

Smoke Management Review Committee Meeting
Oregon Department of Forestry
Operations Conference Room, Salem
June 19, 2003
0930-1530

(Includes corrections made at July 17, 2003 meeting)

Attendance: Stephen Fitzgerald, Gregory McClarren, Mike Dykzeul, Brian Jennison, Jim Brown, Stan Benson, Gary Stevens, Geoff Babb, Erik Christiansen, Lee Miller, Jim Russell, Mike Ziolko and Cindy Smith.
Visitors: Steve Williams (Hood River County), Rick Smedley (National Park Service), Brain Finneran (DEQ), David Collier (DEQ), Mike Cunningham (BIA), and Jim Peterson (Rainbarrel Industries Inc).

- | | |
|---|-------------------------|
| 1. Administrivia | Mike Ziolko, ODF |
| 2. Minutes
The minutes of May 15, 2003, were approved as submitted. | All |
| 3. Definitions Handout
Mike Ziolko distributed a handout of terms commonly used in smoke management including definitions and explained how to use the table. | Mike Ziolko |
| 4. Discussion of Previous Meetings' Issues
Refer to Matrix (Issues G,H,I and K will be discussed at a later date.) | All |

Discussion - Issue F:

Barriers and Opportunities:

- Different abilities to manage smoke is a barrier.
- Neighboring boundary areas may have different designations (ie. voluntary vs. mandatory).
 - Mike Ziolko – referring to they Jackson/Klamath County Issue – Jackson County is in the restricted area but Klamath county is in the voluntary area
 - Stephen asked if the voluntary area would still not have to adhere to the rule – they're the source.
 - Stan Benson – Is question F appropriate for the future – the barrier may be that the system of the past may not be the best system for the future.
 - Mike Dykzeul – Klamath is voluntary for the Klamath Basin but some of the Industrial land goes over the crest of the Cascades – when pile burning takes place we have to register and pay fees for Jackson County – when the plan changes, there is some voluntary consideration on both sides.
 - Mike Ziolko noted that in discussions of DA's or smoke sensitive areas, you're talking about the receptor area – the source is something different and that is the area that has a voluntary or mandatory label.
 - Greg McClarren commented that the mishmash of systems that don't work well - don't integrate across agency or geographical boundaries are the barrier.
 - The objective of both voluntary and mandatory programs is the same – to keep smoke out – that's the measure of success. There is supposed to be coordination.
 - Stan Benson asked what constitutes a designated area and added that we need a definitional tool that the people on the ground can turn to and so that over time the system can move with the definition.

Measuring Success in the Future:

- Addressing how success will be measured in the future, Stan noted that having no accidents (injuries or fatalities) attributed to the failure of smoke management system would be that measure as it relates to smoke on the highways.
- No intrusions
- Greater knowledge of the Smoke management among burn bosses and others.

5. Public Comment

- Jim Peterson, President of Rainbarrell Industries Inc, 30-year fire fighter and experienced burner, was present to express his concern over the possibility of no longer being able to utilize plastic to cover piles. He provided samples of the plastic tarp he uses. Jim read his letter (attached to these minutes) to the committee expressing his concerns as he relies heavily on the use of plastics to facilitate burning during the winter. In closing he asked that the committee give serious consideration to the factors involved – his 8 or 9 employees, the investment he has already made in materials.

Discussion:

- Greg asked if the tarps were removed before burning.
 - Jim responded that he removes the plastic only when he is required to do so by LRAPA.
- In response to Jim's letter, Brian Jennison, LRAPA, noted that in neither the April 17 nor the May 15 minutes of this committee did he say anything about prohibiting the use of plastic and pointed out that this committee has shown a positive concern (is sympathetic) towards his needs. Brian quoted statements from the minutes of May 15, 2003 where he was quoted as saying "Currently, plastic is a prohibited material and added that what he would like to get from the plastics manufacturers are: emissions created by plastics because perhaps a modification of the rules for pile burning is warranted." And in the April 17th minutes of this committee Brian Jennison was again quoted as saying "From an air quality perspective, it might be better to burn a little bit of plastic." Brian asked that Jim please be accurate in his references to what LRAPA has recommended.
 - Jim said he was referring to the minutes from Fish Creek about four years ago.
 - Stephen reminded members that this is also the topic of discussion for Agenda Item 10 scheduled for after lunch.
 - Mike added that the pictures Jim provided would be distributed as well..

6. Break

7. Continuation of Issues Discussion

All

Discussion - Issue G: How may administrative rules be changed to reflect current and future fuels and operational issues?

Tabled for future discussion.

**Discussion - Issue J:
Communications/Education**

Is there a problem?

- Stan Benson commented that based on his experience he feels that the public does not know that there is a smoke management plan and added that not even all burn bosses have a grasp of smoke management plans and its application and purposes.
- Jim asked who has to be educated and Stephen explained that segments could be identified.
- Jim commented that the public and those directly involved in burning don't need the same information.

Will there be a problem in the future?

- Yes. Based on demographic patterns, potential increased burning, population growth.
- Changing demographics and urban forest.

What are the options?

- Coordinated messages or public service announcements burning and the Smoke Management Plan.
- Stan Benson noted that showing people how quickly a forest recovers is a good public service announcement.
 - Posting signs and a smoke education tool kit were suggested
 - Target specific audiences
 - Communication to key local stakeholders.
 - Information packet to send to complainants.
 - Jim Russell added that in the mid 90's a fuels management specialist was assigned to Department of Forestry specifically looking at smoke related issues and utilization topics and spent a lot of time working through the Forest Practices side and the Service Forestry side looking at ways on private land to do some things relative to utilization and looking for opportunities. We should look at a position within Oregon Department of Forestry that concentrates specifically on utilization - outreach and education. (A position similar to that once filled by Paul Bell). Liaison between the state and Federal agencies would be helpful.
 - Mandatory classes prior to burn permits being issued were suggested.
 - Possibly a subset of the Certified Burn Manager program. Geoff Babb discussed the Florida program.
 - Jim Russell suggested that it be a condition of the permit – at the notice of operation stage - to submit a one pager that talks about training, requirements for burning, conditions to look at. Perhaps something from Stephen's curriculum package and a contact number to get additional information.
 - Stephen said at the time of notice of operation would be the best time because it would allow time to consider non-burning alternatives as well.
 - Statewide education and outreach.
 - Jim Russell said there could be economic opportunities if ODF hired a new person and initiated utilization opportunities.
 - Stan Benson suggested a pre-burning season education of the public regarding the amount of burning anticipated for the year, where the burns are generally located, followed up by day to day announcements during the burn period.
 - Stephen suggested even following up with photos – that way they would get information before, during and after the burn.
 - All 20 NF system units and BLM are already encouraged to do that – and the web page sites are broadcast widely.
 - Stan suggested that a stock paragraph be added to a one page handout for the private operator mentioned earlier that when a prescribed burn notification goes out there is information about the smoke management plan describing that “this area is being burned under the State Smoke Management Plan, with the hope air quality will be achieved as well as hazard reduction.”
 - Need to encourage a good neighbor policy by keeping them informed of the burning going on around them.
 - Stephen added that education is ongoing – keeping people informed should be part of the business plan of burning. Maybe the program comes up with a one liner that could be inserted into any PSA that says this burn is being done for these

reasons and that the burn itself is being administered under the Oregon Smoke Management Plan that tries to reduce intrusions and maintain high air quality.

- Jim Russell noted that a website could be created to provide much of this information – an integrated website that included all ag, forestry, private landowners, etc., that summarized the conditions and requirements of using fire in the environment. Include the full gamut of counties, protection districts, etc. as it relates to smoke.
 - It would let the public know that it's a coordinated effort.
 - Include agency logos at the top of the website
- Mike Dykzeul noted that he had talked to someone in Arizona involved in prescribed fire who reported that after the health risks had been identified – they advertised scheduled controlled burns and took persons with health concerns to the mall by bus and sent them to the movies in order to get them out of their houses and out of that environment.

Require Changes in Rules or Directives?

- Mike Z. – None of this requires rule change – it's more directive related and can be changed with policy.
- The exception is implementation of a mandatory training program for burners, which would be a rule change.

Barriers and Opportunities

- Money – barrier.
- Education is a long-term commitment, which is a barrier in the short term but an opportunity in the long run.
- Multiple approaches based on the message and target audiences are needed.
- Adding a new position requires legislative approval – barrier.
- Workload that would be generated by the certified burn program barrier.
- Agreeing on the message could be a barrier.
- Local media could be an opportunity because they are always looking for something to print.
- The Weather channel could also be utilized to educate the public. They could possibly become a partner in terms of sending the smoke management message in the Pacific Northwest.
- NOAA might be a source for financial support.
- Jim Russell asked if there was a litmus test of what the Board of Forestry would support and take forward. Jim Brown responded that it is an opportunity that seems to fit nicely with the Forestry Program for Oregon and public education goals.

How would success be measured in the future?

- Public knowledge and acceptance of the Smoke Management Program.
- Stephen suggested that OFRI does public opinion polls – OFRI may be willing to allow us to insert questions regarding smoke management into their public opinion surveys/polls. That would allow us to assess (or measure) public knowledge of the smoke management program. – This may fit better in the opportunity side.
- Another measure could be legislative monetary support for the State Smoke Management program.
- Budget (including fees) is adequate and consistent – not just from the legislature.
- Lee Miller suggested the implementation of mandatory training programs and implementation of the Certified Burn Manager Program.
- Reduced numbers of complaints – keeping in mind that success is not educating the public so they don't complain when they get smoked out.
- Knowledge and acceptance of the smoke management program.
- Training will reduce intrusions, education will reduce complaints.

- Institute a complaint tracking system in order to track the level of complaints and facilitate your educational message. It will reinforce your message as well.

8. Working Lunch Warm Springs Reservation

Mike Cunningham, BIA

Mike Cunningham has been with the Warm Springs Bureau of Indian Affairs since July of 1978 and in the fire program since 1982. His goal was to resurrect the underburning/natural fuels program.

Prescribed fire and natural fuels started at Warm Springs in 1956. Their first test was a 20,000-acre burn that they planned to burn at the south end of the reservation. They completed 415 acres before there was a difference of opinion and with Washington, DC, on what the definition of a test was. They did get approval and continued burning natural fuels. The tribe finally passed a resolution to allow the BIA to do test burning. Before that the only burning they did was pile burning on the reservation after logging activities. There was little record keeping prior to 1970. The greatest number of acres burned on the reservation was in 1971 when they burned 52,000 acres of pile burning and 240 acres of natural fuels underburning. Some of the underburning was done for cedar reduction but they finally realized that not only do you have to reduce the number of small trees but you also have to reduce the number of seed trees producing all those trees.

They did come to realize that there was more incense cedar in areas that had not been underburned. Incense cedar germinates better in duff than in bare material. Fire management continued pre-commercial thinning and burning for fuel break maintenance along the south end of the reservation.

The history of native burning on the reservation is not well documented except through oral history. Most of it was high Cascade burning for huckleberries. There is no history of weather conditions when they burned. If the fire did take off they would use a different berry field for the next 5-7 years.

The BIA has done no huckleberry burning per se but has done logging burning trying to promote some huckleberries. Oregon State just completed a huckleberry study, part of which was done on the reservation.

The most prolific documentation is for burning down on the low lands in the root gathering areas where they dug pits to grow root plants and then dry roots with fires. Today you can still see the marks on the trees where the fire came out of the meadow. From what we have been able to determine, none of them were set deliberately, they were all escaped campfires.

We have done several range burns or meadow burns to look at the effects of root response and have determined that they respond very well to burning. The HeHe escaped burn in 1999 was a 6000 acre meadow burn to promote root plants. It crossed Highway 26 on the opening weekend of deer season and closed the highway for three days. As a result there are three separate lawsuits in two different federal courts - one in the Federal Court of Claims and one in Federal District Court in Portland – six million dollars at each court.

That's the history of the local Indians doing the burning. Today the BIA burns about 3000 acres per year for natural fuels/underburns and about 1000 acres of pile burning – post logging. Little broadcast burning is done today because of the reduction in clear cutting.

Every 3-4 years BIA does a large range burn of 3-4 thousand acres. some are on individual allotments – pasture ground, others are just for range conservation. The Tribal Range and Ag general manager is a large livestock producer in the south end and he and his father had BIA do a large burn. There was a lot of objection when setting up in October up the burn but by November he thought the burn was really a great thing.

Discussion :

- Stan Benson asked if cultural burning is still being done and Mike responded that it is done only occasionally.
- Jim R – if BIA does the burn, does the tribal council approve the burn plans?

- Mike replied that as of this year the tribal general manager of natural resources is a co-signer. Generally the burn boss or he does the burn plan, it goes to the FMO, forest manager, the regional office for review, the tribal general manager concurs and it goes to the Superintendent for approval.
- Jim Russell asked if smoke mitigation is included in the burn plan? It is.
- Mike Cunningham added that there is considerable resistance from the tribe towards smoke management.
- Mike Cunningham commented that production of smoke from a given unit is probably 20% of what it used to be because of better utilization.
- The local saw mill installed a power generator plant during the southern California power crises a couple of years ago.
 - Upgrade plans for power system have fallen by the wayside. The system used slash to power the sawmill – the upgrades to the boilers made it easier to supply the outside – Mike thought they were just waiting for the price to go back up. Right now it's just providing power for the sawmill. They took all the slash from the salvage harvest of the HeHe escaped prescribed burn and because there was no mitigation for slash in the timber sale and they used that to power the generator when the price of power was up. They chipped the slash in the field and brought it to the mill. It's not running to capacity now because it's not cost effective at this time – they are probably waiting for the price to come back up.
- Mike Ziolko inquired to what extent the tribe can say yes or no to the burn plan.
 - Mike Cunningham replied that there is a document that requires BIA to burn - a mutually agreed upon plan and that so far the tribes have not tried to stop a burn
- Asked if they were linked to the Central Oregon Interagency fire management group and the dispatch, Mike replied that they do relay information to them – there have been a few communication issues, which they are working on, and they notify NWCC is notified when a burn is planned. This year BIA has burned six acres of juniper piles.
- Mike plans to put natural fuels burns into the logging burn plans.
- Mike Ziolko added that he would like to get Warm Springs integrated into the ODF data system

Northwest Collaborative Air Priorities Project Workshop

Mike Dykzeul

Mike Dykzeul attended the Northwest Collaborative Air Priorities Project (NWCAPP) was held at SeaTac two weeks ago, participating as part of the leadership team. It was a collaborative approach to establishing the five priority issues in air quality in the northwest in the next ten to fifteen years. The goal was to have about 400 delegates from the area covered by EPA Region 10 – Oregon, Washington, Idaho, Alaska and Canada (British Columbia). There was also tribal representation. There were 202 registered delegates – about 30% from Oregon, for the three-day event. Run as a facilitated process, the 5 priorities became 8.

Mike provided copies of the final priorities for committee members. The leadership team had identified some priorities that were part of the discussion on the first two days. In order to prepare for day three, a turn around team comprised of one person from each of the 26 tables, took all the comments from the first two days break out sessions and exercises and they met at 6 pm on day two. The session lasted until 12:30 the next morning.

According to Mike, the preamble concept credit goes to Greg McClarren. On day three the preamble was the first thing everyone agreed upon and that became the starting point to moving forward. In addition to the eight priorities identified, seventeen “Promising Projects” were identified and team leaders were assigned for each project. (See page two of the NW CAPP handout).

Discussion:

- Greg McClarren brought up the matter of future highway congestion and the impact it will have on smoke within the next fifteen years. All major cross highways in the state of Oregon will be

congested under National Highway Transportation Safety Act definitions within 15 to 17 years. Hwy 26, Hwy 20, Hwy 58 will all be congested, Hwy 97 from the Dalles south of LaPine will be considered congested. Presently the only highways in the state considered congested using those same definitions are fingers out from Portland, Eugene and Medford along Interstates 5 and 84. The ramifications dealing with the potential for ozone and forest organic compounds and smoke management visibility are fairly significant. Part of the equation is the huge diesel truck driver – improved fuels will not be available for three years, or ultra clean diesel engines for 7 – 8 years, and it will take twenty years for that affects to be felt. There will be a significant lag time.

- Greg also noted that there had been a summation of the health hazards posed by ultra fine particulate matter and said it was a sobering topic, exposing children ultra fine particulate matter.
- There is a notion that in the Pacific Northwest, including British Columbia and Alaska, that we pride ourselves on the quality of our environment and the clean air and clean water.
- Mike Dykzeul pointed out the website written at the top of the “Promising Project’s” page. More information will be available there.

9. Regional Haze Rule Process Update

Brian Finneran, DEQ

Brian provided members with a one-page handout of the presentation he had made on May 15.

In summary, Brian said the 309 SIP is now being written and there are some fire elements that are to be included that he will need feed back from this committee on.

Brian focused on the requirements for fire and reported that the decision is now final to follow the 309 SIP. That SIP must be completed by the end of the year. May be late submitting the SIP but said he did not see that as an issue at this time. The decision will be made in the immediate future. The SIP would probably be only a month or two late, at most, and be completed by Feb. 1, 2004.

The Oregon SMP is one of the more advanced smoke management programs in the country and Brian Finneran does not expect that changes will need to be made in order to meet the 309 SIP requirements.

Brian reviewed the Requirements of Fire and made the following comments:

Requirements for Fire:

1. The first requirement is not an issue – not likely smoke would get that far – the SIP only has to address the 16 Class 1 areas of the Colorado Plateau.
2. The seven basic elements are already included in the Oregon SMP
3. Guidance is already there but emission estimates need to be included in ODF’s Annual Report.
4. Brian asked the committee to identify a process in the smoke management program for promoting non-burning alternatives which is probably the most significant requirement. The WRAP came up with a policy document that addresses all the alternatives – a comprehensive manual. Brian Finneran and Mike Dykzeul will make a presentation at a future committee meeting.
5. Adopting an Enhanced Smoke Management Plan will be required in the 2003 SIP.
6. Implementation of emissions reduction techniques will satisfy the requirement for annual emission goals. DEQ needs to clarify the requirements of the 2003 SIP concerning Enhanced Smoke Management Plan implementation, which includes emission cap development and emission reduction tracking.

Brian Finneran will bring the Draft 309 SIP back to this committee for feedback.

10. Plastic Covered Piles

All

- David Collier – Doing own research into the issue – this group could help by providing information. If they get to the point the rules need to be amended, it’s about a six-month process because it’s a formal rule change. In the interim, if a certain course of action was decided upon but hadn’t quite completed the rule adoption process - probably the fall burning season is a

critical time period to get these results by. We are open to the idea of considering the use of plastic covering on piles but can't just say ok, we must have rationale to make the exemption to allow it to be burned.

- Miller - The burning period starts in about mid-October
- Greg – The piles are being built now and they are using plastic.
- Jim Russell reported that NM had had a ban (on burning plastics) in place for a considerable number of years and when the National Fire Plan came along, they tried to work with the federal and state land managers on how they were going to meet some of the objectives. NM determined that the ban wasn't reasonable relative to what was trying to be done in terms of fuels. They specifically looked at the health constituent part of it.
 - Nobody has any scientific information in terms of emissions. The lead chemist in NM looked thought he constituent part of it and said that from his perspective he didn't think that polyethylene, specifically would yield any other by products relative to the toxic affect on people. That's where the proposed lifting of that ban in NM came from.
 - Plastic is only used as a moisture barrier to keep fuel dry for burning later in the season.
 - The NM draft is very specific including allowance for the use of incendiary or auxiliary fuels to ignite the burn, the type and amount of auxiliary fuels that may be used, and specifically what may be ignited. The plastic must have covered the pile for a minimum period of time, one month, prior to combustion. No more plastic is to be used than the amount needed to cover the pile. If not practical to remove the sheeting prior to the burn, then the sheeting could be burned. Additionally, the burner must be able to provide evidence that the sheeting is truly polyethylene - purchase receipts or package labeling.
 - Jim asked Roger Ottmar, of the PNW lab in Seattle to supply some information and he provided an estimate of emissions generated by the Consume program. He provided a table comparing emissions from wet versus dry piles.
 - Jim Russell provided copies of email to Mike Ziolko and attached NM Draft for approval of the use of plastic on burn piles and proposed that this committee develop a recommendation to DEQ regarding the use/burning of plastic based on the public testimony and the information have heard today. Mike Ziolko pointed out that the recommendations would be to the State Forester to forward to DEQ.
 - Jim said this is an important issue that should be addressed as rapidly as possible for the fall fire season. We are continually violating the rule as we continue to allow plastic material to be used.
- Mike Ziolko asked Jim and Erik what they are telling their people to do as they are building piles.
 - Erik responded that his people know that it is not legal to burn plastic.
 - Mike Ziolko then asked David Collier what his response would be if he heard that the Deschutes NF is burning plastic in piles. David Collier responded that he did not know.
- Jim Brown pointed out that when polyethylene is used, it is consumed in a hot fire.
- Greg commented that he doesn't believe that the intent of the DEQ regulation was to prevent burning plastic in this manner but rather to keep anyone from using it as a disposal practice for plastic and secondly, there are risk and hazards that in certain instances around subdivisions should result in alternatives being used.
- Mike Dykzeul noted that paper products are petroleum treated and also identified in the rules as unacceptable.
- Stephen Fitzgerald said the committee should have a chemist do some testing and if it came out ok then make amendment to the rule, if it turns out that there may be some level toxins then the dilemma becomes under what conditions would it be allowed and do the benefits off set the risk.
- David Collier confirmed that DEQ is open to the idea but is not willing to create a blanket exemption for plastic.
- Brian Finneran said he would like some feedback on the NM approach – are the provisions feasible for Oregon? If acceptable, how would they work in Oregon? Is the polyethylene readily

available? (Lee Miller said polyethylene is all he uses.) Would all the requirements in the NM approach work for Oregon?

- Jim Russell said that every contract that the USFS currently uses incorporates 4 mil polyethylene plastic in it. He would like to resolve this before it becomes a train wreck. If it requires that all forest related burning would come under the purview of ODF, then Jim recommended that it be done – that could be done administratively by changing DEQ and ODF rules.
- Greg noted that asking for change that would occur in 2003 could result in a public relations fiasco.
- Stan Benson commented that if you gather information that would lead to a rule, you could make a temporary rule, while the permanent rule change process is taking place. A temporary rule would expire after a set period of time.
- Erik said he would be glad to help write any proposed rule or participate on a subcommittee.
- Stephen said that should include looking at the NM draft.
- Brian said DEQ has a variance procedure but the EPA does not recognize it. It may be ok within the state.
- Mike Ziolko added that the authority given to ODF to administer forest related burning does not allow for a variance for burning prohibited material.
- Commenting on Jim Russell's suggestion, Mike Dykzeul asked if there would be additional benefits if open burn rules were shifted to ODF?
 - Mike Ziolko said the cleanest way to get what you want done is to shift all open burning on forest land to ODF, it could be done with a DEQ rule change. Then ODF could develop the rule that allows for the use of plastic and under what conditions. DEQ and the EQC are still protected because the Smoke Management Plan has to be jointly approved by both agencies. It would result in a basically consolidated program with control over burning that occurs on forestland.
 - David Collier responded that if there were legitimate reasons to do this he didn't know why DEQ would shift the authority to another agency.

The following sub-committee will work on recommendations to bring back to the full committee: Mike D, Brian J, David C, and Erik C. Randy Clark will be invited as an ad hoc member and David will invite Larry Calkins, DEQ, The Dalles, to participate.

The committee will look at work DEQ has done and is charged with:

1. Consider the NM proposal/model as well as other states – Florida.
2. Look at MSDS sheet provide by Randy Clark last month
3. Consider the Hazards/Risks
4. Determine the process and options for the time frames for interim
5. Develop recommended amendment language to the open burning rule. Language that would cover what we want to accomplish.

(Dr Peter Spencer could be a contact for health effect approach)

The committee will meet via conference call and provide a progress/update at each meeting.

Brian Jennison will send an email to set up the conference call date.

Mike Ziolko noted the recommendations of this committee would go to the State Forester for review and then to DEQ.

The August meeting date has been changed to Thursday, Aug 14, 2003.

11. Break

12. Public Comment

There was no public comment at this time.

13. Continuation of Issues Discussion

All

The agenda was revised to allow this discussion to be completed in the morning session.

14. Adjourn

The meeting adjourned at 14:30.

The next meeting will be July 17, 2003

Committee information may be found on the web at:

http://www.odf.state.or.us/DIVISIONS/protection/fire_protection/smp/SMR/SM_Review.asp