

**Smoke Managers Subcommittee  
Conference call  
10.29.2013**

**Roll Call:**

**Mike Broughton, Colorado/USFWS (Chair)**  
**Claudia Standish, New Mexico/BLM State Office (Vice Chair)**  
**Ursula Parker, California/Butte County AQMD (Secretary)**  
**Pete Lahm, Washington D.C./USFS**  
**Brian Bohlmann, WY DEQ**  
**Leif Paulson, WY DEQ**  
**Carol Blocksome, Kansas/Kansas State University**  
**Nick Yonker, Oregon Dept Forestry**  
**Gary Arcemont, California/San Luis Obispo APCD**  
**Ann Hobbs, California/Placer County APCD**  
**Rick Gillam, U.S. EPA, Southeast Region, Atlanta, Georgia**  
**Julie Simpson, Nez Perce Tribe**  
**Doug Miedtke, Minnesota/Dept of Natural Resources**  
**Dan Chan, Georgia Forestry Commission**  
**Erin Law, Idaho/Idaho-Montana Air Shed Group**  
**Andrea Boyer, Nez Perce Tribe**  
**Mary Anderson, Idaho/DEQ**  
**Lawra Boyce, South Carolina/South Carolina DHEC**  
**Rick Boddicker, South Dakota/Department of Environment and Natural Resources**  
**Dar Mims, California/ARB**  
**Gary Curcio, IPA FES-FE Forester, Retired NC Forester**

*The purpose of the Smoke Manager's Sub-Committee is to increase communications amongst the community of air quality professionals, other state and federal governmental agencies, land managers, and other persons conducting burning activities.*

***Agenda:***

***Intro***

***Update from EPA***

***Summary of International Smoke Symposium October 21-24, 2013***

***NRDC Study Discussion***

***Round Robin***

**EPA Regulatory Update – Rick Gillam**

- PM2.5 national standards (2012 revision): EPA is getting final designations for non-attainment areas. By December 13<sup>th</sup>, 2013, all states are required to submit recommendations to EPA for areas not meeting the standards. EPA has been working with the states and has developed an interactive mapping tool to help states prepare their recommendations. The tool allows the user to see where standards are not being met, locations of previous non-attainment areas, HYSPLIT/wind rose trajectories and more. The website is: <http://www.epa.gov/pmdesignations/2012standards/techinfo.htm> - go to

the bottom of the page and click on the PM2.5 Designations Mapping Tool. Direct link: [http://geoplatform2.epa.gov/PM\\_MAP/index.html](http://geoplatform2.epa.gov/PM_MAP/index.html).

- Ozone - nothing new to report. The evaluation for new standards is proceeding. Exceptional events policies: Nothing new to report.

### **International Smoke Symposium Summary – Mike Broughton, Pete Lahm & Claudia Standish**

- **Pete Lahm** was chair of the Symposium. The symposium's objective was to bring together science + policy and implementation. The event had a great mix of folks. Topics addressed included: Science, Climate Change, effects (of smoke) on people (American Lung Association), and information from/about Prescribed Fire Councils.
- Nearly all sections of the symposium can be viewed online and accessible. Note that you must be registered in order to have access - \$95 or \$120 if you also want a DVD of the proceedings. Employees of the USFS should contact Pete directly for access points to go back.
- One of the highlights of the Symposium was a discussion regarding the guidance document for responding to wildfire smoke. It will be revised with US EPA, CDC, and the USFS – a whole session was provided on this topic discussing the new science and new approaches. **Dar Mims** and other California regulators will be engaged in that.
- **Mike and Claudia** inquired on problems and issues on smoke management needs and issues. Pete will be following up with others regarding potential opportunities. One area of interest is the desire to increase the number of qualified individuals to serve as Air Resource Advisors.
- Some of the presentations included such topics as fuels and fire emissions, reducing smoke through wood energy, fire impacts, transportation corridor safety, smoke and populations/health, fire and emissions inventory, smoke and people, attitudes and influencing factors, carbon sequestration, fire behavior model and more. The number of experts available to talk to outside of the sessions was very valuable. **Nick Yonker's** name came up a couple of times when wildfire response and forecasting in Oregon – he did a great job of forecasting smoke and that was noticed during the Symposium.
- **Mike** commended **Brian Finneran** (Oregon DEQ) for doing an excellent job of presenting Oregon protocol's to protect public health from wildfire smoke impacts. It brought up a great extended discussion with ID, WA, and others. Smoke from wildfires is impacting most of the states in the country. If you don't have a protocol yet, put together one now; do not wait until you have smoke impacts. Oregon's protocol is a good template to start from if you don't have anything yet.
- **Mike** attended a great presentation on the Evans Road fire. This "peat fire" started on June 1, 2008 by a lightning strike during North Carolina's drought and burned for three months. Because of the fuel type, acreage and emissions were not accurately estimated. **Gary Curcio** commented that in the National Emissions Inventory, 193,000 pounds of PM2.5 were reported, but it was adjusted to 440 million pounds of PM2.5. When you are reporting emissions that are low and they don't jive with hospital admissions, there's

something up. There is increasing research in these areas and a desire to use remote sensing to monitor organic soils to update the National fire danger rating system. With these types of fuels you have to be looking at long term duration; surface fuels are likely to be consumed quickly, but if you have these types of soils, they can burn for days, weeks, even months.

- **Mike** also noted the excellent presentations on satellite imagery and said that he would have to go back to review them for post analysis. Of particular interest was a presentation from NASA, Rich Kleidman (<http://airquality.gsfc.nasa.gov/> for more info). **Rick Gillam** said that he also learned a lot about remote sensing and is interested in learning more about several of the products, including Blue Sky Wildfire Smoke Impact forecasting system.
- **Mike** commented that the folks from USFS in Seattle did a fantastic job with their presentation on modeling smoke for incident support. He also noted that it is important to be aware of visibility on highways in the southeast (FL, GA for example) – superfog conditions. **Gary Curcio** recommends that the group understands the elements discussed in Dr. Tim Brown’s presentation (“dispersion box”).
- **Claudia** and **Mike** had a session regarding the challenges that are faced. The two largest challenges identified were:
  1. Uncertainty in forecasting: Meteorological changes, forecasting fire/smoke behavior;
  2. Communicating successes.

**Claudia** emphasized that the key issue is communication. It is important to communicate and build relationships with all people, whether or not their goals are different than ours. **Mike** added that Prescribed Fire/Wildfire managers and air quality and health officials need to be able to communicate. Ultimately, air quality folks want to reduce emissions, burners want to burn more; there is a balance there and it doesn’t work when we are fighting one another. It only works when we get together on the issues. It was added that communication with the public is where we really need to start branching out. The folks in the SE have been doing a pretty darn good job. The messaging that they have been using has been effective.

- **Mike** commented that the public has commented that we have been hitting them over the head for years why we have to burn; they get it. But they have no idea of what is being doing to manage the smoke. We need to let people know what steps we are taking to manage the smoke; this is a message that we can expand on.
- **Dar Mims** commented that the amount of work, resources (money) spent and technology expended toward that end (managing the smoke/limiting impacts) are rarely communicated to the public. One reason that we need to keep pushing on with education is to fight against bad information such as websites like Prescribedburns.com.
- **Ann Hobbs** added that another real key issue is that when we have the public’s attention (like during the Rim Fire), one of the pieces of information that we can pass along is that different treatment techniques cause more or less smoke to be emitted during these wildfire events. It was noted that there is a database for fuels treatment effectiveness; what are the tradeoffs, reduced smoke affects, burnouts, value after the fact. We have to have an agreed upon methodology.

- **Nick Yonker** stated that they have a prescribed burning brochure on their webpage. He stated that the main people we are concerned with are the interested public – they are the ones talking with their legislature, have the squeaky wheels, and are often the subset who have allergies, asthma, and are generally not happy with burn activities, etc. These are the people to whom we should be educating.

### **NRDC Study Discussion – Mike Broughton**

The article from USA Today, entitled “Wildfire Smoke Becoming a Serious Health Hazard” (<http://www.usatoday.com/story/news/nation/2013/10/24/wildfires-smoke-climate-change-harm-health/3173165/>) presented results from NRDC (National Resources Defense Council) that showed 2/3 of Americans lived in areas with smoky air in 2011 due to wildfires. The article provides additional exposure that we need to be aware of because of concerns/reaction from the public. Read the article – brief that came out, “Where there’s fire, there’s smoke”. **Mike** is encouraging others to read and comment. The background study has been forwarded around via email as well. Mike wants to know what others think before he moves forward with it.

**Mike** was contacted by Fish and Wildlife outreach coordinator who wanted to do additional outreach regarding how widespread wildfire smoke is affecting communities and whether we see an increasing trend. Mike will want to put together a map of which areas over the last decade have seen significant impacts from wildfire smoke and he may request others help.

### **Round Robin**

- **Ursula Parker** discussed an indigenous fire that she participated in on October 14<sup>th</sup>. The 100-acre burn was conducted on the Cosumnes River Preserve and involved Plains Miwok tribal members, several fire agencies, regulatory agencies, as well as land owner representatives (Nature Conservancy, Bureau of Land Management, Department of Fish and Wildlife, and others), and was facilitated by the California State University, Chico, Research Foundation (Don Hankins, professor). The land is sacred to the Miwok and used to be regularly managed with fire by their ancestors; however, it had not been burned in 100 years. Prior to ignition, a Miwok ceremony was conducted and all the participants were blessed. The type of vegetation burned was oak woodland with some meadows. The burn went really well with no smoke impacts to the highway, which is immediately adjacent to the preserve, and no reports of impacts to the public.
- **Mike** warned the group that there have been some problems with the myfirecommunity website. Just before the government shut down, the site migrated over to a “wildfire lessons learned” website and it was not as seamless as Mike would have liked. The site is not operational. Stay tuned; Mike will try to get the site up and running.

The next meeting will be scheduled for sometime in January and will include a coalition of Prescribed Fire Councils.