***TAMS Steering Committee Call Notes***

**August 18, 2021 @ 10AM PDT**

Attending: Christal Black, Pat Childers, Ann Marie Chischilly, Tennille Denetdeel, Ben Giwojna, Hayden Hardie, Lori Howell, Carma Huseby, Josie Kamkoff, Mehrdad Khatibi, Mike King, Chris Lee, Angelique Luedeker, Mike Natchees, Melinda Ronca-Battista, James Payne, Tanda Roberts

**Opening Business**

Roll Call was completed, and there was a quorum of voting members.

The agendawas approved.

**EPA ORD Air Monitoring Loan Opportunities for Wildfire Smoke Response** – Gayle Hagler

* ORD’s Wildfire Smoke Air Monitoring Response Technology (WSMART) Pilot
* ORD has an expansive wildfire research portfolio
* Continuing areas of R&D: Studying source emissions to health and ecosystem impacts; methods development in modeling, monitoring, and data visualization
* ORD support to immediate wildfire air quality response…with many partners inside and outside of EPA
* Worked with many collaborators to understand wildfire smoke impacts, developed measurement technologies, modeling approaches; in some of our work in recent years has extended to looking at supporting immediate response to wildfire smoke
* The Biden-Harris Administration acts to address the growing wildfire threat; President Biden met with western governors to discuss concerns about wildfires in late June
* Also pulled together all federal agencies that played a role in wildfire response to look at what the federal government can do to step up its response effort
* EPA was tagged on Instagram for helping expand technologies that could help support smoke monitoring in areas that have data gaps; utilizing data and technology to protect communities; use satellites and new technology to detect fires earlier
* Focus on one area of ORD support:
* Provision of air monitoring technology to help partners address ground-level data gaps during immediate smoke response and protect front line worker
* Looking at providing supplemental air monitoring technologies not necessarily regulatory monitoring, but instruments that can help with smoke impact, investigations, assessment, help with modeling and ground-truthing to try and get the best understanding about the level of smoke impacts at the time the event is happening
* Enhanced smoke monitoring support during wildfires
* Additional measurement locations can ground-truth data for smoke models used by Air Resource Advisors (ARA) working on the response to large fires
* Looking to expand equipment that goes to ARA directly as well as to state, local and tribal organizations that go through a request process
* Portable sensor systems or mobile monitoring data to assess front line worker smoke exposure conditions
* Mobile monitoring data can be compared against and complement public sensor networks that may be operating in smoke impacted areas
* 2021 ORD Smoke Air Monitoring Equipment Support
* Preparing to procure and have ready and available in our North Carolina labs are 3 air monitoring system types for supplemental monitoring:
* 100 PurpleAirs; PM2.5 (related – Barkjohn et al., 2021)
* 10 ThingyAQs; PM 2.5, CO, CO2, VOCs (related – Landis et al., 2021)
* 20 Vehicle Add-on Mobile Monitoring Systems (VAMMS); PM2.5
* Partnership with the Interagency Wildland Fire Air Quality Response program
* Technical support at the USFS smoke monitor cache
* Loan of new sensor and VAMMS technologies
* Partnership with Regions
* Loan on request to state, local and tribal (SLT) air organizations to meet their supplemental monitoring needs
* More on the technology
* PurpleAir
* Measures PM2.5 via sensor continuously (minutes resolution)
* After installation/registration, data viewable on AirNow Fire and Smoke Map
* Equipment can remain permanently if desired
* Suggested use case: Data gap locations where a site has WiFi, no local emissions, and interest in public data presentation
* ThingyAQ
* Measures PM2.5, CO, CO2, total VOCs via sensors continuously (minutes resolution)
* Flexible data telemetry, including option for areas with low cellular coverage
* Data are accessible on private access data platform
* Suggested use case: Locations with PM2.5 + CO concerns
* Vehicle Add-on Mobile Monitoring System (VAMMS)
* Measures PM2.5 using research-grade monitor (pDR-1500) and location via GPS (one second resolution)
* Can add to any vehicle (GPS antenna, inlet through vehicle window)
* Data are downloadable and can be uploaded, mapped, and explored with RETIGO ([www.epa.gov/retigo](http://www.epa.gov/retigo))
* Suggest use case: Mapping PM2.5 ranges in areas affected by smoke; model comparison
* ORD Mobile Smoke Monitoring Equipment Use
* VAMMS fits into any vehicle and samples out a passenger-side window
* Has special inlet that allows you to be in driving mode
* Designed for quick install and easy operation
* ORD Mobile Smoke Monitoring Equipment Development
* VAMMS systems are custom-built, support adding real-time PM2.5 measurements to any vehicle
* Data is plug-and-play with ORD’s RETIGO data visualization application
* Units are being custom built in the RTP, N.C. electronics lab and machine shop
* Anticipated support timelines for 2021
* August 2021: Limited VAMMS units in use by ARAs in a pilot mode
* September 2021: Request process available on EPA website for state, local, and tribal air agencies
* September through remainder of fire season: Loans of VAMMS, ThingAQs, and PurpleAir sensors will occur based on requests and equipment availability
* Prioritization and redeployment of units:
* If requests come in beyond available units, areas experiencing smoke impacts and with monitoring data coverage gaps will be prioritized
* ThingyAQ and VAMMS loans to occur during time periods of smoke impact, then likely to be redeployed to other locations
* EPA will cover shipping costs both ways; also accepting responsibility for any repairs and provide as much support as we can remotely; for VAMMS we are providing coaching call and live training over the phone to make sure they are comfortable with the system and how to use the ready go data platform
* Contacts for EPA’s WSMART Pilot (Wildfire SMoke – Air monitoring Response Technologies) Pilot

Questions about partner coordination?

* Gayle Hagler: [hagler.gayle@epa.gov](mailto:hagler.gayle@epa.gov)
* Lara Phelps: [phelps.lara@epa.gov](mailto:phelps.lara@epa.gov)

Questions about the measurement systems?

* Amara Holder: holder.amara@epa.gov

**American Rescue Plan Funding Joint Letter** – Andy Bessler, NTAA

* Seek approval and review of letter hoping to send to EPA by August 25; send Andy comments, feedback, specific language
* Letter is essentially a response to EPA questions about $50 million coming from the American Rescue Plan; NTAA Executive Committee (EC), the TAMS Steering Committee (SC) and the National Tribal Caucus (NTC)
* Ensure funding from this pot of money is set aside for tribes
* $50 million set aside for air monitoring for communities across the United States; some going to State, tribes, direct funding, competitive grants process; hoping to do RFPs out in October; then funding by December, January timeframe
* Requested OAQPS folks to meet with the EC before the 25th deadline; call is for August 23, waiting forconfirmation
* Request edits to be done by Friday, August 20; final review and signature by August 23; Andy to send to all for review and comments
* SC members agreed to be a signatory on the letter

**EPA Update –** Pat Childers/James Payne/Hayden Hardie

1. American Rescue Funds – Discussion on TAMS involvement/EJ funds – tribal communications other opportunities

* Still a lot of uncertainties
* There is another $50M; $1.6M set aside for tribes coming out of the Office of International Tribal Affairs and Office of Environment Justice (EJ); has not been spelled out yet; NTAA and TAMS should focus on as well; Pat will share more information when available

1. Upcoming NTC meeting –

* Annual meeting is coming up; Administrator and Deputy Administrator level
* SC members are encouraged to provide input on air quality issues
* Pat is on task force assisting with developing agenda; will make efforts to add input to agenda
* Suggested talking points or bullet points for tribal monitoring needs since $50M is going towards monitoring; important to show the need for tribes is great

1. Loaner Programs – TAMS, ARP, ORD – Tribal Input/discussion and finding/developing best practices

* Going to hear more from ORD on wildfires
* TAMS on the government side needs to find some funds for work for the existing equipment; hope to get some ARP funds
* Hayden reported there is a little money, put in a critical needs request last week and received approval for calibrating some equipment
* Pat and Hayden discussed ORD loaner program with Gayle Hagler; setup ARP loaner program and standard operating procedures; helpful to learn and setup SOP for TAMS activities and equipment loan program as discussed at last month’s meeting

1. Climate Change and Social vulnerability

* Ideal to get presentation done soon
* Pat reported there is an internal EPA presentation from scientist from Office of Atmospheric Programming; great presentation agrees with everything that the tribes have been telling us for decades, which is the tribes are one of the first and most severely affected by climate change; there is hardcore scientific numbers and breakdowns based on different populations and native Americans and Alaska native villages are one of those breakdowns
* Working on getting this presentation soon; data is just being released; will probably have by NTC meeting; will share at next month’s TAMS SC meeting
* Once we see this data, what next; what to do with this information; what training should ITEP and AIAQTP have on climate change and climate change adaptation planning
* Mehrdad suggested to invite other ITEP staff who are working on climate change, technical assistance and training; to provide input and trainings that we currently offer with the funding from Bureau of Indian Affairs (BIA); may also invite partners from BIA
* Pat suggested to add topic to next month’s agenda for further discussion
* Mehrdad suggested to invite climate change program staff to provide overview of trainings offered to tribes; discuss future direction of the program and what additional training courses that can be developed

**TAMS Technical Needs Assessment** – Chris Lee, TAMS

* Review of report; still in mid process; hope to get completed before next call
* Will plan separate call to work with all to get finalized
* Graph report from the regions; grouped the different tribes into the individual regions and identified their concerns: secondary sources; other; natural sources; mobile sources; area sources
* Mehrdad suggested to review data further at next meeting

**Planning for Fall 2021 TAMS SC Meeting –** Chris Lee, TAMS

* Pat shared the earliest EPA staff to be back in office is mid November
* Due to ongoing move the TAMS center is still not yet completed
* Hayden reported no visitor, no meeting policy at this time
* SC members reported they are limited to travel or unable to travel
* Begin planning process of fall on-line meeting
* TAMS 20 year anniversary plan for October, November time frame or wait for in-person event in 2022
* Pat suggested to tie into NTFAQ at Muscogee
* SC members agreed to move forward with 20 year anniversary as online event; will start planning

**TAMS Center Draft MOU** – Guiding document regarding relationship between TAMS collaborators – Chris Lee, TAMS

* SC members agree to table discussion to next meeting

**Other Updates** –

* Tennille announced that she will be stepping down as Chairman and also from the TAMS steering committee effective soon
* Chris requested Tennille to submit official announcement via email to Chris and Hayden
* As vice-chairman, Vallen to step up as Chairman; Cbris will notify him
* Prepare notice for nomination and send out announcement; start with 30 day deadline; extend if needed
* Review status and provide updates on next call; add to agenda

Submitted by:

Darlene Santos