

AIR PROGRAM DEVELOPMENT & GAP FUNDING

ITEP WEBINAR SERIES

AUGUST 11, 2020

“INTRODUCTION TO TRIBAL AIR QUALITY”



PRESENTED BY

CRIT ENVIRONMENTAL PROTECTION OFFICE

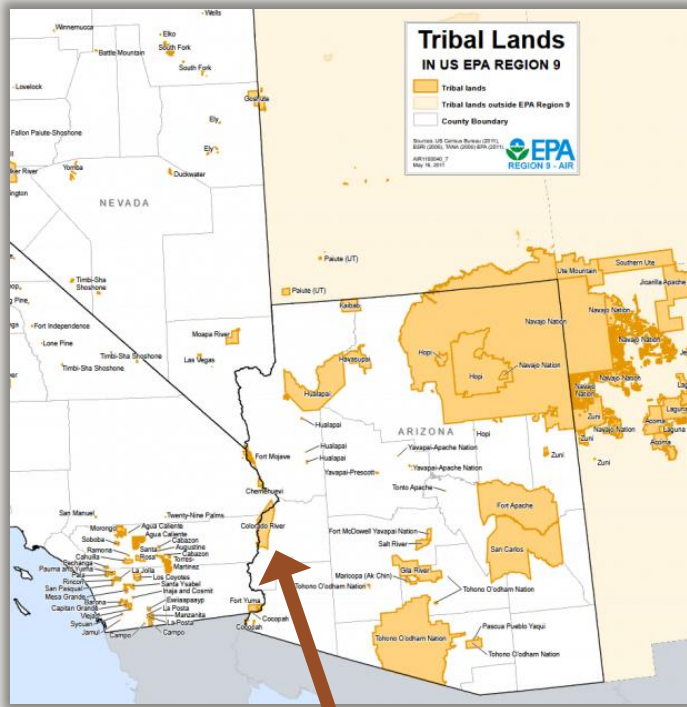
WILFRED J. NABAHE - DIRECTOR OF EPO

AND

MERCEDES A. KAISER - AIR QUALITY SPECIALIST

CRIT ORIENTATION

COMPRISED OF
FOUR DISTINCT TRIBES
MOHAVE . CHEMEHUEVI . HOPI . NAVAJO
ESTABLISHED: MARCH 3, 1865

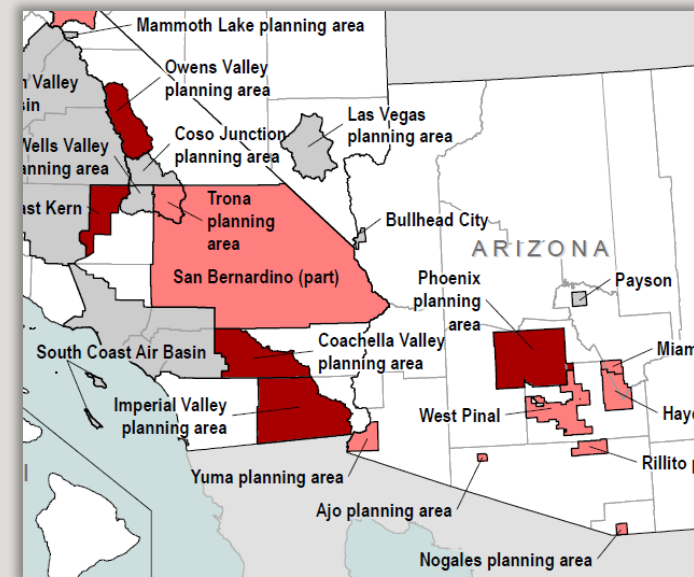


LOCATED IN:
LA PAZ COUNTY, AZ
SAN BERNARDINO COUNTY, CA
RIVERSIDE COUNTY, CA



DESIGNATIONS IN US EPA REGION 9 FOR THE
24-HOUR PARTICULATE MATTER PM₁₀
NATIONAL AMBIENT AIR QUALITY STANDARDS

- Nonattainment/Serious
- Nonattainment/Moderate
- Attainment (Maintenance area)
- Unclassifiable/Attainment



CRIT ORIENTATION CONTINUED...



THE RESERVATION IS BOTH **NON-ATTAINMENT** AND **SERIOUS-NON ATTAINMENT** ON THE CALIFORNIA SIDE; HOWEVER, THE ARIZONA SIDE, IS CONSIDERED **“UNCLASSIFIABLE/ATTAINMENT”** UNDER AREA DESIGNATIONS



OVERVIEW

- I **NEW TO THE FIELD: ACRONYMS**
- II **HISTORY OF THE EPA, YOUR TRIBE, AND THE CAA** (R10 FARR FOR AK)
- III **TRAINING: INTRODUCTORY COURSES ON AIR QUALITY**
- IV **GAP, GAP GUIDANCE (APPENDIX I, SECTION C), & ETEP'S**

OVERVIEW

V

THE CAA SECTIONS/CODE OF FEDERAL REGULATIONS

VI

TYPES OF FUNDING & INFORMATION GATHERING

VII

RELATIONSHIP BUILDING

VIII

CLOSING & QUESTIONS



I

NEW TO THE FIELD

DON'T BE ALARMED!

CAA

AQS

NEI

PCBs

AIR QUALITY SUBSYSTEM

QAPP

NATIONAL EMISSIONS INVENTORY

POLYCHLORINATED BIPHENYLS

$S = \lim \sum T_i = \lim \sum \frac{P_i}{\cos \theta_i} V = 10(-1 \frac{1}{5})$
CLEAN AIR ACT

QUALITY ASSURANCE PROJECT PLAN

OAQPS

$$A = \frac{\pi \cdot d}{4} \quad S = 2\pi RH$$

NSPS EPA R10

OFFICE OF AIR QUALITY PLANNING & STANDARDS

ENVIRONMENTAL PROTECTION AGENCY

NEW SOURCE PERFORMANCE STANDARDS

NTAA

FRM



EIS

FEDERAL REFERENCE METHOD

NATIONAL TRIBAL AIR ASSOCIATION

RCRA

$$y' = (x) \cdot \sin x + x(\sin x)$$

EMISSIONS INVENTORY SYSTEM

RESOURCE CONSERVATION RECOVERY ACT

AQI

$$W = (S, y, S) = \dots$$

NAAQS

FEM

FARR

AIR QUALITY INDEX

FEDERAL EQUIVALENT METHOD

NEPA

NATIONAL AMBIENT AIR QUALITY STANDARDS

NATIONAL ENVIRONMENTAL PROTECTION ACT

II

HISTORY OF THE EPA, YOUR TRIBE, AND THE CAA (R10 FARR FOR AK)

GET FAMILIAR

WHO WHAT WHEN WHERE WHY

WHO IS BEING EFFECTED, WHO ARE THE POLLUTERS, WHAT ARE THE POLLUTANTS, WHAT MEASURES HAVE BEEN TAKEN, IF ANY, WHAT OTHER AQ AGENCIES ARE MONITORING NEARBY, WHAT IS THE PLAN, WHEN WERE NEGATIVE IMPACTS DISCOVERED, WHEN WAS ACTION TAKEN, IF ANY, WHERE DOES THE TRIBE STAND WITH EPA AND GRANTS, WHERE ARE YOU LOCATED (RURAL/CITY/MOUNTAIN TERRAIN), WHERE ARE THE POLLUTANTS COMING FROM, WHY HASN'T AN AQ PROGRAM STARTED IN THE PAST, WHY/HOW WILL AN AQ PROGRAM BENEFIT THE TRIBE

IS IT PRACTICABLE/FEASIBLE?

IS THE TRIBE LOCATED WITHIN AN AREA DESIGNATION OF ATTAINMENT, NON/SERIOUS-ATTAINMENT, NON-CLASSIFIED.
ARE THERE NEARBY FRM MONITORING ACTIVITIES. WILL THE AQ PROGRAM FILL A DATA GAP
WHAT IS THE FISCAL REALITY THAT EXISTS IN YOUR REGION.

II

HISTORY OF THE EPA, YOUR TRIBE, AND THE CAA (R10 FARR FOR AK)

A BRIEF TIMELINE

FY13: INITIATED DEVELOPMENT OF DRAFT EMISSIONS INVENTORY (EI) THROUGH INTERNAL CRIT FUNDING SUPPORT

FY16: AQS HIRED THROUGH GAP FUNDING TO ASSIST TRIBE IN DEVELOPING AIR QUALITY PROGRAM

FY17: EI FINALIZED AND APPROVED BY EPA UNDER GAP FUNDING

FY18: HIRED NEW AQS IN 2018 THROUGH GAP FUNDING TO BUILD CAPACITY AND FOCUS ON AIR PROGRAM DEVELOPMENT

FY19: TRAINING/CAPACITY BUILDING, QAPP DEVELOPMENT FOR PM10, IAQ, DIESEL EMISSIONS REDUCTION, OUTREACH, DRAFT CRIT AQ CODES

FY20: SUBMIT DRAFT QAPP TO EPA, AWARDED CAA § 103 FUNDING

DON'T BE DISCOURAGED

BE AWARE

REDUCED FUNDING !!!!

FY21 GAP COMMENTS FROM EPA R9

THERE WERE \$21M IN GAP FY21 REQUESTS AND \$16M IN AVAILABLE GAP FUNDING FOR FY21;

THERE WERE DISCREPANCIES BETWEEN THE COST ESTIMATOR TOOL, BUDGET AND WORKPLAN SUCH THAT COMMITMENTS, FTE OR BUDGET LINE ITEMS WERE NOT APPROVED IF THE FILES WERE NOT IN AGREEMENT; AND

FOUR AIR COMMITMENTS WERE NOT FUNDED DUE TO ANTICIPATED FUNDING BY THE CAA FOR FY21

THIS CAN HAPPEN

SO CAN THIS



CARBON REGENERATION FACILITY – RCRA PART B PERMIT

III

TRAINING

STAFF AND DEPARTMENTAL DEVELOPMENT

EMPLOYEE KNOWLEDGE OF AIR QUALITY? CAPACITY TO LEARN? WILL TRIBE ALLOW FOR NEW-HIRE?
WITH NEW EMPLOYEE, COMES TRAINING. WILL TRIBE ALLOW FOR TRAVEL AND TRAINING?

LEADERSHIP / DIRECTORSHIP CONSIDERATIONS

HISTORY OF SUCCESSFUL LEADERSHIP / DIRECTORSHIP? KNOWLEDGE OF PROGRAMS AND POLICY
(INTERNAL AND EPA)? SUCCESS OF PAST PROGRAM DEVELOPMENT (START UP TO CURRENT)

HISTORY

SIGNIFICANT ENVIRONMENTAL IMPACTS . REGIONAL ISSUES . LOCAL ISSUES . HEALTH & SAFETY OF THE TRIBAL COMMUNITY
WHAT PROGRAMS HAS YOUR ENVIRONMENTAL DEPARTMENT MANAGED . WAS AN AIR QUALITY PROGRAM
INITIATED IN THE PAST? IF SO, WHY DOES IT NO LONGER EXIST? (FUNDING ISSUES, PERSONNEL LOSS,
WORKPLAN PROJECTS INCOMPLETE?)

III

TRAINING

EPA OFFERS ONLINE TRAINING COURSES THROUGH THE AIR POLLUTION TRAINING INSTITUTE **APTI**



<https://www.apti-learn.net/LMS/EPAHomePage.aspx>



Welcome to ITEP's Online Training

Our goal is to assist in the professional development and exchange of information for tribal staff in order to enhance the operations and performance outcomes of environmental management. We strive to achieve this by providing training in relevant and current topics through the use of accomplished trainers who also understand the cultural aspects of tribes throughout the United States.

http://www7.nau.edu/itep/main/Training/training_air
<https://itep.scholarlms.com/login/index.php>

INSTITUTE FOR TRIBAL ENVIRONMENTAL PROFESSIONALS OFFERS ONLINE AND CLASSROOM TRAINING COURSES AS WELL AS PROFESSIONAL CONTACTS.

TRIBAL + STATE + LOCAL

REACH OUT TO AIR / ENVIRONMENTAL PROGRAMS IN YOUR AREA. ASK QUESTIONS, ASK FOR ADVICE, DO THEY HAVE CONTENT THEY WOULDN'T MIND SHARING? SEE ABOUT FIELD TRAINING OPPORTUNITIES. WE ARE ALL WORKING TOWARDS THE SAME GOALS.

IV

GAP . GAP GUIDANCE . ETEP'S

(APPENDIX I, SECTION C)

BEGIN WITH

EPA – TRIBAL ENVIRONMENTAL PLANS

ESTABLISH BENCHMARKS, SUCH AS:

- IDENTIFY AND INVESTIGATE IMPACTS OF NEIGHBORING SOURCES ON TRIBAL AIR QUALITY;
- ACQUIRE EXISTING AIR QUALITY DATA FROM NEIGHBORING JURISDICTIONS;
- DEVELOP AN EMISSIONS INVENTORY;
- GENERATE AN AIR PROGRAM NEEDS ASSESSMENT.

ENSURE AIR PROGRAM DEVELOPMENT IS IN YOUR 5 YEAR “APPROVED” PLAN,

CAVEAT LANGUAGE (REVISIT EACH YEAR)



HISTORY OF EPA
INDIAN POLICIES

RESEARCH REGION RESOURCES

IMPLEMENTATION OF TRIBAL STANDARDS (84 INDIAN POLICY)
GAP PROGRAM DEVELOPMENT* - STATUTE V. GUIDANCE INTERPRETATION



GAP GUIDANCE

*COOPERATIVE AGREEMENTS / CONSIDERATIONS

IV

GAP . GAP GUIDANCE . ETEP'S

(APPENDIX I, SECTION C)

FOREIGN, COMPLICATED AND CONFUSING (FOR THOSE NEW TO GAP)

STOP AND TAKE A BREATH!

STARTING FROM THE BEGINNING

FOLLOWING THE GUIDANCE DOCUMENTS BASED UPON FUNDING TYPE AND EXISTING POLICY

IDENTIFY THE NEEDS OF YOUR TRIBE.

SELECT ACTIVITIES THAT WILL BEST SUIT YOUR TRIBE AND END GOALS.

CREATE AN ACTION PLAN FOR EACH.

STARTING WITH AN EXISTING WORKPLAN

A WORKPLAN ALREADY IN PLACE

TAKE THE TIME TO REVIEW THE GUIDANCE DOCUMENTS BASED UPON FUNDING TYPE.

EVALUATE THE EXISTING WORKPLAN. IDENTIFY THE NEEDS OF YOUR TRIBE.

CROSS EXAMINE THE EXISTING WORKPLAN WITH THE NEEDS OF YOUR TRIBE.

DOES IT MAKE SENSE OR WILL IT BE BENEFICIAL TO MAKE UPDATES.

V

THE CAA SECTIONS/CODE OF FEDERAL REGULATIONS



[CLEAN AIR ACT OVERVIEW](#)

[CLEAN AIR ACT TITLE I AIR POLLUTION](#)

[CODE OF FEDERAL REGULATIONS](#)
[CFR TITLE 40](#)



VI

TYPES OF FUNDING & INFORMATION GATHERING

GENERAL ASSISTANCE PROGRAM (GAP)

TRIBES CAN USE GAP FUNDING TO CONDUCT *BASELINE ASSESSMENTS OF AIR QUALITY, WHICH CAN TAKE ONE OR UP TO SEVERAL YEARS TO COMPLETE (THOUGH MAY NOT EXCEED FIVE YEARS). AT THE END OF THE PROJECT PERIOD, A TRIBE WILL ASSESS WHETHER FUTURE AIR ACTIVITIES ARE NEEDED, AND FOR WHAT TYPE OF FUNDING TO APPLY

*** NO IMPLEMENTATION**



TYPICAL AIR PROGRAM DEVELOPMENT ACTIVITIES UNDER GAP

TRAINING

DEVELOP AN EMISSIONS INVENTORY

AIR PROGRAM NEEDS ASSESSMENT

ACQUISITION OF EXISTING AIR QUALITY DATA FROM NEIGHBORING JURISDICTIONS

INVESTIGATE IMPACTS OF NEIGHBORING SOURCES ON TRIBAL AIR QUALITY

DEVELOPING TRIBAL CODES AND ORDINANCES TO REGULATE SOURCES OF AIR POLLUTION

COMMUNITY OUTREACH/EDUCATION

PARTICIPATE IN REGIONAL INITIATIVES

COMMUNITY OUTREACH/EDUCATION

DEVELOP A DRAFT MONITORING PLAN

SUBMIT A CAA § 103 PROPOSAL

TYPES OF FUNDING & INFORMATION GATHERING

RESEARCH . RESEARCH . RESEARCH

CAA

[CLEAN AIR ACT OVERVIEW](#)
[EPA R9 GUIDELINES FOR TRIBAL AIR FUNDING](#)
[CLEAN AIR ACT TITLE I AIR POLLUTION](#)

NONATTAINMENT AREAS FOR CRITERIA POLLUTANTS

[GREEN BOOK](#)

AMBIENT MONITORING TECHNOLOGY INFORMATION CENTER (AMTIC)

[AMTIC](#)

AIR QUALITY SYSTEM

[AQS](#)

AIR NOW

[AQI CURRENT AQ](#)
[AQI CALCULATOR](#)
[AQI FLAG PROGRAM](#)

ACRONYMS

[ACRONYMS](#)

CODE OF FEDERAL REGULATIONS

[CFR TITLE 40](#)

ORGANIZATIONS

[NATIONAL TRIBAL AIR ASSOCIATION](#)
[INSTITUTE FOR TRIBAL ENVIRONMENTAL PROFESSIONALS](#)
[INTER TRIBAL COUNCIL OF ARIZONA](#)
[INTER TRIBAL COUNCIL OF NEVADA](#)
[TRIBAL HEALTHY HOMES NETWORK](#)

MAPS

[USDA DATA MAPS](#)
[USGS](#)
[NASA WORLDVIEW EARTHDATA](#)

INTERACTIVE MAPS

[INTERACTIVE MAP OF AIR QUALITY MONITORS & DATA](#)
[AIR NOW TECH](#)
[USGS THE NATIONAL MAP](#)

INTERACTIVE FIRE MAPS

[AIR NOW CURRENT FIRES](#)
[ESRI DISASTER RESPONSE](#)
[NOAA HAZARD MAPPING](#)

TRAFFIC DATA (R9)

[ADOT TRANSPORTATION DATA](#)
[ADOT TRANSPORTATION STUDIES](#)
[ADOT TRAFFIC MONITORING](#)
[CALTRANS CENSUS PROGRAM](#)
[CALTRANS TRAFFIC VOLUMES](#)
[NDOT DIVISIONS: TRAFFIC](#)
[NDOT TRAFFIC INFORMATION SYSTEMS: TRINA](#)

STATE AQ PROGRAMS (R9)

[ARIZONA](#)
[CALIFORNIA](#)
[NEVADA](#)

EMISSIONS INVENTORY (EI)

[EPA AIR EMISSIONS INVENTORIES](#)
[EPA EMISSIONS FACTORS & QUANTIFICATION](#)

WEATHER CONDITIONS

[VENTUSKY](#)
[NASA WORLDVIEW EARTHDATA](#)
[NATIONAL WEATHER SERVICE](#)
[AVIATION WEATHER CENTER](#)

NOAA

[NOAA](#)
[POLLUTION EDUCATION TUTORIALS](#)
[NOAA CLIMATE](#)
[CENTERS FOR ENVIRONMENTAL INFORMATION](#)

AIR SENSORS

[EPA AIR SENSOR TOOLBOX](#)
[PURPLE AIR](#)
[AMBILABS AQ MESH](#)

EPA

[EPA](#)
[EPA AIR TOPICS](#)
[NATIONAL AMBIENT AIR QUALITY STANDARDS \(NAAQS\)](#)
[FEDERAL REFERENCE AND EQUIVALENT METHODS \(FRM/FEM\)](#)
[EPA GRANTS](#)
[INDIAN ENVIRONMENTAL GAP GRANT](#)

RADON

[EPA RADON](#)
[AIR CHECK RADON.COM](#)

HEALTH

[AGENCY FOR TOXIC SUBSTANCES & DISEASE REGISTRY](#)
[CDC CENTER FOR DISEASE CONTROL](#)

FLAG AND SAVE ANYTHING YOU FIND IMPORTANT FOR FUTURE REFERENCE

VII

RELATIONSHIP BUILDING

STOP LOOK AND LISTEN

WHAT ARE THE TRIBES' CONCERNS WITH AIR QUALITY? HOW IS THE COMMUNITY EFFECTED?
HAVE SOURCES OF POLLUTION BEEN IDENTIFIED?

TRIBAL

CONNECT WITH OTHER TRIBAL AIR/ENVIRONMENTAL PROGRAMS. ASK QUESTIONS, ASK FOR EXPERIENCES, FOR OPINIONS, FOR EXAMPLE DOCUMENTS, PROCESSES & PROCEDURES. WE ARE ALL WORKING TOWARDS THE SAME GOALS.

IF YOU DON'T ASK, YOU WILL NEVER KNOW. EVERYTHING IS WORTH BRINGING UP

STATE + LOCAL + FEDERAL

REACH OUT TO OTHER AIR/ENVIRONMENTAL PROGRAMS IN YOUR AREA, THEY MAY HAVE THE SAME CONCERNS FOR POLLUTION IN YOUR AREA AND ALREADY KNOW HOW TO TACKLE THE PROBLEM.

VIII

CLOSING & QUESTIONS



CONTACT INFO:

WILFRED J. NABAHE - DIRECTOR

wilfred.nabahe@crit-nsn.gov

MERCEDES A. KAISER - AIR QUALITY SPECIALIST

mercedes.kaiser@crit-nsn.gov

CRIT ENVIRONMENTAL PROTECTION OFFICE

928-662-4336