%
141-3501	Small Tools/Equipment	\$ 200	\$ -	\$ -	0.0%
<i>Subtotal, Supplies</i>		<i>\$ 2,300</i>	<i>\$ -</i>	<i>\$ 396</i>	<i>17.2%</i>

Services

141-4101	Professional Services	\$ -	\$ -	\$ -	#DIV/0!
141-4202	Postage	\$ -	\$ -	\$ -	#DIV/0!
141-4301	Travel & Transportation	\$ 5,000	\$ -	\$ 3,396	67.9%
141-4501	Rents & Leases, Space	\$ 5,218	\$ 395	\$ 1,707	32.7%
141-4801	Maintenance, Motor Vehicles	\$ 2,100	\$ -	\$ 155	7.4%
141-4801	Maintenance, Equipment	\$ 505	\$ -	\$ -	0.0%
141-4901	Miscellaneous Services	\$ -	\$ -	\$ -	#DIV/0!
<i>Subtotal, Services</i>		<i>\$ 12,823</i>	<i>\$ 395</i>	<i>\$ 5,258</i>	<i>41.0%</i>

Capital Out-Lay & Fixed Assets

141-4500	Capital Out-Lay/Fixed Assets	\$ -	\$ -	\$ -	#DIV/0!
<i>Total Enterprise Operations Expenses</i>		<i>\$ 32,621</i>	<i>\$ 1,052</i>	<i>\$ 14,045</i>	<i>43.1%</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>\$ 1,188,441</i>	<i>\$ 154,776</i>	<i>\$ 769,562</i>	<i>64.8%</i>
<i>Total Expenses, Base, Grants & Enterprise</i>	<i>\$ 1,033,328</i>	<i>\$ 75,285</i>	<i>\$ 575,996</i>	<i>55.7%</i>
<i>Fund Balance</i>	<i>\$ 155,113</i>	<i>\$ 79,491</i>	<i>\$ 193,567</i>	
<i>Operating Reserves</i>	<i>\$ 30,113</i>			
<i>Estimated Available Fund Balance</i>	<i>\$ 125,000</i>			

FY 2017 Monthly BVA

January 2017 Report Date: February 9, 2017		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	\$ 156,353	\$ 59,269	\$ 65,158	41.7%
614-32190008	Synthetic Minor Sources	\$ 21,280	\$ 10,640	\$ 10,640	50.0%
614-32190006	Complex Sources	\$ 20,560	\$ 7,710	\$ 7,710	37.5%
614-32290001	Title V Sources	\$ 122,891	\$ -	\$ 124,949	101.7%
614-32190002	New Source Review	\$ 30,000	\$ 4,442	\$ 31,252	104.2%
<i>Subtotal, Stationary Source Permit Fees</i>		\$ 351,084	\$ 82,061	\$ 239,710	68.3%
Burn Permit Fees					
614-32290005	Residential Burn Permits	\$ 62,450	\$ -	\$ 29,376	47.0%
614-32290007	Agricultural Burn Permits	\$ 33,000	\$ 3,178	\$ 10,549	32.0%
614-32290011	Conditional Use Burn Permits	\$ 2,329	\$ -	\$ 218	9.4%
<i>Subtotal, Burn Permit Fees</i>		\$ 97,779	\$ 3,178	\$ 40,143	41.1%
Compliance Fees					
614-32190005	Asbestos Removal Fees	\$ 35,956	\$ 3,072	\$ 15,704	43.7%
614-32190009	Construction Dust Control Fees	\$ 8,608	\$ 482	\$ 4,648	54.0%
<i>Subtotal, Compliance Fees</i>		\$ 44,564	\$ 3,554	\$ 20,352	45.7%
<i>Subtotal, All Permit Fee Revenue</i>		\$ 493,427	\$ 88,793	\$ 300,205	60.8%
Base Grants					
614-33366001	EPA, Core Grant	\$ 123,501	\$ -	\$ 61,040	49.4%
614-33403101	DOE, Core Grant	\$ 82,384	\$ -	\$ 41,376	50.2%
<i>Subtotal, Base Grants</i>		\$ 205,885	\$ -	\$ 102,416	49.7%
Fines & Penalties					
614-35990001	Civil Penalty	\$ 2,500	\$ 9,314	\$ 39,546	
614-35990001	Other Fines	\$ -	\$ -	\$ -	
<i>Subtotal, Fines & Penalties</i>		\$ 2,500	\$ 9,314	\$ 39,546	
Supplemental Income					
614-33831001	Supplemental Income	\$ 99,988	\$ 40,251	\$ 79,544	79.6%
<i>Subtotal, Supplemental Income</i>		\$ 99,988	\$ 40,251	\$ 79,544	79.6%
Other Income					
614-36111001	Interest	\$ 1,801	\$ 306	\$ 1,883	104.6%
614-36990014	Miscellaneous Income	\$ 1,200	\$ -	\$ 13	1.1%
<i>Subtotal, Other Income</i>		\$ 3,001	\$ 306	\$ 1,896	63.2%
<i>Total YRCAA Base Operations Revenue</i>		\$ 804,801	\$ 138,664	\$ 523,606	65.1%
REVENUE 614 YRCAA Grant Operations					
614-33403105	Wood Stove Ed	\$ 5,418	\$ -	\$ 5,331	98.4%
614-33403108	PM 2.5	\$ 21,050	\$ -	\$ 10,525	50.0%
614-33403107	Woodstove Change-out	\$ 145,797	\$ 15,536	\$ 66,850	45.9%
<i>Total YRCAA Grant Operations Revenue</i>		\$ 172,265	\$ 15,536	\$ 82,706	48.0%
REVENUE Enterprise Operations					
614-34317001	VE Certification Fees	\$ 85,925	\$ 575	\$ 38,100	44.3%
614-34317002	Other Enterprise Revenue	\$ 450	\$ -	\$ 150	33.3%
<i>Subtotal, Enterprise Revenue</i>		\$ 86,375	\$ 575	\$ 38,250	44.3%
<i>Total Base, Grant and Enterprise Revenue</i>		\$ 1,063,441	\$ 154,776	\$ 644,562	60.6%

FY 2017 Monthly BVA

February 2017		Budget		Actual Current		Actual Year to Date		Year to Date % of Budget	
Report Date: March 9, 2017									
REVEUNE									
REVENUE 614 YRCAA Base Operations									
Stationary Source Permit Fees									
614-32190001	Minor Sources	\$	156,353	\$	80,181	\$	145,339		93.0%
614-32190008	Synthetic Minor Sources	\$	21,280	\$	10,640	\$	21,280		100.0%
614-32190006	Complex Sources	\$	20,560	\$	7,710	\$	15,420		75.0%
614-32290001	Title V Sources	\$	122,891	\$	-	\$	124,949		101.7%
614-32190002	New Source Review	\$	30,000	\$	2,177	\$	33,430		111.4%
Subtotal, Stationary Source Permit Fees		\$	351,084	\$	100,708	\$	340,418		97.0%
Burn Permit Fees									
614-32290005	Residential Burn Permits	\$	62,450	\$	-	\$	29,376		47.0%
614-32290007	Agricultural Burn Permits	\$	33,000	\$	5,634	\$	16,183		49.0%
614-32290011	Conditional Use Burn Permits	\$	2,329	\$	-	\$	218		9.4%
Subtotal, Burn Permit Fees		\$	97,779	\$	5,634	\$	45,777		46.8%
Compliance Fees									
614-32190005	Asbestos Removal Fees	\$	35,956	\$	2,766	\$	18,470		51.4%
614-32190009	Construction Dust Control Fees	\$	8,608	\$	482	\$	5,130		59.6%
Subtotal, Compliance Fees		\$	44,564	\$	3,248	\$	23,600		53.0%
Subtotal, All Permit Fee Revenue		\$	493,427	\$	109,590	\$	409,795		83.1%
Base Grants									
614-33366001	EPA, Core Grant	\$	123,501	\$	30,520	\$	91,559		74.1%
614-33403101	DOE, Core Grant	\$	82,384	\$	20,688	\$	62,064		75.3%
Subtotal, Base Grants		\$	205,885	\$	51,208	\$	153,623		74.6%
				\$	-	\$	-		
Fines & Penalties									
614-35990001	Civil Penalty	\$	2,500	\$	2,707	\$	42,253		
614-35990001	Other Fines	\$	-	\$	-	\$	-		
Subtotal, Fines & Penalties		\$	2,500	\$	2,707	\$	42,253		
Supplemental Income									
614-33831001	Supplemental Income	\$	99,988	\$	350	\$	79,894		79.9%
Subtotal, Supplemental Income		\$	99,988	\$	350	\$	79,894		79.9%
Other Income									
614-36111001	Interest	\$	1,801	\$	332	\$	2,215		123.0%
614-36990014	Miscellaneous Income	\$	1,200	\$	-	\$	13		1.1%
Subtotal, Other Income		\$	3,001	\$	332	\$	2,228		74.3%
Total YRCAA Base Operations Revenue		\$	804,801	\$	164,187	\$	687,793		85.5%
REVENUE 614 YRCAA Grant Operations									
614-33403105	Wood Stove Ed	\$	5,418	\$	-	\$	5,331		98.4%
614-33403108	PM 2.5	\$	21,050	\$	5,263	\$	15,788		75.0%
614-33403107	Woodstove Change-out	\$	145,797	\$	36	\$	66,886		45.9%
Total YRCAA Grant Operations Revenue		\$	172,265	\$	5,298	\$	88,005		51.1%
REVENUE Enterprise Operations									
614-34317001	VE Certification Fees	\$	85,925	\$	350	\$	38,450		44.7%
614-34317002	Other Enterprise Revenue	\$	450	\$	-	\$	150		33.3%
Subtotal , Enterprise Revenue		\$	86,375	\$	350	\$	38,600		44.7%
Total Base, Grant and Enterprise Revenue		\$	1,063,441	\$	169,836	\$	814,398		76.6%

FY 2017 Monthly BVA

February 2017	Budget	Actual Current	Actual Year to Date	Year to Date % of Budget
Report Date: March 9, 2017				

EXPENSES 614 YRCAA Base Operations

Salaries						
614-1001	Salaries	\$	507,693	\$	39,439	\$ 327,816 64.6%
614-2002	Benefits	\$	187,777	\$	13,857	\$ 115,179 61.3%
614-1003	Overtime	\$	-	\$	-	\$ - #DIV/0!
Subtotal, Salaries		\$	695,470	\$	53,296	\$ 442,995 63.7%

Supplies

614-3101	Office Supplies	\$	7,450	\$	117	\$ 3,338 44.8%
614-3101	Safety Equipment	\$	-	\$	-	\$ - #DIV/0!
614-3201	Vehicles, Gas	\$	3,325	\$	188	\$ 1,190 35.8%
614-3501	Small Tools/Equipment	\$	-	\$	310	\$ 310 #DIV/0!
614-3502	Computer Network	\$	10,466	\$	237	\$ 7,791 74.4%
Subtotal, Supplies		\$	21,241	\$	852	\$ 12,628 59.5%

Services

614-4101	Professional Services	\$	15,000	\$	10,394	\$ 30,010 200.1%
614-4101	Laboratory Analyses	\$	157	\$	-	\$ 40 25.5%
614-4125	Treasurer, Yakima County	\$	1,679	\$	44	\$ 997 59.4%
614-4201	Communications, Phones/Internet	\$	12,444	\$	1,424	\$ 8,812 70.8%
614-4202	Postage	\$	3,900	\$	586	\$ 1,846 47.3%
614-4301	Travel & Transportation	\$	3,650	\$	-	\$ 254 7.0%
614-4401	Public Education	\$	4,000	\$	-	\$ 1,444 36.1%
614-4401	Publications, Legal Notices	\$	526	\$	-	\$ - 0.0%
614-4501	Rents & Leases, Equipment	\$	1,982	\$	186	\$ 2,001 101.0%
614-4501	Rents & Leases, Space	\$	41,760	\$	3,480	\$ 27,840 66.7%
614-4601	Insurance	\$	13,398	\$	-	\$ 12,662 94.5%
614-4801	Maintenance, Motor Vehicles	\$	2,229	\$	80	\$ 2,383 106.9%
614-4801	Maintenance, Equipment	\$	1,853	\$	89	\$ 1,892 102.1%
614-4801	Maintenance, Computers	\$	150	\$	-	\$ 357 238.0%
614-4801	Maintenance, Building	\$	520	\$	839	\$ 1,435 275.9%
614-4901	Memberships	\$	230	\$	315	\$ 445 193.6%
614-4901	Training	\$	2,898	\$	-	\$ 2,702 93.2%
614-4901	Service Chgs & Interest	\$	4,600	\$	735	\$ 2,629 57.2%
614-4901	Miscellaneous Services	\$	2,600	\$	-	\$ 1,401 53.9%
614-4901	DOE Oversight Fees	\$	4,787	\$	-	\$ - 0.0%
Subtotal, Services		\$	118,363	\$	18,172	\$ 99,151 83.8%

Capital Out-Lay & Fixed Assets

614-6401	Capital Out-Lay/Fixed Assets	\$	-	\$	-	\$ - #DIV/0!
Total YRCAA Base Operations Expenses		\$	835,074	\$	72,319	\$ 554,774 66.4%

EXPENSES 614 YRCAA Grant Operations 614-33403105 Wood Stove Ed

Salaries						
614-1001	Salaries	\$	3,956	\$	-	\$ 636 16.1%
614-2002	Benefits	\$	1,462	\$	-	\$ 223 15.3%
614-1003	Overtime	\$	-	\$	-	\$ - #DIV/0!
Subtotal, Salaries		\$	5,418	\$	-	\$ 859 15.9%

Supplies

614-3101	Office Supplies	\$	-	\$	-	\$ - #DIV/0!
Subtotal, Supplies		\$	-	\$	-	\$ - #DIV/0!

FY 2017 Monthly BVA

February 2017		Budget	Actual Current	Actual Year to Date	Year to Date % of Budget
Report Date: March 9, 2017					
Services					
614-4139	Professional Services	\$ -	\$ -	\$ -	#DIV/0!
614-4202	Postage	\$ -	\$ -	\$ -	#DIV/0!
<i>Subtotal, Services</i>		<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>#DIV/0!</i>
<i>Subtotal, Woodstove Grant Expenses</i>		<i>\$ 5,418</i>	<i>\$ -</i>	<i>\$ 859</i>	<i>15.9%</i>
614-33403108 PM2.5					
Salaries					
614-1001	Salaries	\$ 15,367	\$ 804	\$ 7,630	49.7%
614-2002	Benefits	\$ 5,683	\$ 283	\$ 2,333	41.1%
614-1003	Overtime	\$ -	\$ -	\$ -	#DIV/0!
<i>Subtotal, Salaries</i>		<i>\$ 21,050</i>	<i>\$ 1,087</i>	<i>\$ 10,311</i>	<i>49.0%</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	\$ -	\$ -	\$ -	#DIV/0!
<i>Subtotal, PM 2.5 Grant Expenses</i>		<i>\$ 21,050</i>	<i>\$ 1,087</i>	<i>\$ 10,311</i>	<i>49.0%</i>
614-33403107 Woodstove Change-out					
Salaries					
614-1001	Salaries	\$ 11,357	\$ 1,533	\$ 12,130	106.8%
614-2002	Benefits	\$ 4,201	\$ 539	\$ 3,653	86.9%
614-1003	Overtime	\$ -	\$ -	\$ -	#DIV/0!
<i>Subtotal, Salaries</i>		<i>\$ 15,558</i>	<i>\$ 2,072</i>	<i>\$ 16,391</i>	<i>105.4%</i>
Supplies					
614-3101	Office Supplies	\$ -	\$ -	\$ 43	#DIV/0!
<i>Subtotal, Supplies</i>		<i>\$ -</i>	<i>\$ -</i>	<i>\$ 43</i>	<i>#DIV/0!</i>
Services					
614-4101	Professional Services	\$ 123,607	\$ 29,202	\$ 84,253	68.2%
<i>Subtotal, Services</i>		<i>\$ 123,607</i>	<i>\$ 29,202</i>	<i>\$ 84,253</i>	<i>68.2%</i>
Capital Out-Lay & Fixed Assets					
614-6401	Capital Out-Lay/Fixed Assets	\$ -	\$ -	\$ -	#DIV/0!
<i>Subtotal, Woodstove Change-out Grant Expenses</i>		<i>\$ 139,165</i>	<i>\$ 31,274</i>	<i>\$ 100,687</i>	<i>72.4%</i>
<i>Total, Grant Operations Expenses</i>		<i>\$ 165,633</i>	<i>\$ 32,361</i>	<i>\$ 111,857</i>	<i>67.5%</i>
EXPENSES 141 Enterprise Operations					
Salaries					
141-1001	Salaries	\$ 12,776	\$ -	\$ 6,209	48.6%
141-2002	Benefits	\$ 4,722	\$ -	\$ 2,103	44.5%
141-1003	Overtime	\$ -	\$ -	\$ -	#DIV/0!
<i>Subtotal, Salaries</i>		<i>\$ 17,498</i>	<i>\$ -</i>	<i>\$ 8,391</i>	<i>48.0%</i>

FY 2017 Monthly BVA

February 2017	Budget	Actual Current	Actual Year to Date	Year to Date % of Budget
Report Date: March 9, 2017				

Supplies

141-3101	Office Supplies	\$ 400	\$ -	\$ 4	1.1%
141-3201	Vehicles, Gas	\$ 1,700	\$ -	\$ 392	23.0%
141-3501	Small Tools/Equipment	\$ 200	\$ -	\$ -	0.0%
Subtotal , Supplies		\$ 2,300	\$ -	\$ 396	17.2%

Services

141-4101	Professional Services	\$ -	\$ -	\$ -	#DIV/0!
141-4202	Postage	\$ -	\$ -	\$ -	#DIV/0!
141-4301	Travel & Transportation	\$ 5,000	\$ -	\$ 3,396	67.9%
141-4501	Rents & Leases, Space	\$ 5,218	\$ 1,209	\$ 2,916	55.9%
141-4801	Maintenance, Motor Vehicles	\$ 2,100	\$ -	\$ 155	7.4%
141-4801	Maintenance, Equipment	\$ 505	\$ -	\$ -	0.0%
141-4901	Miscellaneous Services	\$ -	\$ -	\$ -	#DIV/0!
Subtotal, Services		\$ 12,823	\$ 1,209	\$ 6,467	50.4%

Capital Out-Lay & Fixed Assets

141-4500	Capital Out-Lay/Fixed Assets	\$ -	\$ -	\$ -	#DIV/0!
Total Enterprise Operations Expenses		\$ 32,621	\$ 1,209	\$ 15,254	46.8%

Summary of Revenue vs Expenses:

Prior-Year Carry Over Funds	\$ 125,000	\$ -	\$ 125,000	
Total Revenue, Base, Grants & Enterprise	\$ 1,188,441	\$ 169,836	\$ 939,398	79.0%
Total Expenses, Base, Grants & Enterprise	\$ 1,033,328	\$ 105,889	\$ 681,885	66.0%
Fund Balance	\$ 155,113	\$ 63,947	\$ 257,513	
Operating Reserves	\$ 30,113			
Estimated Available Fund Balance	\$ 125,000			



Executive Memorandum

Date of Release: March 2, 2017
Date of Consideration: March 9, 2017
To: Board of Directors
From: Quatandra Jarvis, Clerk of the Board
Subject: 2017 Board Officers

ISSUE:
Elect the 2017 Board of Director's Chair and Vice-Chair

RECOMMENDATION(S):
Staff asks the Board to open nominations and elect the 2017 Board Officers

DISCUSSION:
The term for Chair and Vice-Chair are one year. The Vice-Chair will serve in the absence of the Chair.

AGENDA ITEM NO. 9



Executive Memorandum

Date of Release: March 2, 2017
Date of Consideration: March 9, 2017
To: Board of Directors
From: Quatandra Jarvis, Clerk of the Board
Subject: Certificate of Appointment to the Board of Directors

ISSUE:

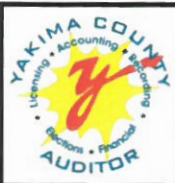
- The City Selection Committee appointment process for selecting Small City Representative began back in November, 2016;
- A legal notice was published in the Yakima Herald on November 17, 2016 and was sent to the mayors and mayors-elect on November 16, 2017; and
- Results of the vote were received January 30, 2017, appointing Mayor Norm Childress to serve a four-year term commencing April 1, 2017.

RECOMMENDATION(S):

None

DISCUSSION:

None



Certificate of Appointment to the Board of Directors

City Selection Committee
Yakima Regional Clean Air Agency

January 2017

This hereby certifies that after conducting the City Selection Committee nomination and mail balloting process pursuant to RCW 70.94.120, a quorum of the City Selection Committee was received.

The results of said balloting for the position representative of small cities and towns are as follows:

Norm Childress - 6 votes

Dan Olson - 2 votes

After receiving a majority of votes of the quorum, Norm Childress is hereby appointed to serve a four-year term commencing April 1, 2017.

Dated this 30th day of January, 2017.

Charles R. Ross
Yakima County Auditor and
Recording Officer, City Selection Committee



Executive Memorandum

Date of Release: March 2, 2017
Date of Consideration: March 9, 2017
To: Board of Directors
From: Office of the Engineering, Compliance and Planning Division
Subject: January and February Engineering and Planning Division Report

Issue:
Monthly activities report to the Board of Directors of YRCAA.

Recommendation(s):
Accept and File.

Discussion:
The following summarizes some of the activities for the months of January and February including some additional related information:

Engineering and Planning:

- February 15, 2016 was the deadline for the annual registered sources with the agency. We have registered 317 sources by the end of February.
- Attended industrial source test.
- Had a state audit for the Title V and Registration for FY 2015 and 2016.
- Issued 4 New Source Review (NSR) Orders of Approval.
- Enter data to TOPs report to Environmental Protection Agency (EPA).
- Reviewed/responded to 34 SEPA projects.
- Issued 27 Agricultural burn permits.
- Had several technical assistance meetings with industry.
- Worked on the daily weather forecasts for the burn status and agricultural allocation.
- Four burn bans (Stage 1 and 2) were called for the month of January lasted for 25 days.
- Two burn bans (Stage 1 and 2) were called for the month of February lasted for 11 days.
- We have a total of nine exceedance during the month of January (7 exceedances) and February (2 exceedances) as shown in the attached graphs.

Compliance:

- Collected and shipped for analysis approximately 30 Air Monitoring Samples and completed 10 Quality Control checks on 5 Air Monitors. Investigated 65 Complaints, issued 27 Notices of Violation (NOV) and 5 Notices of Penalty (NOP) for previously issued NOVs. In addition, the Division reviewed and processed 39 Notifications of Demolition / Renovation (NODR), 3 Dust Control Plan, and inspected 16 industrial.

AGENDA ITEM NO. 11



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

<u>Type of Complaint</u>	<u># of Complaints</u>	<u># of NOV's</u>	<u># of AODs</u>
Residential Burning	7	2	2
Agricultural Burning	2	1	0
Other Burning	53-SFBD	22	4-SFBD*
Fugitive Dust	0	0	0
Agricultural Dust	0	0	0
Agricultural Odor	1	0	0
Surface Coating	1	1	0
Odor	0	0	0
Asbestos	1	0	0
Other	0	NSR**	0
<u>TOTALS</u>	<u>65</u>	<u>27</u>	<u>6</u>

* SFBD-Solid Fuel Burning Device

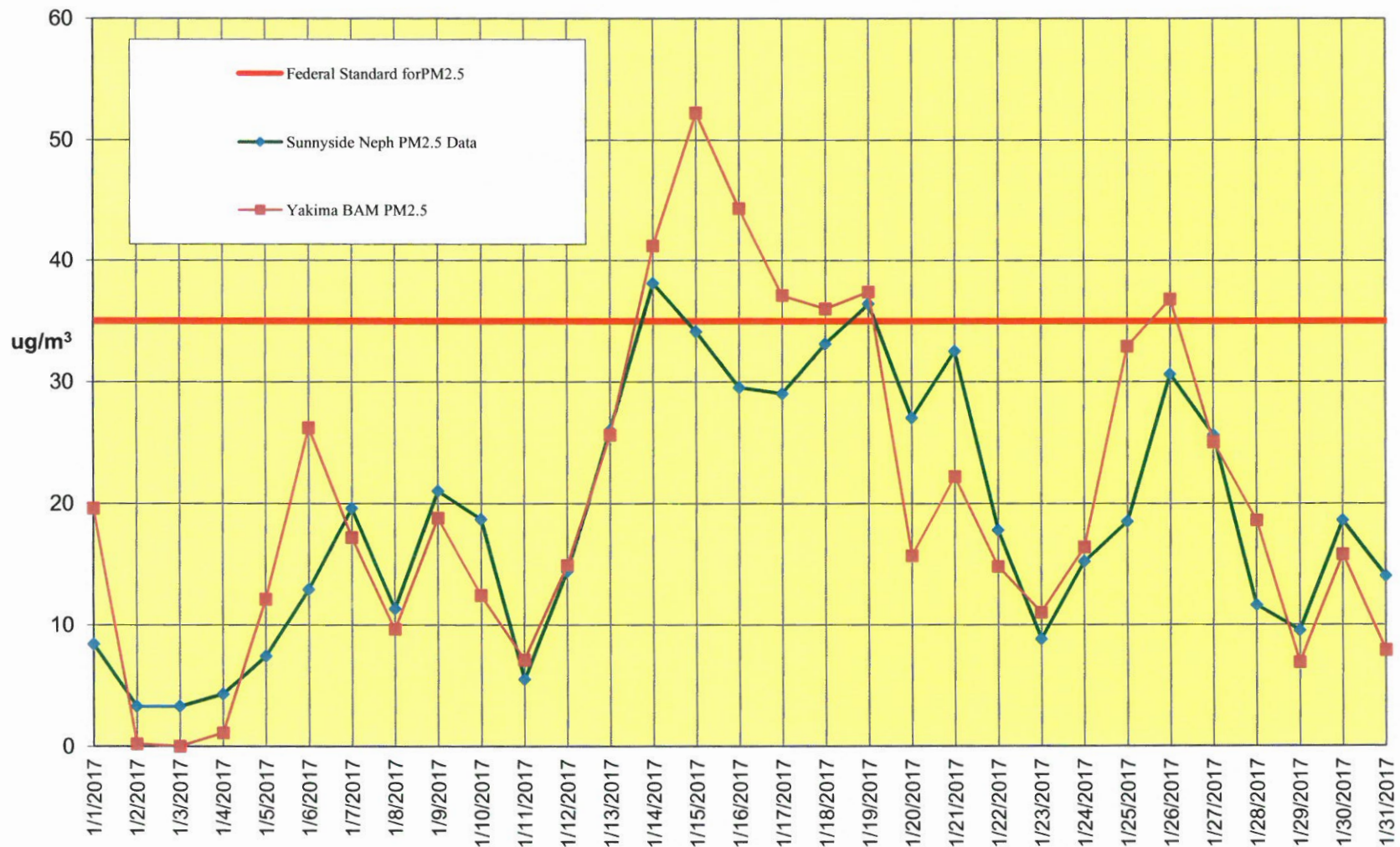
** NSR- New Source Review

Attachments:

- ✓ *PM_{2.5} Monitor Data for the month of January and February, 2017 and the annual graphs.*
- ✓ *PM₁₀ Monitor Data for the month of January and February, 2017.*

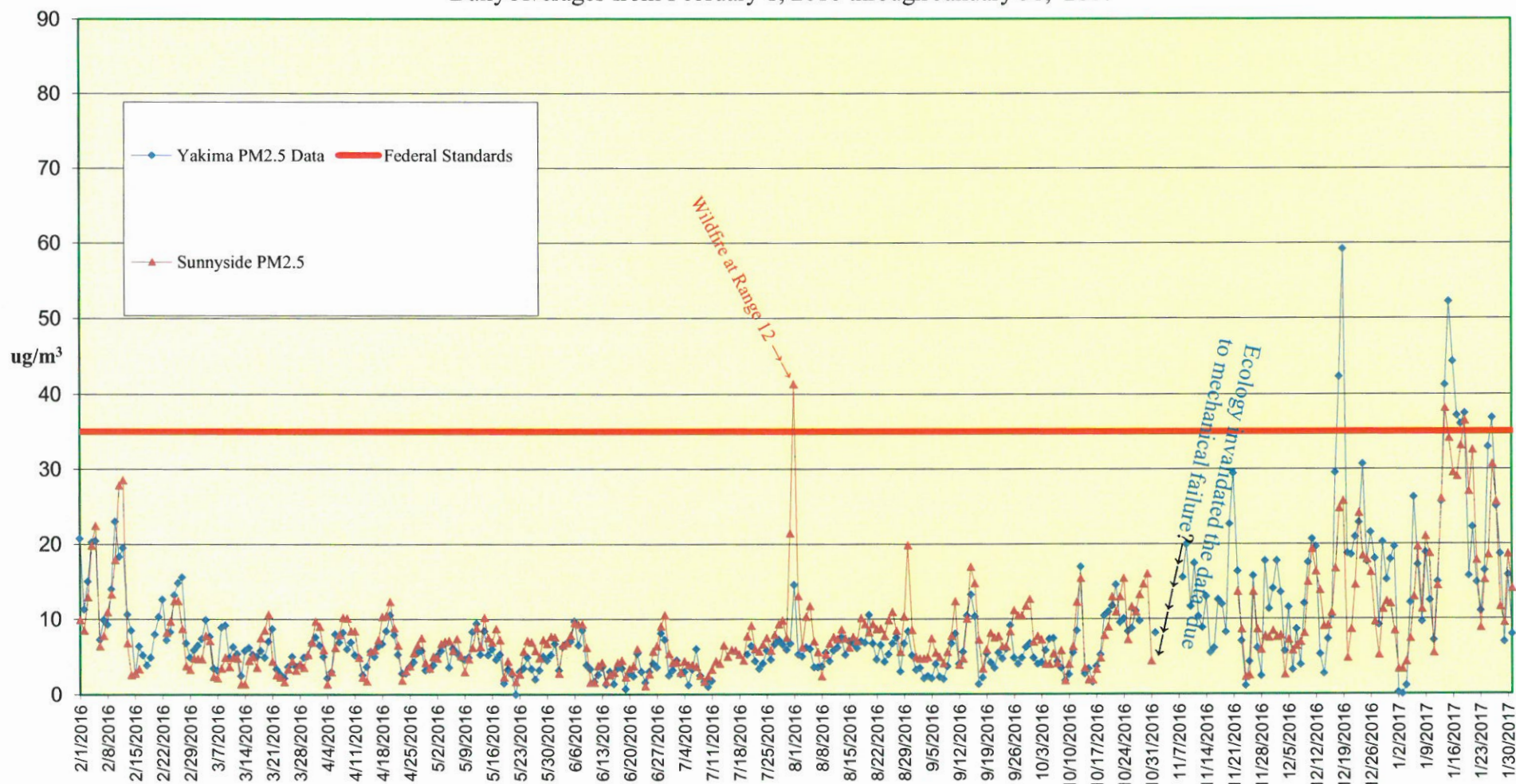
PM_{2.5} BAM_{2.5} Data for Yakima; Neph PM_{2.5} Data for Sunnyside

Daily Averages Value from January 1, 2017 through January 31, 2017



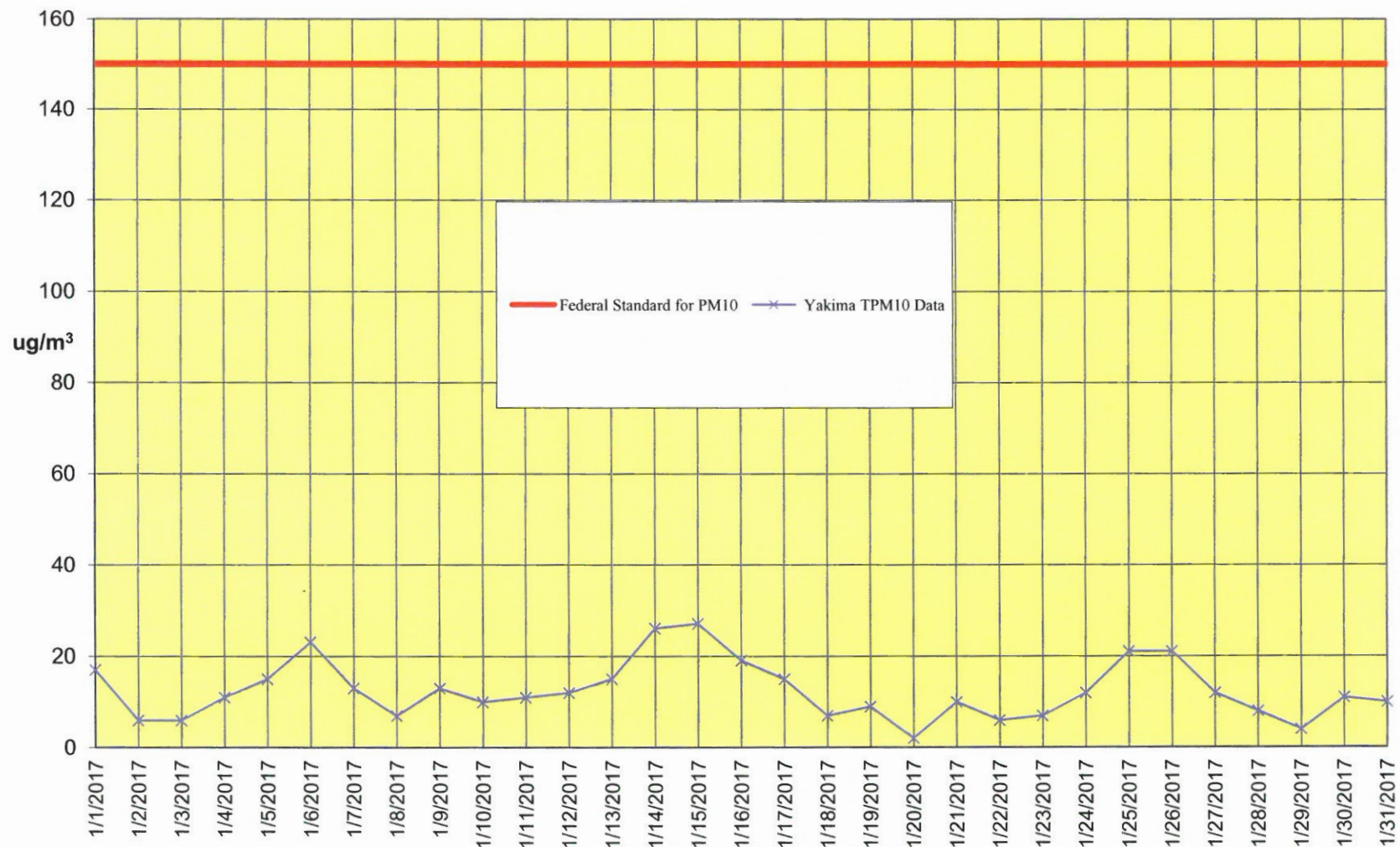
PM_{2.5} FEM/BAM_{2.5}(starting September 15, 2015) Annual Air Monitoring Data, Cities of Yakima and Sunnyside

Daily Averages from February 1, 2016 through January 31, 2017

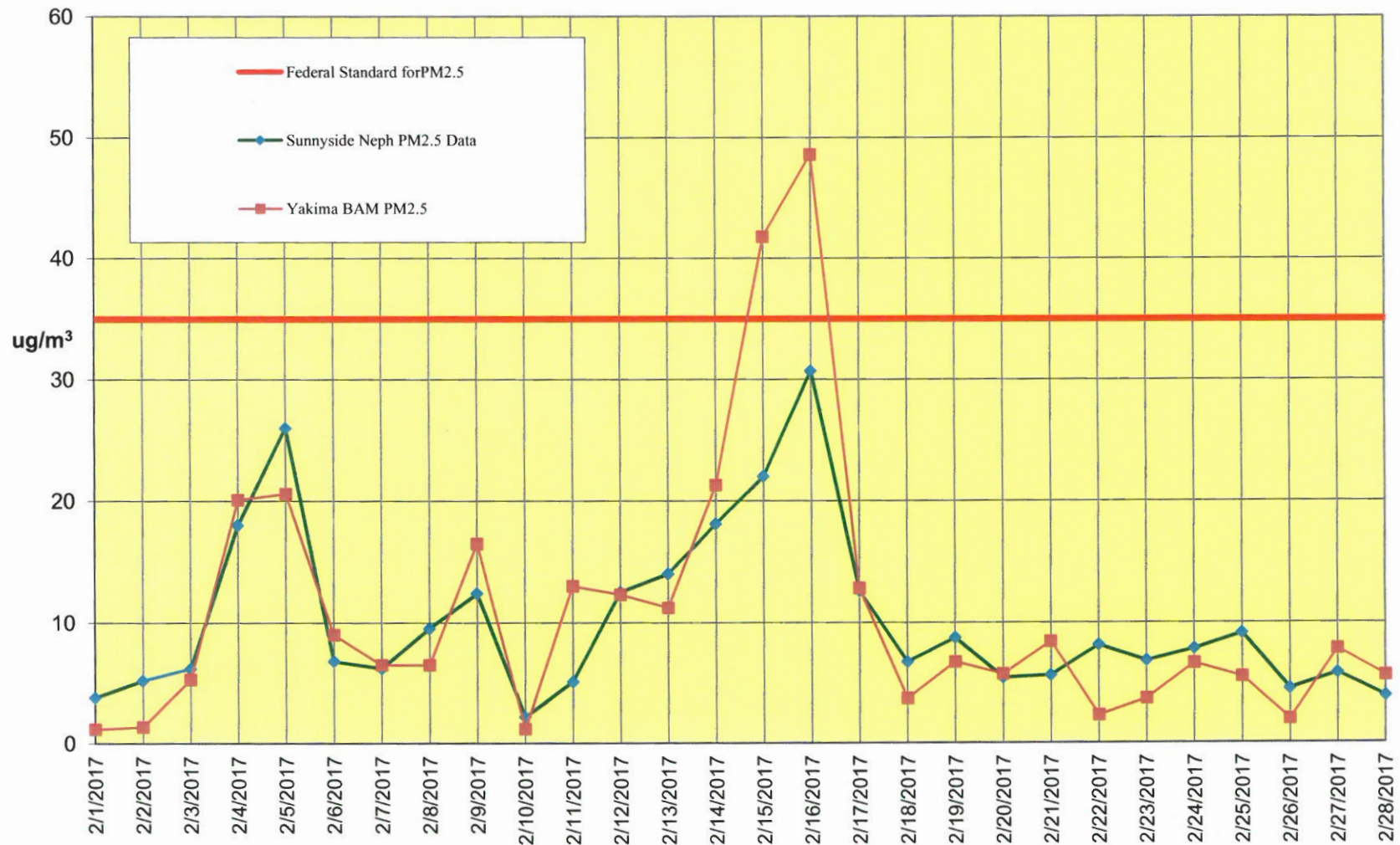


TPM₁₀ Data for Yakima Site

Daily Averages Value from January 1, 2017 through January 31, 2017

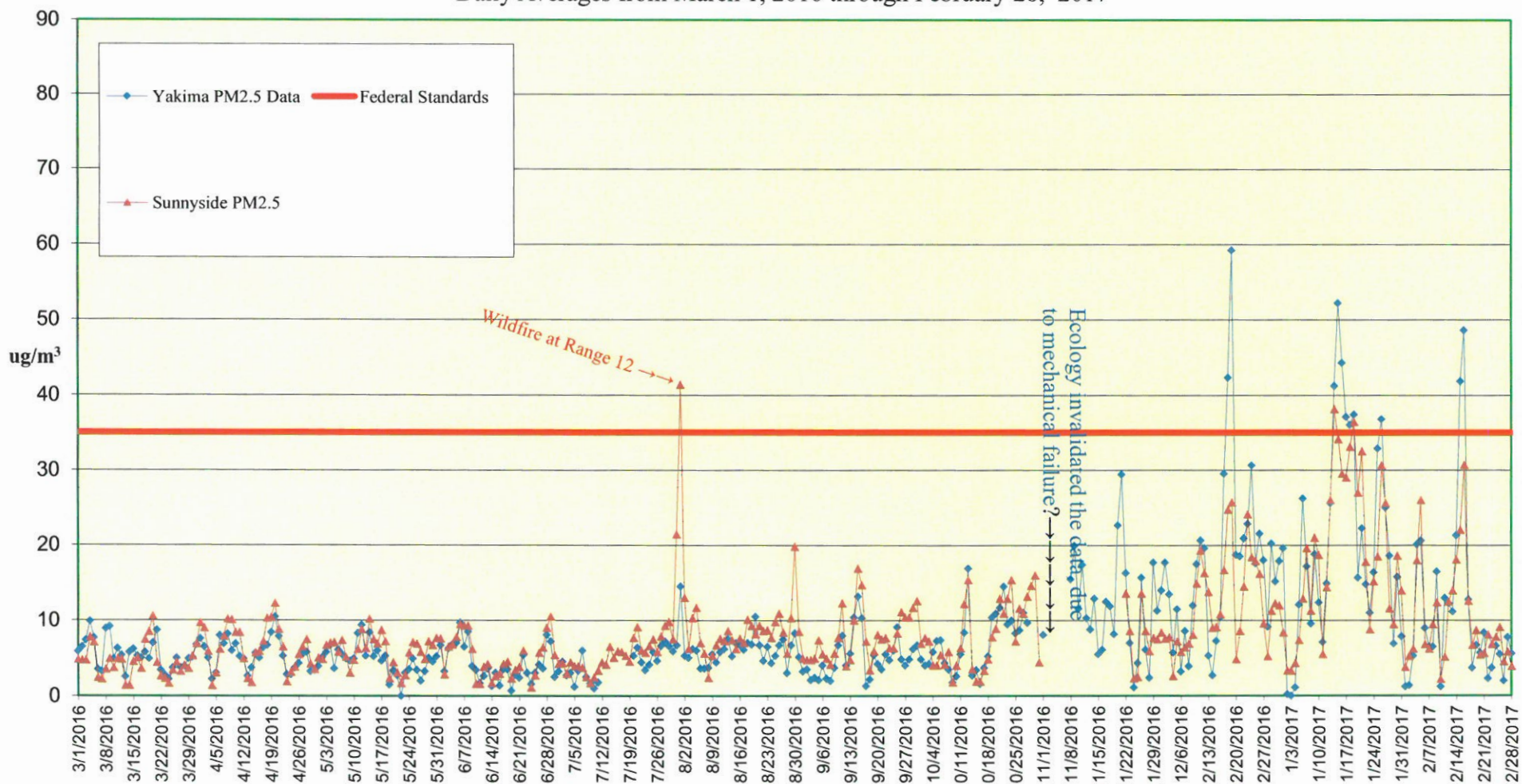


PM_{2.5} BAM_{2.5} Data for Yakima; Neph PM_{2.5} Data for Sunnyside
Daily Averages Value from February 1, 2017 through February 28, 2017



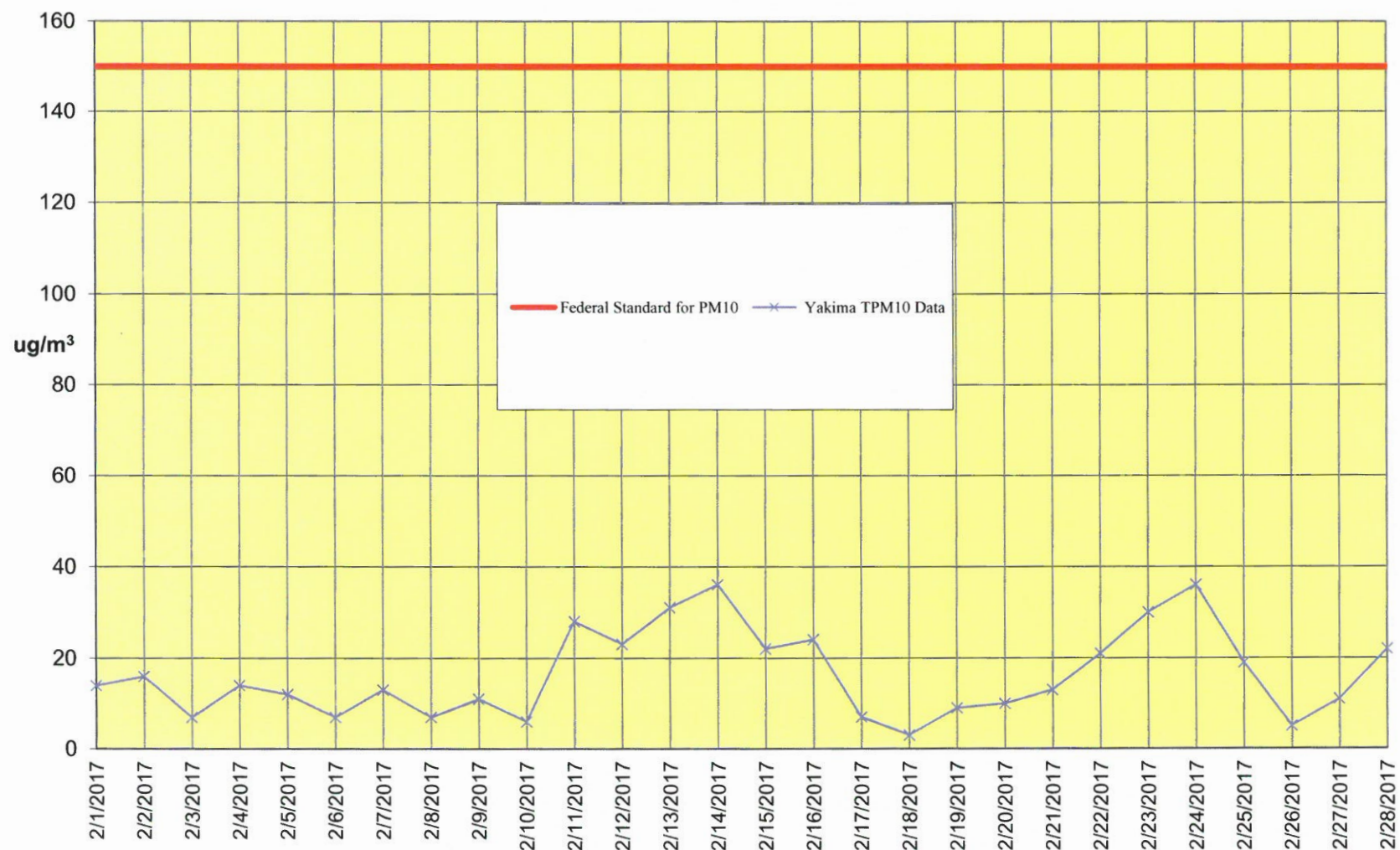
PM_{2.5} FEM/BAM_{2.5}(starting September 15, 2015) Annual Air Monitoring Data, Cities of Yakima and Sunnyside

Daily Averages from March 1, 2016 through February 28, 2017



TPM₁₀ Data for Yakima Site

Daily Averages Value from February 1, 2017 through February 28, 2017





DEPARTMENT OF
ECOLOGY
State of Washington

Air Monitoring Data Quality Assessment Report
3rd Quarter 2016

Prepared by

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Air Quality Program

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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

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 that are needed in order to determine compliance with the National Ambient Air Quality Standards (NAAQS), that checks are included to assess data quality, and corrective actions are in place to improve quality systems when needed. Washington Network operations are carried out in accordance with these regulations for its Federal Reference Method (FRM) and 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 3rd Quarter 2016 describes the quality of the data collected from July 1 through September 30, 2016.

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 specify 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 through the use of 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 bias 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.

Sampling Methods

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 FRM or FEM.

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 caution when using non FRM/FEM data to make decisions as there can be a greater degree of error inherent in the data.

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 (or wiggle) in the precision is 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. 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 nearing 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 collected compared to what was expected. The percentage of valid data is the measure of data (averaged in hours) obtained from a monitoring instrument (that meets the MQOs) calculated against the

total number of hours in the calendar quarter and may include specific months or number of months in the year that must include valid data to determine if the DQOs were met. The AQP data completeness goal is that at least 80 percent of the expected data be collected each calendar quarter.

Loss of data occurs on occasion and may be a result of a calibration error, malfunction, power loss, telemetry communications, or operator error.

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.

Ozone

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	1.19	1.94	100
Cheeka Peak	530090013	1.88	± 1.36	97
Cheney	530630001	1.00	± 0.80	85
Custer	530730005	0.73	± 0.67	100
Enumclaw	530330023	2.32	- 2.06	88
Greenbluff	530630046	1.39	± 1.07	99
Issaquah	530330010	1.37	± 1.12	100
Kennewick, S. Clodfelter	530050003	3.48	± 3.04	82
Mt. Rainier, JVC	530530012	1.48	1.90	96
North Bend	530330017	0.91	- 1.06	98
Seattle, Beacon Hill (BH)	530330080	0.67	- 2.65	92
Vancouver	530110011	2.02	- 1.71	90
Yelm	530670005	1.24	- 2.00	97

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 between the actual ozone concentrations (generated by the QA personnel equipment) is compared 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 ± 7 percent for Levels 3–6 and within ± 1.5 ppb or ± 15 percent for Levels 1 and 2. QA staff was not able to perform an evaluation at Cheney due to instrument malfunction at the end of the ozone seasonal monitoring (May–September).

Table 2. Performance Evaluation Results for Ozone Analyzers in Percent Difference from Assessment Concentration

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	*	1.33	*	*	2.78	3.10
Cheeka Peak	*	1.33	*	*	5.47	6.30
Cheney	†	†	†	†	†	†
Custer	*	- 6.25	*	*	0.00	0.87
Enumclaw	*	- 4.00	*		0.56	1.10
Greenbluff	*	- 0.67	*	*	0.26	- 0.60
Issaquah	*	4.67	*	*	1.25	0.90
Kennewick, S. Clodfelter	*	- 4.38	*	*	0.93	- 2.40
Mt. Rainier, JVC	*	2.67	*	*	2.27	2.20
North Bend	*	0.67	*	*	0.28	0.60
Seattle, BH	†	†	†	†	†	†
Vancouver	*	1.33	*	*	3.60	4.30
Yelm	*	11.33	*	*	2.33	2.20
* No evaluation performed at this level.						
† No evaluation performed during this quarter.						

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	6.67	± 6.11	76*†
Seattle, BH (NC)	530330080	1.30	2.04	98
Seattle, 10 th & Weller (near-road)	530330030	4.17	- 5.07	61*
* QC check failures. The instrument has been recalibrated.				
† Power outage events.				

Annual Performance Evaluation 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 between the actual CO concentrations (generated by the QA personnel equipment) is compared 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 Spokane monitor is challenged at higher levels (Levels 5–8) due to the type of instrument being used.

The MQO for performance evaluation results is that the difference be within ± 10 percent for Levels 3–8 and within ± 30 ppb or ± 15 percent for Levels 1 and 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.								

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	2.40	2.58	97
Cheeka Peak	530090013	2.67	± 2.20	93
Seattle, BH	530330080	2.07	± 1.76	98

Annual Performance Evaluation Audits 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 between the actual SO₂ concentrations (generated by the QA personnel equipment) is compared 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 ± 10 percent for Levels 4–6, within ± 15 for Level 3, 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	*	- 6.67	*	2.00	*
Cheeka Peak	†	†	†	†	†	†
Seattle, BH	†	†	†	†	†	†
* No evaluation performed at this level. † No evaluation performed during this quarter.						

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
Seattle, 10th & Weller	530330030	1.06	5.54	93
Seattle, BH	530330080	5.58	6.21	97
Tacoma, S 36 th St.	530530024	6.37	± 5.58	98

Performance Evaluations Audits 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 between the actual NO₂ concentrations (generated by the QA personnel equipment) is compared 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
Seattle, 10th & Weller, near-road	*	*	*	*	*	*	*
Seattle, BH	*	*	*	*	*	*	*
Tacoma, S 36th St.	*	*	*	*	*	*	*
* No evaluation performed during this quarter.							

Nitric Oxide (NO)

The MQO for the measurement of NO is the relative precision (CV%) and bias be within ± 15 percent.

Table 9. DQI Results for NO Analyzers in Percentage

Location	AQS Number	CV%	Bias	% Valid Data
Cheeka Peak (NC)	530090013	1.83	1.05	83
Seattle, BH (NC)	530330080	1.44	1.85	97

Performance Evaluations for NO

The MQO for performance evaluation results is that the difference be within ± 10 percent for Levels 6–7, within ± 15 percent for Levels 3–5, and ± 1.5 ppb or ± 15 percent for Levels 1–2.

Table 10. Performance Evaluation Results for NO 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

Bias Estimate (Bias)

The bias estimate is the systematic difference of the expected flows and the measured flows over time. 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. A one-point flow rate verification (QC check) of the instrument is performed, at a minimum, 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. The difference between the two is calculated (in percentage) to determine how close to “true” the indicated flow is. 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 “ $\pm$ ” 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.

One-Point Flow QCs 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.

Semi-Annual Flow Rate Audits (Audit % D)

In addition to monthly QC checks, an independent flow rate audit is performed by QA personnel on a semi-annual basis. 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.

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. The bias for BAM at Toppenish did not meet the MQO due to heavier dependence on the difference between assessed and indicated flow rates in the two quality checks. Typically, at least three quality checks are performed quarterly.

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) established 7/1/2016	530570011	0.44	± 1.57	1.21	98
Bellingham (1405F TEOM)	530730015	1.27	2.00	- 1.32	98
Bremerton (8500 TEOM)	530350007	- 0.04	± 0.87	0.00	97
Darrington (8500 TEOM)	530610020	1.83	1.15	*	89
Ellensburg (1405F TEOM) discontinued	530370002	- 0.33	- 0.33	- 0.33	98
Ellensburg (BAM 1020) established 8/17/2016	530370002	- 1.18	- 1.18	1.21	92
Kent (8500 TEOM)	530332004	0.73	1.33	0.33	98
Lynnwood (8500 TEOM)	530610005	- 0.49	± 1.04	- 2.92	99
Marysville (8500 TEOM)	530611007	0.05	± 0.70	- 2.91	92
Marysville (collocated) (8500 TEOM)	530611007	0.67	1.10	- 2.60	99
Seattle, 10th & Weller near-road (8500 TEOM)	530330030	0.00	± 0.39	*	99
Seattle, BH (NC) (8500 TEOM)	530330080	- 1.64	- 2.18	0.67	97

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

Location	AQS Number	Average % D	Bias	Audit % D	% Valid Data
Seattle, Duwamish (8500 TEOM)	530330057	- 0.71	± 1.38	- 1.96	99
Spokane, Augusta (BAM 1020)	530630021	0.82	± 3.21	*	100
Tacoma, South 36th St. (BAM 1020)	530530024	0.21	± 1.62	- 0.59	99
Tacoma, South L St. (8500 TEOM)	530530029	- 0.16	± 0.59	- 1.64	99
Toppenish (BAM 1020) established 8/1/2016	530770015	- 0.88	± 6.45	*	96
Vancouver 84th Ave. (BAM 1020)	530110024	- 0.12	± 0.67	- 1.18	70 ^{†‡}
Wenatchee, 5th St. (1405F TEOM) discontinued	530070011	*	*	*	92
Wenatchee, 5th St. (BAM 1020) established 7/17/2016	530070011	0.64	± 3.91	- 2.34	96
Yakima S. 4th Ave. (BAM 1020)	530770009	- 0.15	± 0.50	0.00	92

* No evaluation performed during this quarter.

† Failed QC checks. The instrument has been recalibrated.

‡ Performed 72-hr zero test on the new BAM and replaced the old one for annual service.

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
Colville, E. 1st St.	530650005	- 0.98	± 2.94	*	100
Kennewick	530050002	1.03	± 2.57	*	100
Spokane, Augusta	530630021	0.24	± 0.95	*	99
Yakima S. 4th Ave.	530770009	0.84	± 4.51	- 3.00	100

* No evaluation performed during this quarter.

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 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.

One-Point Flow Rate Bias Estimate (Signed 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.

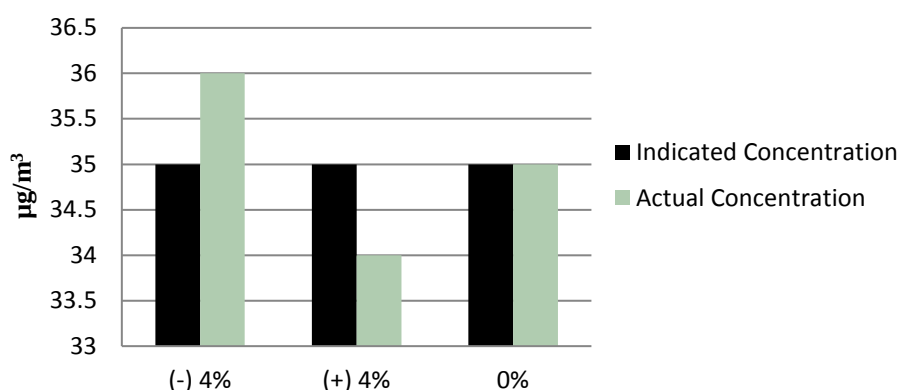


Figure 1. Graph illustrating how flows impact actual concentrations

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.

One-Point QC Precision Estimate for Particulate Pollutants (% 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.

Semi-Annual Flow Rate Audits (Audit % D)

In addition to monthly QC checks, an independent flow rate check is performed by QA personnel on a semi-annual basis. 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.

Fine Particulate Matter (PM_{2.5} FRM - Daily)

The MQO for the measurement of PM_{2.5} using FRM method 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 FRM PM_{2.5} Samplers in Percentage

Location	AQS Number	Average % D	Bias	Audit % D	% Valid Data
Seattle, BH	530330080	- 2.41	- 4.10	- 1.01	97
Tacoma, South L St.	530530029	- 0.80	- 1.02	- 3.14	96
Tacoma, South L St. (collocated)	530530029	- 1.26	- 1.80	- 2.34	100
Yakima S. 4th Ave.	530770009	1.88	3.90	- 0.83	87

Precision Estimate for Manual and Continuous Collocated Samples (PM_{2.5}, PM₁₀)

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 for the FRM and TEOM. 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	Method-Instrument	AQS Number	CV%
Marysville	181-TEOM 8500	530611007	10.68
Tacoma, South L St.	145-FRM PM _{2.5}	530530029	20.75
Seattle, BH	127-PM ₁₀ Coarse	530330080	*
* No collocation for monitoring method.			

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, an independent flow rate audit is performed by QA personnel on a semi-annual basis. 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	- 4.15	- 5.44	- 4.62	- 2.33	- 2.1
Tacoma, South L St.	530530029	2.84	2.57			2.0
Yakima S. 4th Ave.	530770009	- 2.94	- 1.15			1.0
* No evaluation performed during this quarter.						

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
Cheeka Peak	530090013	99	99	99	99	99
Colville, E 1st St. Established on 5/20/16	530650005	26*	26*	100	---	---
Enumclaw	530330023	98	98	97	---	---
Kennewick	530050002	100	100	100	---	---
North Bend	530330017	100	100	100	---	---
Omak	530470013	99	99	100	---	---
Seattle, 10th & Weller	530330030	100	100	99	---	---
Seattle, BH	530330080	100	100	100	100	100

Table 16. Data Capture for Meteorological Parameters

Location	AQS Number	WS	WD	AT	PA	RH
Spokane, Augusta	530630021	100	100	100	---	---
Tacoma, 36th St.	530530024	100	100	100	---	---
Tacoma, Tower Dr.	530531016	100	100	100	---	---
Toppenish	530770015	96	96	99	---	---
Vancouver, Blairmont	530110011	94	94	95	---	---
Wenatchee	530070011	100	100	100	---	---
White Swan	530770016	100	100	100	---	---

* Anemometer malfunctions. It was corrected in September 2016.

Washington Air Quality Advisory Data

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	530330037	100
Cheeka Peak	530090013	99
Chehalis	530410004	100
Chelan established 9/1/2016	530070007	99
Clarkston	530030004	100
Colville, E 1st St.	530650005	41*
Dayton	530130002	66*
East Wenatchee	530170018	92
Ellensburg	530370002	100
Kennewick	530050002	72*
Lacey	530670013	95

Table 17. Completeness Results for Nephelometers

Location	AQS Number	% Valid Data
LaCrosse	530750005	100
Leavenworth	530070010	83
Longview	530150015	100
Mesa	530210002	100
Moses Lake	530251002	96
Mount Vernon	530570015	100
Neah Bay	530090015	67 [†]
North Bend	530330017	100
Omak	530470013	41 [‡]
Port Angeles	530090009	80
Pt. Townsend	530310003	81
Pullman	530750003	100
Puyallup, 128th Ave.	530531018	100
Ritzville	530010003	97
Rosalia	530750006	96
Seattle, South Park	530331011	50 [*]
Shelton	530450007	100
Spokane, Monroe	530630047	100
Sunnyside	530770005	100
Tacoma, Alexander Ave.	530530031	100
Taholah	530270011	100
Toppenish	530770015	81
Twisp	530470009	100
Walla Walla	530710005	59 [*]
Wellpinit	530650002	92
White Swan	530770016	100
Winthrop	530470010	77 [*]
Yacolt	530110022	87

* Failed QC checks. The instrument has been recalibrated.

† Instrument malfunction.

Installed a new nephelometer on 9/20/2016.

‡ Instrument out of calibration.

Removed and discontinued on 9/30/2016.

Note: No QA evaluations are performed on nephelometers.
The quality of the data is not assessed.



Executive Memorandum

Date of Release: March 2, 2017
Date of Consideration: March 9, 2016
To: Board of Directors
From: Office of the Executive Division
Subject: Executive Division Report for January & February, 2017

Mark Ede

WOOD STOVE CHANGE-OUT PROGRAM

- The Woodstove Change- Out Program received an additional \$50,000.00 in funding from the Washington State Department of Ecology on February 22, 2017. The agency changed out five stoves for Low Income Households, issued one rebate, and paid three Bounties for the month of January 2017. There are ten Low Income Change Outs and one Rebate currently being completed. An advertising campaign has generated a waiting list of 10 qualified low income participants so far. With the additional funding the program should be able to complete 4 to 6 of the waiting list with the remainder of the list going to the next grant.

EDUCATION AND OUTREACH PROGRAMS

- The Community Air Quality Forum was held on January 10th at 2:00pm at the YRCAA office. Public participation was low (weather related?) with only three people attending other than staff. The topic of discussion was the proposed ammonia project. The next forum is scheduled to held at the YRCAA office on Monday, April 17, 2017 at 1:00 pm.

OTHER INFORMATION

- The new YRCAA website was put into service on February 2, 2017. The website had some minor issues that were easily fixed, we will continue to update forms and provide more option for online payments. Social media provided several positive comments about the website.
- The Spring Season for Northwest Opacity Certification (smoke school) started March 6, 2017 with preparation of the equipment. Scheduled events begin March 14th on the west side of the state with events at Mt. Vernon, Issaquah, Lacey and Longview. The following week two public events are scheduled in Hillsboro, Oregon and private events are scheduled in Albany, OR and Vancouver, WA. The season ends with two public events in Yakima during the third week.

AGENDA ITEM NO. 12



Community Forum

Location, Date and Time:
Conference Rm of YRCAA,

January 10, 2017 Time: 2:00 p.m.

COMMUNITY	Present	STAFF:	Present
The DeGroots, Skyridge Farms		Executive Director	
Steve George		Quatandra Jarvis,	x
		Mark Edler, Executive Supervisor	x
		Hasan Tahat, Engineering and Planning Supervisor	x
		Keith Hurley, Compliance and Monitoring Supervisor	x

Meeting:

- Mark Edler opened meeting advising that Gary Pruitt asked that the community forum continue before he left;
- There was no Agenda;
- Mark asked to hear from the public;
- Dan wondered about the motivation behind the ammonia study and why ammonia was the selected pollutant. What is the result going to be?
- Dan shared that economic incentive reduces emissions as a result of the rapid speed of social media. In addition, what is applied to the fields and the feed have dramatically change; Taking out solids have decreased odor intensity; and
- Utilization of the cow has gotten better as well;
 - Agency responded that the initial proposal was for 20 sites with WA State University. Grant was denied;
 - Mark advised that the YRCAA does not expect to see a lot of ammonia. Ammonia is a precursor to PM2.5, not the driver. Asked Hasan if that is accurate;
 - Hasan responded that there is ammonia, however not all from dairies. There are several sources of ammonia. Examples would be fertilizers, cold storages, etc.;
- It was asked if the Agency was looking at other sources of PM2.5, for example car emissions and wood stove use. Answer:
 - Not going to get far in car emissions, however, not going to abandon car emissions and wood stove use;
 - The Agency has hired out security companies in the past to patrol during the

- wood heating season;
- Dan and Steve agreed that the study needs to have a more comprehensive approach;
 - Keith advised that the Board could do one of three things, shut it down, approve it or modify it;
- Dan initially opposed the Dairy Policy; however believes it turned out to be beneficial in the end;
- Steve believes that during Public Comment period everyone should have only one chance to provide comments;
 - Hasan responded that how the Public Comment Period is run is up to the Board;
- Mark closed the meeting by stating that the Community Forum will happen once a quarter in the Agency Conference Room.
- Share any particular topic of interest with Mark.