



National Wildfire Coordinating Group (NWCG)
Smoke Committee (SmoC)
Monthly Activity Update – March 2012



SmoC NEWS:

Communication and Messaging:

2012 Wildfire Season Talking Points - Interagency talking points have been developed for 2012 wildfire season in regards to smoke impacts to health and safety.

- *Heavy smoke from wildfires can threaten public health and safety.*
- *Wildfire smoke on roads or in aviation corridors can place the public and firefighters at risk. Reduced visibility from smoke is especially a concern in the Southeast where "whiteout" conditions are more likely when low wind speeds and high humidity are present. People should exercise care when driving in smoky, low-visibility conditions.*
- *Older adults, children, and people with heart or lung disease (including asthma) are more vulnerable to the adverse health effects of air pollution from wildfires.*
- *If heavy smoke is present, those who are more vulnerable should take precautions and avoid prolonged or heavy activity. People should keep in mind that smoke impacts can change quickly.*
- *Prescribed fire is a valuable land management tool. Prescribed fire also produces smoke, but the smoke is typically short-lived and managed to minimize impacts. Prescribed fire and other fuels treatments help to reduce the severity of wildfires and minimize adverse impacts on public health and safety.*

These bulleted messages will be distributed to the public through various agencies' External Affairs Divisions and the NMAC.

Activity Update Document - There has been discussion to determine whether the Activity Update should be shorter. It was suggested the update be no longer than one page so there would be a higher likelihood of the document being read. A lengthier quarterly update (this length roughly) was also suggested. There needs to be further discussion with all group members to determine the best approach to future updates.

Fire Personnel Smoke Exposure

Pete is going to invite George Broyles (San Dimas Technology Development Center) and Joe Domitrovich (Missoula Technology Development Center), who have done some monitoring for PM 4.5, silica, and CO, to provide some input to the SmoC group on the fire personnel exposure topic. Topics of interest include: how far downwind CO is making an impact, cases where CO and PM are not correlated, relationship of PM2.5 and PM4.5 considering the primary PM from smoke is PM0.1 and status of NWCG tasking and final plans.

SmoC 2011 Annual Report with 2012 Upcoming Issues

Report is complete and posted on <http://www.myfirecommunity.net/Neighborhood.aspx?ID=279>.

Linking Visual Range with PM2.5 Concentrations and Air Quality Index – Discussion Paper

Discussions continue to examine the problems linking visual range to PM2.5 concentrations and the Air Quality Index, especially in areas where humidity is high and visual range is restricted by moisture and other aerosol sources besides PM2.5. Susan O'Neill, the author of the discussion paper, has been discussing the issues with the author of the Montana study and other subject matter experts. It has been expressed that a literature review on the subject is also needed and maybe Joint Fire Science Program (JFSP) might be able to help.

Some additional issues discovered with the study is that the author of the study, John Coefield, established relationships between PM and visual range using ASOS data and set ranges using AQI terminology, but not

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AQI values. Another issue is that while one hour visual data agree with one hour PM2.5 concentrations, the 24 hour PM2.5 correlation does not work well. It was suggested through dialogue with Doug Fox and Al Riebau (JFSP contractors) that a national isopleths map be created comparing PM2.5 concentrations to visual range in order to account for differences in humidity and other aerosol concentrations throughout the country.

HYSPLIT Trajectories in Spot Weather Forecasts

Work continues with the SmoC-initiated interagency Working Group to support the National Weather Service (NWS) trial capability of providing HYSPLIT Trajectories with Spot Weather Forecasts. A one-pager has been completed www.srh.noaa.gov/ridge2/fire/docs/HYSPLITone-pager_final_woSMEs.docx that can be provided with the forecasts explaining the information that the trajectories provide. Approximately 20 people across the US have been identified as subject matter experts (SMEs) who will be go-to people to help answer user questions. Some gaps in the training have been identified for dealing with SMEs and webinar planning (the last week of April or first week of May). This will be addressed soon. The NWS has added an Air Quality header to their wildfire page, see: <http://www.weather.gov/fire/>.

International Smoke Symposium 2013

Joint Fire Sciences Program (JFSP) has already provided \$15K in seed money for the symposium to be held with International Association of Wildland Fire. EPA, NWCG, and NASA are other agencies will be sought as partners in the symposium. Still seeking additional sponsors/investors. A prospectus and steering committee are being developed, including a potential international cadre for the event. Dates and locations have not been firmly decided but will likely be slated for approximately the October to November timeframe. Potential sites include several along the East Coast, Denver, Oklahoma, and California.

NWCG Business

- Subcommittees need to think about projects that need strategic funds from NWCG and bring them to SmoC to be vetted. May 30 is last day for funding submissions.
- Phase 2 of the Smoke Management Guide Revision (on-line version with advanced chapters) has been funded by the Fuels Management Committee.
- Need to consider a SmoC face to face meeting maybe over the summer – but probably only in conjunction with EPA Fire Smoke Policy changes.
- Need for a Fuels Management Committee and Fire Use Subcommittee/SmoC inter-committee conference call. Pete Lahm working out the details.

SmoC Subcommittees:

Subcommittees need to develop a Charter in order to meet NWCG requirements.

Technical Smoke Topics Subcommittee

- *Smoke Management Guide*: The steering committee met and has been working with several authors including those at the Forest Service PNW lab. Alan Dietz from NWCG administration outlined publication review steps in order to finalize the guide as an NWCG document.
- *Retrospective Emission Inventory Task Team*: The March 16 conference call yielded a good discussion on the 2008 NEI, and has started laying groundwork towards a 2011 EI. Greenhouse gas inventory needs and process was discussed.

Training Subcommittee

- *NWCG Smoke Training Assessment*: The latest version of *Fire personnel positions with smoke management training within the Incident Qualification and Certification System (IQCS) report (the "IQCS*

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Report”) has not received comment so far and closed as of 3/23. Opportunity is still available for comments if they result from upcoming inter-Committee sessions.

- Identified some representatives for a steering committee for the 4 hour Wildfire and Air Quality Decisions training. In the process to form that group.
- Phase three training assessment report (smoke training recommendations for NWCG) work begun with a matrix of three training categories: transportation safety, public health/safety, and personnel exposure issues.
- Smoke Management for Land Managers course and other training items will be present as a poster in the Seattle Fire meeting by Josh Hyde.

Smoke Managers Subcommittee

- No news this month

Round Robin

- 1990-2010 EPA GHG EI was out for review and since closed.
- Gary emailed to find out if BlueSky is close to accepting inputs that would allow one state to see if emissions from neighboring states are incoming.
- WIMS is being modified.
- NWCG prescribed fire implementation guide is in front of Fuels Management Committee for their input and then will undergo an external review before finalization.
- Pete met with Jennifer Jenkins, EPA, about GHG emissions inventories. There will be a comparative analysis between 2008 EI and draft of 1990-2009 EI during the Retrospective EI call.
- Mike was contacted by Carol Blocksome from Kansas State University who is looking for any reference that compares black carbon emissions from forest fires vs. grass/prairie fires.
- Colorado wildfire from a RX fire escape. Twenty homes were lost with three fatalities. A lot of interaction between the National Coalition of Prescribed Fire Councils, the local Council and the local media.
- Newly funded PNW AirFire team Fire Climatology 2000-2011 Project.
- SE Experiment Station is working on superfog advisory system.

SmoC Accomplishments

2011 Phase I of the Smoke Management Guide Revision – Funding received

2011 Smokepedia and online course updates – Funding received

2011 Report – An Assessment of NWCG Wildland Fire Training and Position Requirements for Smoke and Air Quality

02/2012 Report – Fire personnel positions with smoke management training within the Incident Qualification and Certification System (IQCS)

12/2011 HYSPLIT Trajectories in Spot Weather Forecasts – Extension of deadline

01/2012 Retrospective Emission Inventory Task Team – SMARTFIRE2 improvements to the 2008 EPA NEI

01/2012 International Smoke Symposium in 2013 – Funding received from JFSP

01/2012 Online Wildfire Course – Funding received from NWCG

SmoC Completed Briefing Papers – See myfirecommunity Neighborhood Library (<http://myfirecommunity.net/NeighborhoodLibrary.aspx?ID=279>)

Posted 5/11/2011 - EPA GHG EI BP

Posted 5/20/2011 - SmoC March Seattle Meeting Summary

Posted 5/26/2011 - Consideration of Smoke in Wildland Fire Decision-making and Operations BP

Posted 6/06/2011 - Smoke Monitoring Kits

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Posted 8/18/2011 - Wildland Fire Smoke Messaging and Perception Webinar
Posted 8/18/2011 - NWCG Smoke Assessment
Posted 9/02/2011 - 2005 National Air Toxics Assessment (NATA) Briefing Paper

Upcoming Conferences and Meetings

- WESTAR Spring Business Meeting, April 16-17, 2012, Seattle, WA <http://www.westar.org/Docs/Business%20Meetings/Spring12/Spr12agenda.html>
- 3rd Human Dimensions of Wildland Fire Conference, April 17-19, 2012, Seattle, WA www.iawfonline.org
- EPA Region 10 Annual Smoke Management meeting April 18-20, 2012, Boise, ID
- EPA International Emissions Inventory Conference, August 13 - 16, 2012, Hyatt Regency in Tampa, Florida http://www.epa.gov/ttn/chief/conference/index_papers.html
- 5th International Fire Ecology and Management Congress: Uniting Research, Education and Management, The Association for Fire Ecology, December 3-7, 2012, Portland, Oregon <http://afefirecongress.org/>
- 4th Fire Behavior and Fuels Conference, February 18-22, 2013, Raleigh, NC, <http://www.iawfonline.org/2013FuelsConference/index.php>

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