

# Air Quality in Alaska Native Villages

Nome, Alaska

October 10 to 11, 2017

## AQ Course Objectives

After completing this course, participants will be able to:

1. Name the six criteria pollutants, their sources, and environmental and health effects.
2. Describe the purpose of the National Ambient Air Quality Standards (NAAQS).
3. Name three air toxics, their sources, and environmental and health effects in Alaska.
4. Discuss issues related to trash burning and suggest alternatives to trash-burning practices in rural Alaska.
5. Discuss solutions to dust problems in rural Alaska.
6. Describe the basic relationship between air quality and climate change.
7. Describe health concerns related to wild fire smoke and person protective measures.

## Instructional Team

Mary Mullan - Alaska Native Tribal Health Consortium (ANTHC)

Carrie Cummings - Alaska Department of Environmental Conservation (ADEC)

Billy Conner - University of Alaska Fairbanks (UAF)

Mansel Nelson - Institute for Tribal Environmental Professionals (ITEP)

## *Agenda*

### **Day 1 (Tuesday, October 10, 2017) -**

---

0:45	8:30 AM	<b>Welcome and Introductions</b> ITEP Overview and Purpose Course Policies and Expectations, hand out Reflective Writing Course Overview
2:45	9:15 AM	<b>Road Dust (breaks as needed)</b>
1:15	12:00 PM	Lunch (on your own)
0:30	1:15 PM	<b>Criteria Pollutants and the NAAQS</b>
1:00	1:45 PM	<b>Small-Group Activity: Criteria Pollutants Summary Chart</b> Health Effects, Environmental Effects, Sources, Controls, and Prevention
0:15	2:45 PM	Break
0:30	3:00 PM	<b>Small Groups report back on Summary Charts</b>

0:30	3:30 PM	<b>Air Toxics</b>
0:45	4:00 PM	<b>Bioaccumulation</b> Activity
0:15	4:45 PM	Announcements / Reflective Writing
	5:00 PM	Adjourn

## **Day 2 (Wednesday, October 11, 2017)**

---

0:15	8:30 AM	Review of Day 1; Introduction to Day 2; hand out Reflective Writing
0:30	8:45 AM	<b>Diesel Exhaust</b>
1:00	9:15 AM	<b>Trash Burning in Rural Alaska (Management of Burn Boxes)</b>
1:15	10:15 AM	Break
1:00	11:30 AM	<b>Temperature Inversions in Alaska</b>
0:15	12:30 PM	* Inversion Demonstration
1:15	12:45 PM	Lunch (on your own)
1:00	2:00 PM	<b>PM Issues: Monitoring, Wildfire Smoke</b> Break
1:00	3:00 PM	<b>Introduction to Climate Change</b>
1:00	4:00 PM	<b>ANTHC Programs and Resources</b> Action Planning (assignment for more time to finish) ANTHC Phase 1 Air Assessment Tool Announcements / Reflective Writing
	5:00 PM	Adjourn

**Air Quality in Alaska resources are available at [http://bit.ly/AQinAK\\_resources](http://bit.ly/AQinAK_resources)**

### **Instructions**

Mary Mullan - Alaska Native Tribal Health Consortium (ANTHC)

Mansel Nelson - Institute for Tribal Environmental Professionals (ITEP)

## **Day 3 (Thursday, October 12, 2017)**

---

0:15	8:30 AM	Review of Day 1; Introduction to Day 2; hand out Reflective Writing
0:30	8:45 AM	<b>IAQ Concerns (Small Group Activity)</b>
0:45	9:15 AM	<b>Basic Strategies for Maintaining Good Indoor Air Quality</b> *How Lungs Work, Source Control, Ventilation, Air Cleaning

0:15	10:00 AM	Break
1:00	10:15 AM	<b>Introduction to Mold and Moisture</b> *Mold, Health Impacts, Clean-up
1:15	11:15 AM	Lunch
0:30	12:30 PM	<b>Introduction to Radon</b>
1:00	1:00 PM	<b>Community Education and Outreach</b> Tribal Case Study Air Matters Tool Kit Bed Bugs Tool Kit
0:15	2:00 PM	Break
0:30	2:15 PM	<b>Indoor Air Quality and Health</b> *Asthma, wildfires
0:45	2:45 PM	<b>IAQ and Weatherization</b>
0:15	3:30 PM	Break
0:45	3:45 PM	<b>Resources and Partnerships</b> Sub award for Air Quality / Indoor Air Quality
0:15	4:30 PM	Announcements, Reflective Writing
	4:45 PM	Adjourn

#### **Day 4 (Friday, October 13, 2017)**

---

0:15	8:30 AM	Review of Day 1; Introduction to Day 2; hand out Reflective Writing
1:00	8:45 AM	<b>Home Heating Safety and Wood Stoves</b> *Carbon Monoxide and Particles
1:30	9:45 AM	<b>Conducting IAQ Assessments</b> *Carbon Monoxide Case Studies *RH and Air Movement (Smoke Puffer) *Home Assessments *School Assessments *Basic Measurements
1:15	11:15 AM	Lunch
3:00	12:30 PM	<b>Building Walk-Throughs</b> *School Walk-Through: *Residential Walk-Through

1:15	3:30 PM	<b>Debrief of Walk-Throughs</b>
0:15	4:45 PM	Announcements / Reflective Writing
	5:00 PM	Adjourn

**p**