



State of Oregon Department of Environmental Quality

Public Meeting and Comments on Air Quality in Lakeview

Comment Response Document

This document summarizes public comment received and the Town of Lakeview, Lake County, and DEQ's responses on the Lakeview Area PM_{2.5} PM Advance Plan. The town and county also held three public town hall meetings to discuss the plan and strategies and all comments from those meetings are also summarized below. Where possible the comments were incorporated into the final draft of the PM Advance Plan.

Comments are summarized by issue category. All persons who provided comments are listed at the back of this document. At the end of this document a table assigns numbers to individuals who provided comments. These commenter numbers follow each comment summarized below.

1.Residential Wood Burning
a. In general
1) <i>Comment:</i> The only measures to address pollution reduction are from open burning and wood stove emissions. It is incumbent upon all of us to develop a robust Action Plan. (14)
<i>Response:</i> We agree that there should be a robust Action Plan for Lakeview. Wood stove emissions are the most significant source of pollution in Lakeview, and while open burning is not as much of a contributing factor, there are actions included in the Action Plan to address this source of pollution. With input from the community and the Advisory Committee there will be effective strategies identified to help Lakeview achieve the goal of meeting the standard by 2019.
2) <i>Comment:</i> County Commissioner Dan Shoun asked to see the "Cost of Heat in the Northwest" slide and what it means. (20)
<i>Response:</i> The slide shows the BTU's produced per dollar spent for heat pumps in relationship to other sources of heat including wood burning. According to the slide developed by Mitsubishi, heat pump costs are lower than the cost of operating a woodstove based on the amount of heat delivered to the home. This slide is available on DEQ's website at: http://www.deq.state.or.us/ag/LCLVadvisory/lclvAQ.htm under the March 12 meeting.

b. Curtailment Program

1) *Comment:* If the Klamath Falls air quality program staff issue fines to people, how do they deal with families where wood stoves are their only source of heat, or they don't qualify as low income but can barely afford to burn and wouldn't be able to pay fines? I can't afford an electric bill and if woodstove restrictions occur in Lakeview, I won't be able to keep warm in the winter. (9)

Response: The Klamath Falls air quality program allows exemptions for low income families, sole source of heat, and for people with very clean woodstoves (stoves with very low emission rates) so that they can burn on red and yellow days. These residents are required to obtain formal exemptions from the air quality ordinance, but review of these exemptions is quite strict and there are site visits to confirm the circumstances.

2) *Comment:* The current Lakeview air quality program makes advisory calls on a daily basis at 7:30 in the morning. Many people are already up and/or gone by this time of day and they've had their stoves going and emitting smoke for a number of hours. Is there a way to put out the advisory call at 4 a.m? (15)

Response: There was a suggestion that Lakeview could also make an advisory call from noon to noon, so that residents would have the information the evening before if they were going to rise at 4 a.m. Staff at the Town thought this approach was a good idea and has already begun making advisories from noon-to-noon to address this concern.

c. Changeout Program

1) *Comment:* With the woodstove change-out program, are stoves replaced at no cost? How does it work? (8)

Response: There have been various replacement programs over the years with various methods or requirements for replacements depending upon the source of funding. Primarily, the programs would fully pay for a replacement heating device if individuals were low income, and provide financial incentives for people with means to change out their old uncertified wood stoves.

2) *Comment:* We need to get the natural gas pipeline into the town so people have an alternate source of fuel other than woodstoves, to help clean up the air. Another person said they would love natural gas. They asked what options people have in Lakeview. They also asked about the cost of ductless heat pumps. (19)(27)

Response: We agree and are hopeful the community will eventually get natural gas. Natural gas to heat homes will improve air quality and there are several efforts underway to determine the feasibility of extending natural gas to this community. Unfortunately, bringing the pipeline into Lakeview and building an infrastructure for the distribution of the natural gas will be expensive. Should the expense be addressed, it may still take many years and a significant investment to build an infrastructure to deliver natural gas to customers within the town. There are many partners that need to come to agreement, expenses that need to be addressed, and challenges to be overcome before natural gas home heating can

become a reality. The Town said there are incentives and subsidies, many on a sliding scale. Ductless heat pumps costs are similar to the installation costs of a new wood stove. Depending on how you calculate the cost of wood, they can also be less expensive to operate.

3) Comment: Why do the new stoves in the changeout cause more soot and clog pipes? (22)

Response: This opinion is not consistent with what DEQ has heard from others. DEQ heard from recipients of the new wood stoves, that if the stoves were properly used there would be less creosote and should burn less wood. Others at the meeting described using different techniques with the new stoves and once they modified their burning style that they burned about the same amount of wood in a winter.

4) Comment: A commenter said they have a woodstove from the changeout program and said they still burn the same amount of wood and that the new stoves take a while to get used to. Another said there is a learning curve with the new stoves. (24)(27)

Response: Thank you for your comment.

5) Comment: A commenter said they were mistakenly told in the past that the woodstoves were free. They are not free. The person is a renter and their landlord doesn't qualify for a new woodstove. (30)

Response: The Town empathizes and states it will be clear about which people qualify and what the qualifications are.

d. Education

1) Comment: Commenter is concerned about children. He said the schools should put the green, yellow or red flag up at schools to spread awareness. Kids shouldn't even be allowed outside on some red days. Commenter said he may approach the district about not letting kids outside on red days. (27)

Response: DEQ agrees with this suggestion.

e. Other

1) Comment: Changeout programs should be required for rental situations, though income restrictions should apply. The commenter asked if landlords need a permit to rent property, and if so, whether there could be some regulation of woodstoves tied to that process. The permit for landowners could cover certified stoves to make sure the stoves meet a community need by being an appropriate heating device. He also asked about annexation of property south of Ninth Street. He said many problems could be addressed (not just air quality) through annexation. (27)

Response: DEQ agrees changeout programs should be made available for rentals and hopes to make funding available in the near future. The town states that no permits are required to rent property but ordinances could be developed to require landlords to have an alternate source of heat besides woodstoves in rentals. Annexation takes place from time to time, but county ordinances could accomplish the same thing, at least in

terms of air quality.

2. Forest and Agricultural Burning

1) *Comment:* What is the Department of Forestry's (ODF) jurisdiction? Is it only on woodlands or other areas? (2)

Response: ODF jurisdiction only applies to forestlands within specific boundary areas.

2) *Comment:* DEQ should use the ridgetop around Goose Lake as a boundary for both the MOU and the modeling. There is nothing in the MOU that prevents the USFS from burning west of the SPZ. There is burning in the Quartz Mountain/Drews Valley area west of the SPZ. An MOU with the BLM should also be developed. (14)

Response: Both the USFS and Collins MOU use ridgelines around the valley near Lakeview. You are correct there is burning in the Quartz Mountain and Drews Valley area. Inside the selected area, the main federal land manager is the USFS and the main private land manager is Collins. The BLM lands are predominately outside the valley area. The current plan for agricultural burning as well as other open burning in the valley is to request a voluntary commitment from local ranchers and residents not to burn on a yellow or red day. There should be sufficient green days to allow burning throughout the year.

2) *Comment:* There should be a discussion with Modoc County and burn officials in Northern California. There is agricultural burning in New Pine Creek (CA) and forest burning in the Modoc National Forest that can have similar impacts. Will you have similar discussions with entities in Modoc County to develop an MOU? (14)

Response: The County is committed to discussions with County counterparts in Modoc County. DEQ has also had discussions with Modoc County and will continue those discussions. However, the different rules and requirements in California cause difficulty in this communication.

3) *Comment:* Why use the ODF SPZ boundary in the emission inventory rather than a more defensible ridge top boundary? (14)

Response: ODF's SPZ was a defined boundary at the time the emission inventory was conducted. The decision to use the SPZ to calculate emissions was made before a robust discussion with the community occurred. Still, the SPZ provides a reasonable estimate of emissions in the greater Lakeview area and served a purpose for this plan. The SPZ will **not** be used as a boundary for any strategy in the plan and instead all strategies will be focused within the UGB boundary.

2. Open Burning

a. General

1) *Comment:* What is the procedure for open burning? The commenter has 20 trees that he needs to dispose of in the fall. What is the procedure going to be in the fall if there are new open burning restrictions? He is located outside the UGB. (1)

Response: The procedure is to call dispatch to see if it is a green, red, or yellow day. Dispatch needs to know where you are burning. If it's a green day, you would go ahead and burn. If it is a red or yellow day, you would be asked to please not burn until it is a green day again as a voluntary measure.

b. Boundary

1) *Comment:* A concern was raised about arbitrarily choosing a boundary, far out from the monitor (for example, 15-20 miles away from the monitor) to impose requirements. How do we know that it is really going to improve anything? Is there any data to support expanding the open burning restrictions on red and yellow days to rural areas outside the UGB? (6)

Response: The Commissioners, the Air Quality Committee and DEQ heard the concerns about a boundary outside the UGB and have chosen not to identify such a boundary for strategy purposes. The monitor in Lakeview is primarily affected by emissions coming from inside the UGB, and the bulk of those emissions are coming from wood stove/fireplace smoke. However, DEQ did conduct modeling to estimate the impact of prescribed burns occurring outside the UGB on red and yellow days (when wind and weather patterns were keeping smoke in the area). The model showed an increase of $1.2 \mu\text{g}/\text{m}^3$. While this amount of emissions is small in comparison to the wood stove/fireplace smoke, it is an impact nonetheless. Instead, the PM Advance Plan was changed to ask residents outside the UGB to conduct open burning only on green days and voluntarily not burn on red and yellow days. If everyone does their part to help minimize emissions on red and yellow days, then it becomes a community solution to the problem and a nonattainment designation may be avoided.

2) *Comment:* The plan states that the area in the UGB doesn't meet the standard. The Commissioners should just take action on the UGB. No action should be taken in the SPZ unless monitoring is done in the SPZ. (13)

Response: Based on this comment and others, the plan will focus on the UGB with a request to individuals outside the boundary to voluntarily burn only on green days. The plan will not identify a boundary outside the UGB for strategy purposes.

3. Industrial Sources

a. In general

1) *Comment:* Why does the PM Advance Plan not contain any restrictions on industry, now or in the future? (14) (12)

Response: The PM Advance Plan will include a section on DEQ rule changes. These rule changes are scheduled to be proposed in the summer of 2014, with a potential adoption in January 2015 that include new or expanding industry requirements to obtain emission offsets in proposed "sustainment areas" such as Lakeview. Emission offsets could come from sources like wood stoves and would require fewer offsets if these

“priority sources” were used as offsets, rather than other industrial emissions. DEQ regulates industrial sources by permit. Each permit contains limits on particulate matter emissions. Sources are also required to periodically monitor for opacity and particulate matter concentration (grain loading) standards and require self reporting of excess emissions. Should there be ongoing excess emissions from a facility or any exceedance of a particulate matter limit, DEQ can take enforcement action.

2) *Comment:* Voluntary emission reduction actions from industry are conspicuously absent. Why doesn't industry volunteer to reduce emissions during inversions? (14)

Response: Due to permitting requirements and local industry understanding the risks of nonattainment, the industrial sources are looking for ways to reduce emissions. As an example, Cornerstone is trying to bring natural gas to their facility.

3) *Comment:* The plan is deficient without concrete emission reductions from industrial sources. In addition, the plan is deficient without a percentage reduction from each source of pollution in proportion to their contribution. (14)

Response: We understand the concern. However, the plan is not deficient. The plan is based on pollution impacts, what citizens breathe, and not on the amount of pollution emitted. The release of emissions from a very small pollution source at ground level can cause worse localized air quality than a very large source with a tall exhaust stack. DEQ's modeling of source contribution at the monitor indicates the industrial source contribution is quite small. DEQ has conducted further modeling, based on updated permitting information to determine the relative contribution at the monitor.

An EPA analysis of the filter sample shows that wood smoke was the most significant component (nearly 50%) based on a yearly average and that urban unidentified (in part - industrial) emissions were less than 6% of the filter sample. This estimate is supported by the dispersion modeling that shows impacts of about 2% from industrial sources. If analyzing the filter sample based on daily emissions in the winter, the wood smoke percent contribution would be much higher.

b. Modeling

1) *Comment:* A concern was raised about DEQ's industrial modeling, stating that it was using 2011 data and using incomplete data because it didn't include recent air quality permitting information. Point sources account for 15% of the problem at the monitor without updated permits (author speculates it could be as high as 25% if 2013 permit increases were included). Future emissions are skewed if improper emissions levels are not addressed. The commenter wants DEQ to provide a rationale for excluding 2013/14 permitted source emissions; explain how DEQ accounts for known impacts from these increases; and provide a justification for future year impacts not included in the modeling. Future growth is determined to be constant and that there a 30% reduction in emissions from these sources. The reduction appears to be magic and without explanation because there are no voluntary reduction measures by industry. Suggestions are to update the emission inventory and the modeling. (14)

Response: DEQ updated the emissions inventory and dispersion modeling for the Future Year 2019 to reflect the 2013 permit modifications. While the emission inventory suggests that point sources account for about 20% of the total emissions from all sources in 2011, and roughly 27% in 2019, they only contribute to two percent of concentrations at the monitor. The dispersion modeling for 2019 will include current information from the industrial source permit, but this will not change the major focus of the plan because industrial source emissions are still a small percentage of total impacts.

2) Comment: The (industrial dispersion) modeling does not use the most current weather information and should take into account periods of stagnant conditions. The contours should be more round than pear shaped. Why haven't you prepared modeling for worst case scenarios? Will you include a worst case scenario? Will you include 2013 data and weather in your models? Update the modeling and include missing permit information and an extended inversion scenario and 2013 monitoring data and weather. (14)

Response: The roll-back modeling of emissions reductions in Lakeview uses an estimate of existing conditions of PM2.5 called the Baseline Concentration. Following EPA methodology, this Baseline Concentration is calculated from a running five-year average of monitoring data from 2009-2013. In order to approximate the conditions under which the Baseline Concentration was measured, five years of met data were also used for the dispersion modeling, including the overlapping year of 2009. The met data used in the dispersion modeling does include "worst case" conditions such as stagnant weather with low wind speeds. Although there is some inter-year variability in meteorology, its effect on the dispersion modeling does not significantly affect the impact of industrial sources at the DEQ monitor. The pattern of concentrations from the dispersion modeling, round or pear-shaped, reflects the predominant wind direction. In Lakeview, the average annual wind flow is from the south; as a result the highest impacts from the industrial sources lie in an elliptical pattern to the north of these facilities.

3) Comment: The Iberdrola project is not included in the modeling and it will be contributing high emissions.

Response: Iberdrola was included in the future year modeling, but its emissions were based on the condition that Iberdrola's contribution would be mitigated by reductions from another local facility. Since DEQ conducted the initial modeling, Iberdrola modified its emissions offsetting options, thus DEQ has updated the emissions data and has remodeled the industrial source contributions. For 2019, dispersion modeling will evaluate three scenarios: Scenario 1) Collins Lakeview Sawmill without a boiler plus Iberdrola (providing steam to Collins Lakeview Sawmill); 2) Collins Lakeview Sawmill without Iberdrola; and 3) Collins Lakeview Sawmill with a boiler plus Iberdrola. It is unlikely scenario #3 would occur because it is not economical for Iberdrola to operate without a source for its steam. #3 will be modeled just in case.

4) Comment: The future scenario modeling also does not account for economic growth, even though there are companies that are working to come to town (e.g. Red Rock Biofuels). How is DEQ going to account for Red Rock Biofuels into the plan and other projects for which air quality permits have been issued or are contemplated? That information should be included. (14)

Response: DEQ has not received a permit application for Red Rock Biofuels, and cannot include Red Rock in the 2019 inventory until an application is received with emissions and operating parameters. If and when DEQ does receive an application, the facility will be required to meet all rules and guidance relating to new industrial sources. The new source rules are restrictive for significant emitters of PM_{2.5}, especially in Lakeview.

Growth of Lakeview industrial source emissions between 2011 and 2019 is accounted for by the difference between actual emissions used for 2011 and Permitted (PSEL) emissions used for 2019. The industrial products manufactured by these sources are used largely outside of Lakeview, and growth in emissions would depend on growth in demand for the products state-wide and elsewhere. The PSELs of these facilities provide for significant growth in production, as actual 2011 emissions are well below the PSELs. Growth in emissions greater than the PSELs would require a permit modification and usually a modification to the facility. An increase in growth of this magnitude has not been predicted. As a result, the use of high PSEL emissions for the 2019 Future Year, relative to the 2011 actual emissions is considered to be very conservative.

5) *Comment:* New businesses can afford to put on the best technology available, even though not required to do so. (12)

Response: Businesses may consider installing the best available technology, but are not required to do so unless it is triggered by DEQ regulations. For example, if a new or modified industrial facility is permitted through the “New Source Review” program at DEQ, Best Available Control Technology would be required for larger and possibly smaller sources in a sustainment area. Air quality impacts must also be less than all ambient air quality standards, which can be achieved through offsets.

b. Permitting

1) *Comment:* In the next five years, there may be a rush of industrial sources to Lakeview to avoid strict permitting restrictions imposed from a nonattainment area status. Future air quality permitting will be treated under less stringent, attainment criteria. The commenter is concerned that the community will see a rush of industries coming into Lakeview, since the community is not yet designated nonattainment. For example, Red Rock will be treated similar to Iberdrola and “grandfathered” in. The plan will fail if an existing source or future source is permitted under current attainment criteria. Existing point sources will be able to emit the maximum amount of pollution even during an inversion. DEQ should write a rule that addresses future permitting of sources in a stringent way to meet the emission reduction goals. The Town and County should develop policy, code and planning requirements to ensure best emission control equipment is placed on new facilities. These entities should be good citizens and voluntarily reduce their emissions during this time. The Town, County and State should encourage industrial sources to reduce emissions during inversion periods, either voluntarily or mandatorily. (14)

Response: DEQ believes that designating Lakeview as a sustainment area will address a number of these concerns. When DEQ developed the concept of sustainment areas, the intent was twofold: to balance the community’s desire for economic development with the need to improve air quality; and to be able to apply permitting requirements (specifically offsets) without having to wait years for an official nonattainment area designation. In addition, DEQ wanted to provide incentive for new or expanding industrial sources to obtain offsets that address the actual cause of the air quality problem. In Lakeview, woodstove emissions are the main cause of the local problem. Offsetting industrial emissions increases

with woodstove changeouts would help address the air quality problem while still allowing economic development in the community. To show the magnitude of the issue, even if all the industry in Lakeview were to shut down, there would still be an air quality problem due to woodstoves.

Under the proposed rules, in which Lakeview would become a sustainment area, a source that increases emissions of PM2.5 by 10 or more tons per year will either have to do computer modeling to demonstrate that the emissions do not exceed the NAAQS, or must obtain emissions offsets, either from other industrial sources or from a combination of woodstoves and industrial emissions. The rules provide incentive to obtain offsets from woodstoves by requiring fewer offsets than if the source chose to use industrial emissions alone. In addition, if the source makes a major modification (as defined in the rules), a Best Available Control Technology review will be required. The only sources that would be “grandfathered” in are those that emit less than 10 tons per year of PM2.5.

In addition to the sustainment area designation, DEQ has been working with the Town and County to address the air quality problem locally and will continue to do so.

2) *Comment:* DEQ has failed to implement more stringent permitting requirements because of industry being able to “grandfather” emissions from one permit to their renewal. (14)

Response: Existing industrial source emissions are “grandfathered” until there is a significant increase in emissions over their baseline emission rate or until a rule is developed that changes requirements, such as rules in an attainment plan. At renewal, each application is reviewed carefully prior to reissuing the renewed permit. Current rules are already included and any new requirements are added to the permit. Any expansion of a specific industrial source to increase emissions is addressed under the New Source Review rules. This program is applicable in an attainment area or a nonattainment area.

3) *Comment:* DEQ should propose a rule to address ACDPs for facilities going into Lakeview (14)

Response: Current rules are very protective for an area that exceeds the ambient standards like Lakeview. A new facility cannot obtain a permit or build unless they are below the significant emission rate of 10 tons per year for PM2.5. If they are over the significant emission rate, they must model and any impacts from the facility must be below significant impact levels, which is unlikely in the Lakeview area.

4) *Comment:* Why wasn’t the natural gas pipeline extended to Lakeview five years ago? (11)

Response: The pipeline estimated cost was too high at the time to be feasible, but it is something the county is still pursuing with other partners such as Cornerstone and others.

c. Biomass facilities

1) *Comment:* The plan is not robust. It contains omissions in the emission inventory. There are no future reductions in industrial pollution. It assumes no economic growth. New industry has been announced like Red Rock Biofuels. There will be future growth. Red Rock Biofuels is the example to be located in the Lakeview Enterprise Zone. It has the potential to emit great quantities of PM2.5 emissions. There is no contingency plan to address growth. Has DEQ been contacted by Red Rock Biofuels and for what purposes and what is the rationale for no growth? Will the town and county provide information on Red Rock Biofuels to include in this plan? Follow Order 97-22; provide a growth measure in the plan; reassess the 30% reduction from industry; Town and County provide information on Red Rocks Biofuels for this plan. (14)

Response: DEQ is reviewing the economic growth criteria for industrial emissions. We have also reviewed the modeling for industrial sources. New industry like Red Rock Biofuels has yet to submit a permit application to DEQ. Without a permit application, DEQ cannot assess ambient air impacts. While the facility has been announced, they have not fully committed to a project and the construction and implementation of this facility is not known at this time. DEQ has discussed with the facility their requirements but there has not been a plan submitted to DEQ that addresses the rules or their impacts. DEQ will consider growth for industrial sources in this plan and will conduct modeling to reassess the reduction from industrial sources over the life of the plan.

4. Sources of Emissions

a. Emission Inventory

1) *Comment:* The data has been manipulated to show that the air quality is much worse in the SPZ than the UGB. (13)

Response: DEQ assumes that the commenter is suggesting the emission inventory has been manipulated by DEQ. That is not true. DEQ always uses the best data available at the time of the modeling exercise.

2) *Comment:* There has not been a wildfire or prescribed burning in the SPZ yet the records show 248 lbs/day in the SPZ compared to 0 in the UGB. (13)

Response: Wildfire and prescribed burning within the SPZ were based on satellite image observations of large acreage heat sources (infrared imagery) conducted by NASA. We used 2008 and 2011 imagery to develop a composite year for 2011 to develop our estimates. Inside the Lakeview UGB there were no wildfires or prescribed burning because there are no forest lands inside the UGB.

3) *Comment:* There are no industrial sources in the SPZ. The UGB has several. (13)

Response: This is correct. All known industrial sources are located in the UGB.

4) *Comment:* The plan references Appendix A and the plan doesn't include the information in Appendix A that is needed to verify the numbers in

the plan. (13)
<i>Response: We apologize. The draft plan did not include a live link to Appendix A in the electronic copy of the plan. The final plan will have a complete link. Appendix A is a large document (larger than the plan) that accounts for all the emissions from all sources within the UGB and within the SPZ. It has many detailed spreadsheets with documentation for each number in the spreadsheet. Appendix A has been summarized in the plan.</i>
5) <i>Comment:</i> There is an incomplete emission inventory that includes a permit modification in 2013 for a tripling of emissions from Iberdrola; a permit modification for Cornerstone in 2013 with an increase in emissions for them; Collins is in the process of receiving an updated permit from DEQ. The increases should be included in the modeling. (14)
<i>Response: You are correct there have been some changes and permit modifications since the emission inventory was completed last summer in 2013. DEQ has revised the inventory and modeling to reflect the updated permit modifications for Cornerstone, Collins, and Iberdrola.</i>
b. Other Sources
1) <i>Comment:</i> Goose Lake has been dry recently and has produced dust storms. Fugitive dust could exacerbate the air quality problems during the summer. It would be wise to think about water resources as it relates to air quality. DEQ, the town and county should work with others to develop a public and agricultural use awareness campaign to maintain water in Goose Lake. (14)
<i>Response: We agree fugitive dust can exacerbate the air quality problems. However, DEQ does not see evidence that dust causes an exceedance of the standard, particularly when analyzing the filter samples at the monitor. Nearly all the contribution during the winter months, when Lakeview exceeds the standard, is from carbonaceous material (wood burning) and not silica (associated with dust).</i>
2) <i>Comment:</i> A commenter suggested we create a regional composting facility to reduce leaf/shrub burning. (31)
<i>Response: This was listed as a suggestion for potential emission reduction strategies.</i>
5. General Topics
a. PM2.5 standard
1) <i>Comment:</i> How many days out of compliance in one year do you get, yet still remain in attainment?(10)
<i>Response: Basically, the standard can be exceeded 6 calendar days per year, which equals 2 % of the monitored days (compliance sampling occurs every 3^d calendar day) without causing a violation.</i>

2) *Comment:* Commenter doesn't see any science to show why the national standard went from PM10 to PM2.5. How was this determined? He feels like this community's hands are tied and that there is little leeway in what Lakeview can do. (16)

Response: While it may be frustrating that Lakeview achieved PM10 attainment and is now approaching nonattainment for PM2.5, the community still has a chance to reduce its emissions with locally developed strategies. EPA's national air quality standards are health-based standards. EPA has conducted and reviewed numerous health studies to determine the effects of emissions in different concentrations on human health. (<http://www.airnow.gov/>) The body of evidence from these health studies shows there is a significant health risk from high PM2.5 concentrations that can aggravate asthma, bronchitis, heart conditions and other respiratory ailments. The most sensitive people include children, the elderly and those with heart or respiratory problems.

3) *Comment:* There is a question as to the legality of EPA deferring requirements of the Clean Air Act (nonattainment status) for a community such as Lakeview. EPA doesn't approve the plan (PM Advance Plan) and neither does DEQ. It is up to Lakeview to prepare the plan and it is like the proverbial fox guarding the hen house. EPA should be commenting and approving this plan. EPA does have the responsibility to assure the local plan is robust enough to meet the intended objectives. (14)

Response: EPA has not deferred the requirements of the Clean Air Act in Lakeview's case. In 2012, EPA only changed the annual standard and Lakeview complied with the annual standard. There was no requirement to designate Lakeview as a nonattainment area at that time. In 2006, when the daily standard was established, Lakeview did not have sufficient data to designate the community nonattainment. The PM Advance program was developed as a voluntary program for those communities such as Lakeview that are violating or close to violating the standard, but not formally designated nonattainment. It gives the community an opportunity to identify its own strategies to clean up the air in a timely fashion. You are correct this is a community action plan and up to the community to implement. Should the community fail to meet the standard in a reasonable period of time, EPA retains the authority and responsibility to designate Lakeview as a nonattainment area.

4) *Comment:* This plan is a living document and Phase Two part of the plan is yet to be developed. What happens if Phase Two is never implemented? Is there still a deferral until 2019? (14)

Response: Yes, this plan is a living document and can be changed. Since EPA provided an extension to the original plan deadline (March 2014), there will not be a phase one or two. There will be a plan due to EPA by September 30, 2014. Lakeview needs to show reasonable progress toward meeting the standard as identified in the plan by 2019. Unless legal requirements dictate otherwise, the plan will explain to the community how the community will meet the standard. If the plan does not work or is not implemented, EPA will still review the data along with DEQ and decisions can be made at that time as to whether other measures are necessary by the state or federal government to address Lakeview's air quality.

5) *Comment:* Will EPA change the standard again in the near future? (22)

Response: EPA is required to look at the standard every five years. The standard was last reviewed in 2012. EPA may change the standard as early as 2017, but it is dependent on the scientific review of all the latest available health effects data.

6) *Comment:* What specifically would happen if Lakeview was designated as non-attainment? (25)

Response: It could lead to restrictions on woodstove use and make it harder for new industrial sources to become permitted and existing businesses to expand. This is first a health issue, but the economic issues could impact the community in a significant way as well.

b. Other

1) *Comment:* Commenter would like a commitment from the County, Town, and DEQ to respond to questions raised at this meeting, as well as his written comments he submitted on February 19, 2014. (12)(14)

Response: This comment/response document should address this concern.

2) *Comment:* Commenter believes that the Town and County could utilize the community's geothermal resources. (12)

Response: The Town and County have begun using geothermal resources, and it is identified in the plan. It is very expensive and difficult to build the infrastructure. Nonetheless, the community is moving forward with a project using geothermal to heat the hospital and schools in Lakeview. The prison also uses geothermal heat.

3) *Comment:* Is there an opportunity to have an extension on submitting this PM Advance Plan so that public comments and strategies can be taken into account? A commenter requested that the Commissioners delay action on Phase I of the plan. (4)(13)

Response: The original deadline for submitting the plan to EPA was March 12, 2014. Based on your comment as well as others, the Town and County have requested an extension from EPA, and EPA has said it will grant an extension to September 30, 2014. Since there is a delay in the plan, there will be no phase one or phase two in the final draft of the plan.

4) *Comment:* The PM Advance Committee needs to be consistent with what the PM Advance Plan says and what is in newspaper. The paper says there will be an open burning ban outside the UGB, which isn't accurate.(17)

Response: We agree. The paper tries to report accurately and clearly, and the PM Advance Committee and DEQ try to communicate clearly. Unfortunately, that incorrect statement did occur in the paper and the reporter has agreed to fix the error. He now understands that the PM Advance Committee's currently stated open burning strategy outside the UGB is to ask people conduct open burning on green days and avoid open burning on red and yellow days. The PM Advance Committee's currently stated strategy inside the UGB would be to match that of the Town,

which prohibits open burning from November 1 – the end of February.

5) Comment: The PM Advance Committee should have other people on it from outside the UGB. Why wasn't there an announcement to get other people to participate? There should be meetings in the greater Lakeview area (Westside, New Idaho/Thomas Creek, New Pine Creek. (13)(18)

Response: Thank you for the comment. While efforts to represent the areas inside and outside the urban growth boundary (UGB) were attempted, there could have been a more intentional effort to recruit individuals from outside the UGB. Rural Fire districts from outside the UGB were represented on the Committee. The suggestion for greater inclusion of individuals outside the UGB is appreciated and will be considered for future committee work. In addition, the County and DEQ held a public meeting on April 8th, in Westside to receive additional input.

6) Comment: The Town and County are fortunate to be part of the PM Advance Program. There is no wiggle room in the plan especially with 2013 data; we've got to get it right. (14)

Response: We agree.

7) Comment: A three minute response time is not enough time per person for public response (at the community meetings) and the plan is due to EPA in March. There is no formal mechanism for the public to respond. (14)

Response: These are process questions and we have considered these process questions in our public outreach. First, our facilitator kept a discussion going for the allotted time and we felt everyone had a chance to speak. The three minute limit was observed in an orderly fashion by the audience without facilitator intervention. As stated above in the response to comment #3, the plan due date was extended to September 30, 2014 by EPA. The public was able to provide input through three separate community meetings.

8) Comment: There is a social justice issue if natural gas and geothermal infrastructure is developed, because people of Lakeview will be left paying more than quadruple for their heat when compared to wood heat. (14)

Response: The infrastructure is very expensive and it may not be cost effective to develop natural gas and geothermal heating sources for residences. However, until feasibility studies are done and decisions are made, it will be difficult to assess economic impacts.

10) Comment: The plan understates the problem. There is little new being proposed. (14)

Response: The intent of holding community meetings was to gather new ideas and to strengthen the document to address the problem. The new draft will include 2013 data which will be a robust plan that characterizes the problem more fully.

11) <i>Comment:</i> A commenter said we should think about getting rid of EPA. (24)
<i>Response:</i> This is outside of the purview of this group.
12) <i>Comment:</i> A commenter said children are being indoctrinated by the air quality programs at schools, and is against it. Children should learn math and reading, not be snitches against their parents. (33)
<i>Response:</i> We have no comment.
6. Health Issues
a. Personal Health
1) <i>Comment:</i> A commenter asked if we had any data to support health impacts. (26)
<i>Response:</i> EPA has numerous studies nationwide that show significant health impacts from particulate matter.
7. Air Quality in Other Areas
1) <i>Comment:</i> What is La Grande's status? (3)
<i>Response:</i> La Grande is a former PM10 nonattainment area that came back into compliance with the standards and is now a PM10 maintenance area.
2) <i>Comment:</i> Do inversions impact Lakeview more than other places, such as Klamath Falls? (28)
<i>Response:</i> The Town said the inversions in Lakeview are pretty extreme, but are similar to those in the Klamath Basin.
3) <i>Comment:</i> Does Alturas, California experience similar air quality problems as Lakeview? (32)
<i>Response:</i> DEQ doesn't know. A couple of years ago, Joe Moreo, an official from Modoc County, said that Modoc County would need to develop an air quality program similar to Klamath County for the Alturas area.
8. Air Quality Modeling/Monitoring

1) *Comment:* How does the modeling work and how accurate is it relative to what is happening on the west side? In models outside of Lakeview do you use monitors or other information? How does modeling compare to real world impacts? (4)

Response: DEQ tries to use recent meteorological data to model impacts in the valley, including those from open and prescribed burning. The modeling considers two years of data and the location of the burns during winter days with weather data. This modeling shows there was some impact from prescribed burning that affected the monitor in Lakeview.

Open burning and forest burning impacts in the west side of the valley are much less than those from wood stove smoke, but the monitor is affected nonetheless. These models reflect the best information we have in areas where we do not have monitoring. The need to reduce PM2.5 emissions is a community problem. If everyone does their part to help minimize emissions on red and yellow days, then it becomes a community solution to the problem and a nonattainment designation may be avoided.

2) *Comment:* When looking at modeling with woodstove information how does that work? (5)

Response: Modeling for all PM2.5 is a proportional relationship to emissions quantified at the monitor and is distance weighted. In other words, the further you are away from the monitor the less the impact at the monitor. Additionally, the chemical components on the filter sample are analyzed and a factor model is used to determine the potential sources of emissions including wood stove smoke. Wood stove smoke was determined to be significant on the filter.

3) *Comment:* We need to have a monitor outside the UGB (e.g. in the valley), to find out what is going on in other areas. (11)(13)

Response: There are other less expensive and non-regulatory methods to obtain similar information requested. Modeling or non-regulatory style monitors may be used and DEQ will look into the possibility of this type of monitoring. In fact, Lakeview had a PM10 background monitor outside of Lakeview for years and these levels were far below those at the regulatory monitor. There are also small monitors that are not federally recognized that can be used to determine levels outside the main urban area.

4) *Comment:* The only data from outside the UGB is from surveys conducted to determine an emission inventory without the benefit of monitoring. (13)

Response: We agree. However, those were the best tools without more expense within the timeframe we were originally given.

5) *Comment:* 2013 was a terrible weather and air pollution year. Due to types of exceedances seen during this year, Lakeview has a high risk of not meeting the standard. The worst of these exceedances occur during inversion periods. Why haven't you prepared modeling for worst case scenarios? Will you include a worst case scenario? Will you include 2013 data and weather in your models? Update the modeling and include

missing permit information and an extended inversion scenario and 2013 monitoring data and weather. (14)

Response: DEQ agrees, 2013 was a terrible weather and air pollution year. We also agree that Lakeview is not meeting the standard and may not meet the standard in the future unless significant emission reductions are made community-wide. Now that there is an extension requested for submittal of the plan and we have a complete set of 2013 data, DEQ will adjust the design value (worst case day) and project a 2019 design value. Because a design day by definition is one with air stagnation, the best model does not consider meteorology and simply proportions the weighted emission inventory based on distance and other input models such as industrial source modeling and prescribed burning models. Each of these models will be updated to address the current status of emissions in Lakeview and the surrounding area.

6) *Comment:* Is the population increase in Lakeview responsible for the high 2013 PM2.5 numbers? (23)

Response: The population was about the same county-wide and in the valley. Inversions and an increase in use of woodstoves are more likely the reason for the increase in 2013 PM2.5 concentrations.

9. Nonattainment Boundary

1) *Comment:* Who makes the boundary determination for a nonattainment area? (7)

Response: EPA makes the ultimate determination for a boundary for a nonattainment area. In general, EPA has typically selected the whole county as a nonattainment area, but locals can influence the decision. EPA goes through a process to determine the boundary based on the amount, type and location of the pollutants. For example, with the determination of the Klamath Falls PM2.5 Nonattainment area, EPA started with the whole county area and the size was negotiated down to the air quality zone that Klamath Falls has today. It helped that Klamath Falls had established that air quality zone in advance. Likewise, any air quality area that this Lakeview/Lake County area establishes in advance will only help with negotiations should there come a time that EPA moves forward to establish a nonattainment area in this community.

Comment #	Commenter	Received
1	Gary Johnson	February 19 Community Meeting
2	Unidentified commenter	February 19 Community Meeting

3	Barry Shullanberger	February 19 Community Meeting
4	Cory – Unknown last name	February 19 Community Meeting
5	Unidentified commenter	February 19 Community Meeting
6	Unidentified commenter	February 19 Community Meeting
7	Unidentified commenter	February 19 Community Meeting
8	Unidentified commenter	February 19 Community Meeting
9	Unidentified commenter	February 19 Community Meeting
10	Bill – Unknown last name	February 19 Community Meeting
11	Bill – Unknown last name	February 19 Community Meeting
12	Chris Zinda	February 19 Community Meeting
13	Richard Woodward	February 18 letter to Lake County Board of Commissioners
14	Chris Zinda	February 19 letter to Town of Lakeview, Lake County, Dick Pedersen DEQ; Dennis McLerran EPA
15	Unidentified commenter	February 19 Community Meeting
16	Frank – Unknown last name	February 19 Community Meeting
17	Unidentified commenter	February 19 Community Meeting
18	Unidentified commenter	February 19 Community Meeting
19	Unidentified commenter	February 19 Community Meeting
20	County Commissioner Dan Shoun	March 12 th Community Meeting
21	Unidentified commenter	March 12 th Community Meeting
22	Unidentified commenter	March 12 th Community Meeting
23	Unidentified commenter	March 12 th Community Meeting
24	Unidentified commenter	March 12 th Community Meeting
24	Unidentified commenter	March 12 th Community Meeting
25	Unidentified commenter	March 12 th Community Meeting
26	Unidentified commenter	March 12 th Community Meeting
27	Chris Zinda	March 12 th Community Meeting
28	Unidentified commenter	March 12 th Community Meeting
29	Unidentified commenter	March 12 th Community Meeting
30	Unidentified commenter	March 12 th Community Meeting
31	Jess Brown, Collins Company	March 12 th Community Meeting
32	Unidentified commenter	March 12 th Community Meeting
33	Unidentified commenter	March 12 th Community Meeting