

## Summary of Public Comments and Agency Responses

### Wyoming Air Quality Standards and Regulations Chapter 10, Smoke Management Draft 12/12/03 Proposed Revisions

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**Comment Period:** The public notice soliciting comment on the proposed revisions to Wyoming Air Quality Standards and Regulations (WAQSR), Chapter 10, Smoke Management was published on December 12, 13, 14 and 18, 2003 in newspapers throughout the State. Revisions are being made in response to requirements of the federal Clean Air Act and the Regional Haze Rule. The 12/12/03 Draft prepared by the Wyoming Department of Environmental Quality - Air Quality Division (WDEQ-AQD) presented changes to the existing Chapter 10, Section 2, Open burning restrictions and introduced a new Section 4, Smoke management requirements. Section 2 addresses restrictions and requirements on specific burning practices such as refuse burning; open burning of trade wastes, for salvage operations, for fire hazards, and for firefighter training; and vegetative material open burning. Revisions to Section 2 will reflect current implementation of the rules by District Engineers and provide continuity with the new Chapter 10, Section 4. The new Section 4 proposes to regulate sources of vegetative burning for the management of air quality emissions and impacts from smoke on public health and visibility. Written and oral public comment was accepted through the Air Quality Advisory Board (AQAB) meeting on January 12, 2004. The AQAB meeting was conducted beginning at 10:00 a.m. at the Department of Environmental Quality Casper Field Office at 3030 Energy Lane, Casper, Wyoming.

**Summary:** A total of 22 individuals, including the AQAB Members and WDEQ staff, attended the Air Quality Advisory Board Meeting. Darla Potter presented the proposed revisions to WAQSR Chapter 10, Smoke Management to those present. The AQAB entertained oral comment and entered into discussion regarding the proposed revisions. Six individuals provided oral comment at the meeting. During the public comment period, written comments were received from five different entities or individuals. Each set of written comments as well as a transcript of the oral comments are attached to this summary and should be referred to for the exact comment. Paraphrased comments and the associated response to both the written and oral comments are given below. When a portion of WAQSR Chapter 10 is referenced in the comments and/or responses, it refers to the Draft 12/12/03 Proposed Revisions.

In addition to the transcript of the AQAB meeting normally provided to the Environmental Quality Council (EQC), the AQAB embraced the WDEQ-AQD commitment to prepare a comment and response summary so that the EQC would have the added benefit of the concerns and comments that were submitted to the AQAB along with the WDEQ-AQD responses. To provide the EQC and the public a "stationary target", the AQAB voted in favor of forwarding the January 12, 2004 proposed revisions to WAQSR Chapter 10, Smoke Management, as presented by the WDEQ-AQD during the AQAB meeting, to the EQC for rulemaking at a public hearing on March 17, 2004.

## GENERAL RESPONSE TO COMMENTS

In this rulemaking process the WDEQ-AQD is proposing to modify the existing Chapter 10, Section 2, Open burning restrictions and to add a new Section 4, Smoke management requirements to the Wyoming Air Quality Standards and Regulations. Section 4 is added as a result of requirements pursuant to Section 309 of 40 CFR Part 51, Subpart P, “Protection of Visibility”. Wyoming has submitted a State Implementation Plan (SIP) revision to implement the requirements of this federal regulation commonly referred to as the Regional Haze Rule. Modifications to Section 2 are proposed to clarify the regulatory intent and extent of the existing regulation which is already a part of Wyoming’s EPA approved SIP, and to make Section 2 language compatible with Section 4.

The thrust of many of the specific comments that follow imply that the WDEQ-AQD is attempting to impose additional requirements, particularly in the area of open burning activities regulated under Section 2. The regulatory language in the existing Section 2 is brief and broad, and does not allow for any regulatory exemptions for open burning activities, with one exception. That exception is for refuse burning on residential premises in areas of low population density of refuse generated on those premises. The definition of low population density defined in 1970 is arbitrary and inappropriate in today’s society where the rural/urban interface is a significant public issue. Consequently, we have tried to address that issue by establishing a setback distance from a potential burner and those who might be adversely impacted by such an activity. Relative to open burning of trade wastes and open burning of plant and forestry wastes, the existing regulation allows only that such activities may be permitted (emphasis added) under certain conditions. There is no exemption for private, industrial, or governmental entities, and no de minimus level of open burning defined.

Significant comment has been generated from several participants regarding private property rights and the implication that proposed modifications to the existing Section 2 regulations providing for a “permit by rule” rather than a formal permit would allow unfettered access by Division representatives. State and local governments have the ability to protect public health, safety and welfare. Thus, the state may regulate or limit the use of private property to protect such interests. In recognition that air pollution imperils public health and welfare, harms wildlife, and impairs beneficial uses, Wyoming’s legislature has declared the prevention, reduction and elimination of air pollution, and Wyoming’s control over its air as two express purposes of Wyoming’s Environmental Quality Act. Thus, Wyoming’s air quality regulations may have some effect on the use of private property in order to protect public health and welfare and retain Wyoming’s control over its air. Impacts from burning activities directly affect public health and welfare and Wyoming’s air.

As presented before the Air Quality Advisory Board, because of the broad language in the existing regulation, we are attempting in this action to clearly define for potential open burners their responsibilities in complying with the regulation, to minimize the requirements for a formal burn permit from the WDEQ-AQD (referred to as “permit by rule”), and to provide for a consistent statewide application of the requirements by the agency – as well as to provide continuity to the new Section 4. That is our intent – no more, no less.

## SPECIFIC COMMENTS

### *Michele Barlow, Wyoming Outdoor Council (Oral Comment)*

#### **SMP-I / SMP-II Threshold –**

**Comment:** Wyoming Outdoor Council does not endorse the Environmental Quality Council's change of the SMP-I to SMP-II threshold from 2 tons PM<sub>10</sub> emissions per day to 5 tons PM<sub>10</sub> emissions per day.

**Response:** The WDEQ-AQD agrees that the threshold should not be changed for the following reasons.

The WDEQ-AQD recognizes the time, energy, and compromise devoted in the Stakeholder Process to develop Section 4 for rulemaking. The Development Team wanted to create a threshold that would enable most burners of field crops to be in SMP-I. Since any requirements related to smoke management would be the most burdensome for the private landowners who have not been regulated in the past, the group wanted to set a threshold that would mean that most private landowners would fall into the less rigorous level. According to the farmers in the Development Team, most daily burns would not be anticipated to exceed 100 acres, and emissions tables show that 130 acres of field crops are equivalent to 2 tons PM<sub>10</sub>. The WDEQ-AQD believes that honoring that collaborative process is vital and altering the thresholds proposed as a result of the Stakeholder Process would be completely arbitrary and unfounded.

A smoke management program is a framework of procedures and efforts for managing smoke to minimize emissions and impacts to air quality and visibility. There are nine elements required to comprise a smoke management program to protect public health and visibility. Section 4 as proposed in the Draft 12/12/03 Proposed Revision, is based on requirements tailored to the needs within the State of Wyoming and incorporates all nine required elements to protect public health and visibility.

By changing the SMP-I to SMP-II threshold from 2 tons/day PM<sub>10</sub> to 5 tons/day PM<sub>10</sub>, even larger burns (Federal, State, and private) would most likely fall into the SMP-I level, see the table below. This effectively eliminates the required smoke management program elements of Burn Authorization, Regional Coordination, Actions to Minimize Emissions and Alternatives to Fire. This also minimizes the effectiveness of the required smoke management program elements of Public Information, Smoke Dispersion, and Monitoring. As a result, the viability of EPA recognizing Chapter 10, Section 4 as a smoke management program containing all nine required elements to protect public health and visibility is highly uncertain.

<b>Vegetative Material</b>	<b>2 Tons PM<sub>10</sub></b>	<b>5 Tons PM<sub>10</sub></b>
Field Crops	130 acres	325 acres
Shrub Land	68 acres	170 acres
Forest	46 acres	115 acres
Grass	200 acres	500 acres
Shrub / Forest Piles	10,000 cu ft	25,000 cu ft

**Section 4(d)(ii) –**

**Comment:** Wyoming Outdoor Council does not endorse the Environmental Quality Council's deletion of Section 4(d)(ii), which has to do with eliminating DEQ's ability to inspect and enforce the regulations.

**Response:** The WDEQ-AQD agrees that Subsection 4(d)(ii) should not be deleted. Please see the General Response to Comments noted above regarding private property rights.

**Support for Chapter 10 and the Stakeholder Process –**

**Comment:** The Wyoming Outdoor Council endorses the December 12 version of the proposed rules and would like to commend Darla Potter and Rebecca Reynolds for their excellent facilitation of the Development Team.

**Response:** The positive support of the Wyoming Outdoor Council for the December 12 version of the proposed WAQSR, Chapter 10 and the stakeholder process utilized to develop Section 4 is appreciated. The WDEQ-AQD would also like to extend our appreciation for Michele Barlow's valuable participation in the Development Team.

**Rick D. Cables, United States Department of Agriculture – Forest Service (Written Comment)**

**Support for Chapter 10, Section 4 and the Stakeholder Process –**

**Comment:** The Forest Service response was coordinated between the Rocky Mountain and Intermountain Regions and represents a single agency opinion. The Forest Service expressed thanks for the opportunity to participate in the development of Section 4 and the comprehensive outreach to include all users of fire. The Forest Service noted that as written, Section 4 adequately protects human health and visibility in our Class I areas while supporting the use of fire. The Forest Service recognizes that Section 4 is a reasonable compromise and offered no further suggestions for revision. However, since this is a new process, the Forest Service fully expects some minor revisions will be needed as the regulation is applied and look forward to participating in the annual review and any revisions to the regulation that may be necessary.

**Response:** The WDEQ-AQD would like to thank the Forest Service for taking the time to provide a coordinated single agency opinion from the Rocky Mountain and Intermountain Regions. The positive support of the USDA – Forest Service for the proposed revisions to WAQSR, Chapter 10, Section 4 and the stakeholder process utilized to develop Section 4 is appreciated. The WDEQ-AQD would also like to extend our appreciation for valuable participation of Forest Service staff in both the Development Team and Review Team. The WDEQ-AQD looks forward to working collaboratively with the Forest Service in the development of the Smoke Management Program Guidance Document, application of the new regulation, and annual program evaluation meetings.

**T. Douglas Cooper, 7 L Livestock Company, Casper, Wyoming (Oral and Written Comment)**

**Changes to the Proposed Regulations –**

**Comment:** I hope I can ad-lib my comments enough to correct the moving target that I have been trying to comment on here. Darla had significant changes from the proposed regulations that I saw a few days ago.

**Response:** As is common practice when a regulation is taken before the AQAB for consideration, changes to the following Subsections were proposed in the WDEQ presentation to the AQAB and the public: Section 2(a)(iv) modify population definition, Section 2(a)(v) modify prohibited materials definition, add refuse definition as Section 2(a)(vi) and relabel the remaining definitions accordingly, add a provision for unrestricted open burning as Section (d) and relabel the remaining Subsections accordingly, and Section 4(a)(xi) modify population definition. The bulk of these changes were due to comments and concerns raised by the EQC during the December 12, 2003 emergency rulemaking.

**Stakeholder Process –**

**Comment:** I did participate on the Review Team on the SMP (Section 4) and I am a little disappointed with the whole process.

**Response:** Stakeholder involvement during regulation development is the exception not the rule for the WDEQ-AQD. The WDEQ-AQD recognized the importance of protecting/improving air quality while understanding the role of fire, and as a result chose to utilize a Stakeholder Process to develop a range of methods to address smoke impacts on public health and visibility. Federal, State, local, private, environmental stakeholders who are knowledgeable about burning practices and/or air quality protection in Wyoming served as the cornerstone for a productive and effective Stakeholder Process. The WDEQ-AQD would like to extend our appreciation for Doug Cooper's valuable participation in the Review Team.

The Stakeholder Process was initiated at the end of August 2003 and was based primarily on the work of a two person Management Team, a 25 person Development Team, and a Review Team of approximately 80 persons. The Management Team served to organize the work of the development process, Development Team and Review Team as well as draft the new smoke management regulation. The Development Team met three times and was made up of two groups: one that met in Cheyenne, and another that met in Riverton to ensure adequate representation of burning in the State. The Development Team assisted in developing the approaches the smoke management program and associated regulation would take in addressing the EPA nine required elements for smoke management programs. The Review Team served as a body of additional reviewers beyond the Development Team whose input was garnered through written and/or verbal comment during three separate Review Periods, as the Review Team did not meet. The ultimate goal of the Stakeholder Process was to have a proposed smoke management regulation (SMR) to initiate the State's rulemaking process at the beginning of December.

To make the maximum use of the limited time that the Development Team had during their three meetings the following process was developed to address comments received from the

Development Team and Review Team during Review Period 1 and 2. The Management Team compiled all comments for each Review Period and proceeded as follows:

- 1) review each comment carefully in the context of all of the comments received,
- 2) assess substantive comments as well as those areas that received more than one comment,
- 3) determine what comments to bring back to the Development Team for discussion during the limited timeframe available - 6 hours/meeting,
- 4) comment compilations, once completed, were offered to Development Team participants upon request,
  - i) comments received during the Review Periods 1 and 2 were used to modify the document but were not to be posted
  - ii) comments received during Review Period 3 “Official Review” were the only comments that were posted and responded to by the WDEQ-AQD
- 5) make changes to the next draft (SMR and Explanatory Material) based on Development Team discussion, and
- 6) make changes to the next draft (SMR and Explanatory Material) based on the remaining comments.

The Development Team did not meet after Review Period 3, so the Management Team reviewed each comment carefully in the context of all of the comments received and made final changes to the SMR for the initiation of rulemaking as Chapter 10, Section 4. The rulemaking process was initiated at the beginning of December and is proceeding according to the rulemaking requirements that all regulations must follow. Please see Comment Period and Summary on page 1 for a description of the rulemaking process.

#### **True Intent of the Regulations –**

**Comment:** Section 2 establishes no minimum level of burning that is not regulated by WDEQ. If these regulations are adopted as written, they will prohibit all campfires after dark (because you couldn't burn after dark for any reason), bonfires, all burning for political expression (can't use treated wood waste to make an effigy to burn someone or a treated wood cross for the Klu Klux Klan), and fireworks displays (can't burn explosives and you can't burn them after dark). The regulations should be revised to establish the true intent.

**Response:** As discussed in the General Response to Comments above, the existing regulation contains no de minimus level so the current proposal does not represent a change in regulatory authority. The comment implies that those entrusted with protection of Wyoming's air resource are without common sense, logic, and public responsibility, which is totally unwarranted. Fireworks displays are not prohibited, as they are a detonation of the firework versus open burning of the firework, as is also the case with blasting at coal mines. The WDEQ-AQD finds the examples of infringement on political expression to be an excessive reaction to the intent of the regulation as well.

Implementation of the existing language has not prevented campfires, bonfires, fireworks displays, or political expression. However, at the suggestion of the AQAB, we are clarifying this intent as we move forward to the EQC. Campfires or bonfires are now specifically provided for by the addition of the provision for “Unrestricted open burning” at the AQAB meeting in the Draft 1/12/04 Proposed Revisions.

**Section 2(b)(ii) –**

**Comment:** One of the most onerous sections of these regulations establish that by asking permission to burn that the burner then surrenders his right to privacy; and that WDEQ can then come on his property to inspect the burn. I see no provisions in the regulations that would compensate a landowner for the use of his property in order for the WDEQ to make such inspections, place any limit on the time of day of inspections, number of inspections, or the length of time from when a burn takes place to when an inspection could occur. If the inspections come without prior notice to the landowner then WDEQ may be forced to cut fences or remove locks to gain access to the burned area. It also raises the question of hazards and dangerous situations that may exist where a burn takes place. I don't know if WDEQ staff are trained and certified as fire fighters and have the proper protective equipment. The right to exclude the public from one's property is a well established property right. WDEQ removes that right without providing for due process or just compensation. The WDEQ should have to show probable cause of a violation in order to enter private property without permission.

**Response:** Please see the General Response to Comments noted above regarding private property rights. The proposed rule requires the burner or responsible jurisdictional fire authority to give the Division permission to enter and inspect the property as a condition of obtaining a 'permit by rule.' The Division recognizes that because fire is involved, hazardous and dangerous situations impacting personal safety may exist. Thus, the jurisdictional fire authority may restrict entry until it has determined that it is safe for Division personnel to enter.

The proposed rule allows Division representatives to enter the property for specified purposes. The proposed rule does not authorize general public access to the property.

The Constitutions of both the United States and Wyoming provide that private property shall not be taken for public use without just compensation. Not all public use or access to private property constitutes a taking under the Constitution. If a taking under the Constitution occurs, laws exist which provide the property owner with a variety of mechanisms for redress. This rule does not change such laws.

In order to obtain a 'permit by rule' the burner or responsible jurisdictional fire authority must give the Division permission to enter and inspect the property. Because permission to enter is a condition of the 'permit by rule,' the Division is not required to demonstrate probable cause prior to entry and inspection. However, should the burner choose to exclude Division from entry, then the burner would not be in lawful compliance with the requisite permit requirements as required by law. In such cases, the Division would not have the permission to enter the property as provided by the 'permit by rule,' and would need to utilize other lawful measures to fulfill its statutory responsibility to protect public health and welfare and retain Wyoming's control over its air.

**Discourage the Use of Prescribed Fire –**

**Comment:** In most cases, only government agencies will have the time and resources to comply with the regulation. There is a very narrow window of opportunity for a prescribed fire to be successful. Safety, and favorable weather are the primary limiting factors to burning. The

imposition of another regulatory layer over that already imposed by fire authorities will make the use of fire very limited. The result will be increasing fuel loads and higher intensity wildland fires, which will have a great impact on air quality.

**Response:** The proposed revisions to Chapter 10 focus on the majority of situations for all burners, rather than the extreme and/or isolated circumstances. The burden of the proposed regulation has been intentionally minimized to the extent practicable, specifically to not limit the use of fire as a management tool for both private and governmental entities. In most cases the burden rises only to the level of notification and reporting for private entities. I would submit to you that as a private entity planning to conduct a major prescribed burn under the concept of SMP-I or SMP-II outlined in the proposed Section 4 you should have both the time and the resources to conduct that burn in an environmentally responsible manner. SMP-I contains less rigorous requirements as SMP-I level burns are likely to produce less significant impacts and burners are likely to have less capability to implement and manage the burn. We are asking only that you notify the WDEQ-AQD, the jurisdictional fire authority, and the potentially affected population of your intentions. To minimize smoke impacts you may only burn when smoke will disperse away from the burn. We also require you to be responsible for assessing potential impacts of your activity as it continues and to provide a summary of the results of your planned activity so that we may obtain necessary data to allow us to evaluate the overall air quality impact of these types of activities in Wyoming. SMP-II contains the requirements described above as well as additional requirements as SMP-II level burns are likely to produce more significant impacts and more smoke management effort is warranted.

One of the key assumptions for the development of Section 4 within the Stakeholder Process was to “recognize the natural role of fire in the ecosystem and its use as a land management tool.” In addition, the fact that the development of Section 4 was “not about curtailing fire” was continually reinforced during the Stakeholder Process. Therefore, there is nothing in the regulation that limits the window of opportunity for conducting such burns - safety and favorable weather will continue to be the limiting factors.

#### **Proposed Changes for Threshold and Smoke Dispersion –**

**Comment:** Agricultural burning below ten acres per day should be excluded from regulation on rangeland sites that are more than a half-mile from a population. It should also be possible to burn at night if that time of day is safest for the particular project.

**Response:** Please see the General Response to Comments noted above that the existing regulation provides no such exemption. Providing such an exemption would relax the existing requirements in the regulation and in the SIP, which EPA has approved as implementing the requirements of the Clean Air Act to protect public health and welfare.

The WDEQ-AQD will propose to the EQC on March 17, 2004 to modify Section 2 “Restrictions on open burning” and “Restrictions on vegetative material open burning” to make a waiver option available for those wanting to burn outside the daytime hours.



### **Public Notice Requirement –**

**Comment:** The requirement for burners to publish public notices is another example of an exercise that will do little to provide any real benefit. It would seem more logical to have the WDEQ establish on their website a place where all proposed burning could be entered so that individuals with respiratory problems could have a single place to look in order to determine if they might be effected by smoke in their area.

**Response:** The WDEQ-AQD expects the burner to make a good faith effort with regard to informing the public. A good faith effort means the burner should identify the affected population and select a public notification method appropriate to that population, as public notification can take many forms. For example, for rural areas a flyer in the local post office may suffice; for urban areas a public service announcement in the local newspaper might be more appropriate.

Your comment implies that the responsibility to deal with smoke related impacts should shift from those causing the impact to those adversely affected by the result. This is contrary to the whole notion of environmental responsibility. It also runs counter to my personal belief that the members of the agricultural community, by and large, are effective environmental stewards and, by the intrinsic culture of those individuals, good neighbors.

### **No Exemption for Firefighting Training –**

**Comment:** Another shortcoming in the regulations is that no exemption exists to provide for the use of fire for firefighting training. The fires set in training buildings are deliberately designed to create smoke and simulate structural fires. Training in such facilities should not be limited to just daylight hours. Propane fired devices to simulate oilfield fires and such burning would be prohibited by these regulations, as propane and waste oil are prohibited articles for open burning.

**Response:** In keeping with the existing regulation, Section 2(e) specifically provides for open burns for fire fighting training. Section 2(e)(i) specifically allows for prohibited materials to be burned when authorized by permit, thereby allowing fire fighting training utilizing prohibited materials to take place.

The WDEQ-AQD will propose to the EQC on March 17, 2004 to modify Section 2 “Restrictions on open burning” to make a waiver option available for those wanting to burn outside the daytime hours.

### **No Exemption for Fire Hazard Destruction –**

**Comment:** There is also no exemption to allow public health officials to burn in cases where structures are a threat to human health or to stop the spread of contagious diseases in animals.

**Response:** In keeping with the existing regulation, Section 2(e) specifically provides for the open burning for the destruction of fire hazards if so designated by a jurisdictional fire authority.

The proposed revisions to Chapter 10 focus on the majority of situations for all burners, rather than the extreme and/or isolated circumstances. The WDEQ-AQD considers open burning for the purpose of disease prevention of epidemics affecting livestock when designated by a public

health official to be an isolated circumstance that would be addressed on a case-by-case basis, as is the case with the existing regulation. However, the WDEQ-AQD will propose to the EQC on March 17, 2004 to include a provision for “Emergency open burning” for purposes of eliminating an imminent danger to public health, safety, or the environment.

#### **Enforcement –**

**Comment:** I would predict, with a high degree of accuracy, that if these regulations are adopted as written that they will be enforced only in cases where businesses are involved. Individuals probably have little to worry about because the WDEQ will simply ignore them in order to concentrate enforcement actions on agriculture and industry.

**Response:** The intent of surveillance and enforcement is to provide a structure that penalizes those burners who do not adhere to the regulations, without being an impediment to those burners who do comply. As a point of fact, existing regulations on open burning are regularly enforced, on individuals as well as businesses. The more specific definition of setback distances rather than population density will provide both entities a clearer understanding of the regulatory intent and requirements regarding open burning and limits the need for aggressive enforcement. That same clarity as to the regulatory requirements for larger burn activities will have the same effect.

#### **Impact of Regulations Burdensome –**

**Comment:** Urban residents no longer have a need for, or an understanding of fire, but the impact of these regulations to agriculture will be burdensome. The jurisdictional fire authorities will stress safety while the WDEQ will stress smoke dispersal, two goals that are often at odds with each other. Implied in the permit by rule concept is the ability of the department to delay or deny burn projects. Much of the regulation seems to be providing a framework for further regulation in the future. The real solution is that WDEQ should not try to regulate the burning of natural materials unless they truly contribute to measurable air quality problems. I urge you not to adopt the proposed open burning regulations and instead create a reasonable threshold where burning can take place without the involvement of multiple layers of government.

**Response:** The fact that the development of Section 4 was “not about fire safety” was continually reinforced during the Stakeholder Process. The Development Team concurred that there are other agencies enforcing fire safety, which overrides air quality considerations. Therefore, there is nothing in the regulation that addresses fire safety.

The commenter has missed the point. The whole concept of the “permit by rule” process is to reduce the administrative burden on burners and WDEQ-AQD and provide predictability and enforceability by specifying the circumstances under which a burn is allowed and the permit is assumed. Strict implementation of the existing regulation denies ability to conduct open burns unless permitted, except for refuse burning on residential premises in low population density areas as discussed in the General Response to Comments above. The WDEQ-AQD, rather than implementing the regulation in a draconian fashion, has elected historically to respond with some measure of common sense, with the result that there is naturally inconsistency in the application statewide. Again, our focus here is on clarity, equity, and consistency. There is no question that smoke from prescribed fires contributes to “measurable air quality problems,” in terms of both

health and welfare related issues. The existing regulation contains no de minimus level or exemption, and providing for a de minimus level or exemption would relax the existing requirements in the regulation and in the SIP, which EPA has approved as implementing the requirements of the Clean Air Act to protect public health and welfare.

#### **Similarities between Sections 2 and 4 –**

**Comment:** When Section 4 was developed through the stakeholder process, a lot of the things there we assumed would be allowed for in Section 2. As proposed, there is little difference between Section 2 and Section 4.

**Response:** The Stakeholder Process focused solely on the development of Section 4 and discussion of Section 2 was limited to suggestions for requirements of small vegetative open burns (i.e., less than 10 acres or 1,000 cu ft per day) to lend continuity to the two Sections. Therefore, it was inappropriate for those participating in the Stakeholder Process to “assume” that some of the Section 4 requirements would not also be appropriate for inclusion in Section 2.

A smoke management program is a framework of procedures and efforts for managing smoke to minimize emissions and impacts to air quality and visibility. Further, there are nine elements required to comprise an “enhanced” smoke management program to protect visibility and seven of the nine elements are also required to comprise a “basic” smoke management program to protect public health. Section 2 as proposed in the Draft 12/12/03 Proposed Revision, is proposed to clarify the regulatory intent and extent of the existing regulation and incorporates all seven required elements as appropriate to protect public health. Therefore, the requirements for vegetative burning in Section 2 and SMP-I within Section 4 are very similar. The differences are as follows, vegetative material open burners in Section 2 do not need to notify a population within 0.5 mile of the burn, do not need to complete a reporting form following the burn, and have the option to use a setback with a waiver option to satisfy the smoke dispersion requirement. Further, the inclusion of the second more complex smoke dispersion option (i.e., wind speed and wind direction) with a waiver option in Section 2, consistent with that developed for SMP-I within Section 4, was discussed at Development Team Meeting 3 as an option for those that believed the setback in Section 2 may be too restrictive for private burners.

#### **Notification Concerns and Public Education –**

**Comment:** There are still places in Wyoming where they don't have telephones. We don't have cell phones and we don't have the capability for e-mail. Some of these things may not be as workable and I think you are going to have quite an educational problem to get people to understand that they are to comply with this.

**Response:** The Development Team wanted this notification requirement to be implemented in the simplest way possible for the burner (e.g., phone, e-mail, fax, etc.), while at the same time providing WDEQ-AQD with the information necessary to conduct an airshed assessment, so as to protect public health and visibility. Therefore, no method of communication is specified in the regulation to provide for maximum flexibility in accommodating the various forms of communication available to burners. Further, the proposed revisions to Chapter 10 focus on the majority of situations for all burners, rather than the extreme and/or isolated circumstances (e.g., those individuals without traditional telephone service).

The State of Wyoming will phase-in the modified Chapter 10 during a six to eight month period after it becomes State-approved as a permanent regulation in mid-2004. This phase-in period will consist of an extensive public education and outreach effort by the State of Wyoming to garner full participation and compliance with Chapter 10.

**Volunteer Fire Organizations –**

**Comment:** I see requiring volunteer fire departments to fill out your forms and comply that way as basically slavery. You are telling someone who is volunteering his time that they have to spend their time and resources filling out your paperwork and they are not compensated.

**Response:** During the Stakeholder Process Review Period 3, several comments were submitted identifying concerns regarding compliance with the requirements for volunteer fire organizations. As a result, Subsection (h) was substantially modified so that the only applicable requirement when the responsible jurisdictional fire authority is a volunteer fire organization is that of WDEQ Reporting. It is my observation that individuals that volunteer their time in any endeavor, whether it be as a United Way representative, a Salvation Army bell ringer, or a volunteer fire fighter do so out of a deep sense of civic responsibility. I don't believe for a minute that they consider that service comes with unfettered responsibility.

**Bob Dundas, Belle Fourche Pipeline Company (Oral Comment)**

**Burn Permits for Emergency Response –**

**Comment:** Belle Fourche Pipeline is concerned that the regulation is unclear whether or not BFPL can continue to call up the District Engineer and ask for a burn permit and receive that verbally over the phone. BFPL pointed out that quite often in these instances there is a short window of opportunity to effectively remediate a spill and the verbal approval is imperative.

**Response:** Implementation of the existing language does not provide for verbal approval for an emergency burn. However, the WDEQ-AQD, rather than implementing the regulation in a draconian fashion, has elected historically to respond with some measure of common sense, with the result that there is naturally inconsistency in the application statewide. Again, our focus here is on clarity, equity, and consistency. Therefore, the WDEQ-AQD will propose to the EQC on March 17, 2004 to include a provision for "Emergency open burning" for purposes of eliminating an imminent danger to public health, safety, or the environment.

**Ken Hamilton, Wyoming Farm Bureau Federation (Oral and Written Comment)**

**Section 2 Comments**

**Section 2 –**

**Comment:** Section 2 dealing with Open Burning Restrictions (OBR) appear to greatly expand the regulatory impact on agricultural producers. The Wyoming Farm Bureau does not feel that what was developed for SMP-I in Section 4 and placed in Section 2 is appropriate or necessary.

**Response:** Please see the General Response to Comments above as well as the WDEQ-AQD response to the Doug Cooper comment on the Similarities between Sections 2 and 4.

**Section 2(a)(ii) Open burning definition –**

**Comment:** The Wyoming Farm Bureau believes, that the definition of “open burning” is an exceptionally broad definition that, in the context of the rest of Section 2, significantly increases the regulatory reach of the Division.

**Response:** The proposed definition of “open burning” is the same definition already contained within WAQSR Chapter 1, Section 3. Please see the General Response to Comments above.

**Section 2(a)(v) Prohibited materials definition –**

**Comment:** An example of the far-reaching impact of these rules can be found in Section 2(a)(v) defining prohibited materials. This Subsection dictates that chemically treated wood is a prohibited material, which cannot be burned. One of our members pointed out that kitchen matches are chemically treated wood. But this Section goes further and prohibits wood wastes, or lumber. Lumber is another prohibited material, which is somewhat puzzling if it is OK to burn wood, but not lumber.

**Response:** The WDEQ-AQD finds the examples of kitchen matches as a prohibited material to be an excessive reaction to the intent of the regulation. The commenter has incorrectly read the definition, which due to the placement of the semi-colons, specifies as prohibited materials painted or chemically treated wood, painted or chemically treated wood waste, or painted or chemically treated lumber. Painted or chemically treated wood, wood waste and lumber are prohibited materials due to toxic emissions produced when burned. Further, Section 2(c) and 2(e)(i) specifically allow for prohibited materials to be burned when authorized by permit.

**Section 2(a)(vi) Vegetative material definition –**

**Comment:** Subsection (vi) has some conflict with Subsection (v). Subsection (vi) would classify end cuts from a shed building project both as a prohibited material, which cannot be burned and a trade waste, which can be burned.

**Response:** There is no conflict between the definition of trade wastes and prohibited materials. The commenter has incorrectly read the definition of prohibited materials, which due to the placement of the semi-colons, specifies as prohibited materials painted or chemically treated wood, painted or chemically treated wood waste, or painted or chemically treated lumber. Whereas the definition of trade wastes specifies wood.

**Section 2(b)(ii) –**

**Comment:** Under Subsection (b)(ii) the Division is given permission to enter and inspect a property, premise or place when an open burn occurred, for compliance purposes. A rancher burning fence posts for a branding fire will have, by virtue of this rule, given a Division employee permission to enter on his private land to see if he is complying with this Subsection. And, under the definition of prohibited materials, he could be found in violation of these rules.

We would hope this is not what the Division intended when they promulgated these rules, but nevertheless that is what they say.

Private property rights are very important to agricultural producers. We feel that allowing entry by a government official just because of a branding fire is an excessive reaction to open burning. Furthermore, this “permission Section” contains no time limitation. Not only does this Section give a Division employee the right to come visit the rancher during branding, but it gives the employee the right to come visit a rancher any time after the branding.

**Response:** The proposed regulation, as well as the existing regulation, is silent on the issue of a rancher’s branding fire, and it is best that it remain so. The thought that a government official will be waiting at the gate to crash a branding party is an excessive reaction to the intent of the regulation.

Please see the General Response to Comments noted above regarding private property rights. The Division’s authority to inspect pursuant to the ‘permit by rule’ is for limited purposes. Those purposes include investigating actual sources of air pollution and for determining compliance with the applicable rules, regulations standards or orders. An additional purpose for the inclusion of the ‘permission section’ is that it provides advance notice to the burner that the Division may inspect.

#### **Section 2(d) –**

**Comment:** Subsection (d) greatly expands the authority of the Division. Burning of household wastes is an important tool for rural residents. Under the proposed rules the Division is asking the rural resident to carry their household wastes over a distance of two football fields to the receptacle, in order to meet the “600 foot from the house” (see the definition of population) requirement of Subsection (d)(i). We are unsure why 600 feet was selected and would like to have the reasons explained for that distance.

Once the waste is placed in the container and lit on fire, the rural residents must observe the burn at all times to determine the dispersion, direction and impacts of the smoke. The rules are silent on what the observer is supposed to do with this information, but presumably it will be necessary if a Division representative shows up to investigate the open burn.

Rural residents do not have as many options as urban residents for disposal of trash. Central dumps in some little towns have been closed due to solid waste restrictions requiring the dumps to be covered everyday.

**Response:** Most people who burn their waste do not realize how harmful this practice is to their health and to the environment. Current research indicates that backyard burning is far more harmful to our health than previously thought. It can increase the risk of heart disease; aggravate respiratory ailments such as asthma and emphysema; and cause rashes, nausea, or headaches. Backyard burning also produces harmful quantities of dioxins, a group of highly toxic chemicals that settle on crops and in our waterways where they eventually wind up in our food and affect our health. As a result, EPA is encouraging elimination of all backyard burning. On the other hand, Wyoming is a rural state with long distances between population centers and established

trash disposal facilities. We concur that rural residents do not have many options available for trash disposal and have attempted to recognize this limitation in the proposed regulation changes.

The existing regulation provides for refuse burning on residential premises in areas of low population density of refuse generated on those premises. The definition of low population density (i.e., approximate definition is 100 dwelling units or less per square mile) defined in 1970 is arbitrary and inappropriate in today's society where the rural/urban interface is a significant public issue. Consequently, we have tried to address that issue by establishing a setback distance (i.e., 600 feet) from a potential burner and those who might be adversely impacted by such an activity. 100 dwelling units, when assumed to be equally spaced over a square mile, are 528 feet apart. That figure was rounded up to 600 feet to arrive at a setback distance that is simple to understand and easy to visualize (i.e., the length of two football fields). Further, the proposed setback distance cannot be less stringent than the existing definition of low population density as that would relax the existing requirements in the regulation and in the SIP, which EPA has approved as implementing the requirements of the Clean Air Act to protect public health and welfare.

The WDEQ-AQD believes that the concern about a resident having to carry their household wastes 600 foot from their house was resolved when the definition of population was changed to clarify that it means individuals other than the burner at the AQAB meeting in the Draft 1/12/04 Proposed Revisions.

Open burners are only required to attend and observe the refuse burn, not record the observations of the smoke column as is requisite for visual monitoring in Section 4 for SMP-II. The WDEQ-AQD receives numerous complaints from individuals adversely impacted by smoke from refuse burns when the smoke dispersion and direction change and the open burner is not attending and observing the burn to take appropriate action, such as putting out the burn. It is the intent of this requirement to make the open burner aware of smoke dispersion, direction, and impacts so that the burner can take an appropriate action if conditions change.

#### **Section 2(f) –**

**Comment:** Restrictions on vegetative material open burn, appears to have been lifted directly from Section 4 dealing with SMP I requirements. The only requirement in this Subsection, which does not appear to be in Section 4, is the post fire reporting. When the Smoke Management team was developing Section 4, there was discussion about how impractical that Section would be for items like burning ditches or disposal of other vegetative material and we were told that those particular activities would be covered under the OBR Section. A review of that Section indicated there would not be a significant disruption of this important agronomic practice. Should these rules be adopted as presented, that will not be true.

Under the previous rules the agricultural producer was able to burn the ditches when conditions were best. The Wyoming Farm Bureau presented an overview of the requirements within Subsection 2(f). We are curious why the ½ mile downwind trajectory was put into these rules as well as the other requirements. We are unsure if this was the intent of the Division or not, but we feel the rules as proposed would make many agricultural producers law breakers in order to maintain their ditches.

One of the issues addressed by the Smoke Management team was that we wanted to ensure that fire remained a viable management tool. Under these proposed rules it is doubtful that many agricultural producers will be able to utilize fire legally as a management tool for ditch maintenance.

**Response:** Please see the General Response to Comments above as well as the WDEQ-AQD response to the Doug Cooper comment on the Similarities between Sections 2 and 4. I would submit to you that as a private entity planning to conduct an open burn of vegetative material for ditch maintenance under the concept outlined in the proposed Subsection 2(f) you should have both the time and the resources to conduct that burn in an environmentally responsible manner when conditions are best.

#### **Additional Time for Public Comment –**

**Comment:** The Wyoming Farm Bureau believes that once the emergency rules (Section 4) were adopted, more time was created for public comment to look at Section 2, so that there are not a lot of unintended consequences.

**Response:** On December 16, 2003, Section 4 was added to Chapter 10 by the EQC in an emergency rulemaking with no changes made to Section 2. Due to the emergency nature of the rulemaking, Chapter 10 is only effective for 120 days and will therefore expire on April 27, 2004. As a result, permanent rulemaking needs to take place prior to April 27, 2004.

In consideration of the need to conduct permanent rulemaking on Section 4 prior to April 27, 2004, the AQAB discussed only sending Section 4 to the EQC and entertaining additional public comment on Section 2. Although Section 2 and Section 4 are two separate pieces of Chapter 10 they are connected as they both address burning of vegetative material. The discussion at the January 12, 2004 AQAB meeting was that if the AQAB sent only Section 4 to the EQC and the EQC made a modification that would also affect Section 2 the EQC could not change Section 2. After the EQC adopts a regulation, the administrative process includes a review by the Attorney General to inform the Governor as to whether or not the regulation is legally binding. The concern expressed was that if the EQC was not given the opportunity to modify both Sections for compatibility, the Attorney General might determine that the two Sections are in conflict and not legally binding. As a result of this discussion at the January 12, 2004 AQAB meeting, the AQAB determined it was important that the EQC have the opportunity to make changes in either Section so that they are compatible and avoid a problem when Chapter 10 is reviewed by the Attorney General.

#### **Section 4 Comments**

##### **Limited Time to Develop Section 4 –**

**Comment:** I participated in the development of this Section and would like to thank the Division for the opportunity to be involved with the process. While I was involved in the process, I still have some concerns with Section 4. The first concern is with the limited time both the State and the team had available to develop this Section



**Response:** Governor Freudenthal announced on July 30, 2003 that the State of Wyoming had made the decision to develop a Regional Haze SIP under Section 309. As the SIP had to be submitted to EPA by December 31, 2003 there was not a lot of time afforded to develop the SIP and accompanying regulations, such as Chapter 10, Section 4. Even though there was a limited amount of time available, the WDEQ-AQD chose to utilize a Stakeholder Process to develop a range of methods to address smoke impacts on public health and visibility due to the importance of protecting/improving air quality while understanding the role of fire. Stakeholders who are knowledgeable about burning practices and/or air quality protection in Wyoming served as the cornerstone for a productive and effective Stakeholder Process. The WDEQ-AQD would also like to extend our appreciation for Ken Hamilton's valuable participation in the Development Team. It should be noted, that stakeholder involvement during regulation development is the exception not the rule for the WDEQ-AQD.

Although there was a limited amount of time for the Stakeholder Process, WDEQ-AQD staff, as well as some of the Development Team participants, has been actively participating over the past several years in the stakeholder based Western Regional Air Partnership (WRAP) - Fire Emissions Joint Forum (FEJF). The FEJF was established to develop several policies for the WRAP to assist the WRAP states and tribes in addressing emissions from wildland and agricultural fire sources. Participants in the Fire Emissions Joint Forum represent a variety of stakeholder groups including state air quality agencies, Federal/state/private land managers, tribes, the EPA, environmental groups, industry, business, academia and others. The Stakeholder Process to develop Section 4 built off of the preceding stakeholder based FEJF efforts by utilizing the consistent framework of the FEJF work products. This was a conscious decision by the WDEQ-AQD to efficiently develop and tailor a smoke management program and associated regulation to Wyoming's needs while addressing public health and visibility.

#### **Exempt Agricultural Burning –**

**Comment:** Agricultural representatives feel very strongly that agricultural burning could be exempted from these requirements as was done in Utah and still meet the requirements of EPA under Section 309. The Wyoming Farm Bureau presented information in an attempt to demonstrate that the burning of barley stubble is small in comparison to the burning of trees in Wyoming. We are aware that EPA is somewhat reluctant to take our word for this, so we look forward to coming to the Division and the Board to revisit this issue once better numbers are acquired.

**Response:** Please see the General Response to Comments noted above that the existing regulation provides no such exemption. Providing such an exemption would relax the existing requirements regulation and in the SIP, which EPA has approved as implementing the requirements of the Clean Air Act to protect public health and welfare.

WDEQ-AQD recognizes that agricultural burning may not be a significant contributor in the state of Wyoming. However, in order to be able to provide for an exemption for agricultural burning under Section 309 requirements as was done in Utah, the State will need to have evidence that demonstrates that these emissions are not in fact contributing significantly. This evidence will be gained through the reporting requirements. When the results of the reporting are clear, there is the possibility of modifying the regulation to reflect actual emissions. Discussions

about this would take place at the annual program evaluation meeting. It will be critical to have reporting compliance from all burners so as to have the evidence upon which to base future decisions.

**Section 4(e)(i) –**

**Comment:** In addition to the contact information and location of the burn, the Division is also requiring “other information” from the burner. We are unsure what this “other information” is exactly. The development team has not discussed this additional wording and adding it at this late date seems somewhat incongruous with the process up until now. Until this is further explained, we feel it should not be included in these rules.

**Response:** The language “and other information required by the Administrator of the Division” was added to Subsections 4(e)(i) and 4(f)(ii) due to a comment received during the Stakeholder Process Review Period 3 that was accepted by the WDEQ-AQD and incorporated for rulemaking. The Development Team and Review Team participants were informed that Review Period 3 was the final review period for the Stakeholder Process after which there would not be a Development Team meeting and that the Review Period 3 comments would be used to develop Section 4 for rulemaking. Therefore, making changes such as that addressed in this comment/response is consistent with the process conveyed to the Development Team and Review Team participants. Although it is currently anticipated that the notification information would only include that identified in Subsections 4(e)(i) and 4(f)(ii), circumstances may change necessitating the collection of other information that may vary over time. This addition to each Subsection will allow for modification of the Guidance Document to reflect what other information is being collected without going through rulemaking to modify the regulation.

**Section 4(e)(ii)(B) –**

**Comment:** In the original discussion by the development team the low population density average was one dwelling per 6 acres. By changing from 6 to 10 acres we see an increase of 66% over the original density requirement. This is a significant increase. We suggest the acreage be changed back to one dwelling per 6 acres.

**Response:** The definition of low population density (i.e., approximate definition is 100 dwelling units or less per square mile) defined in 1970 has not provided a clear understanding of the regulatory intent and requirements in implementation of the existing regulation for refuse burning. 100 dwelling units, when assumed to be equally spaced over a square mile, is one dwelling unit per 6.4 acres. The Development Team discussion during Meeting 3 utilized the existing definition of low population density as a starting point and changed the 6 acres to 10 acres when the word “approximate” was removed from the low-density language in its application in Subsection 4(e)(ii)(B). The Development Team agreed that the definition of low-density should not be approximate, but rather specific, and that it should be as equivalent as possible to the existing definition in Section 2 for refuse burning. The number 10 was also considered to be a more easy to use and remember figure than 6, which would provide the burner and WDEQ-AQD with a clear understanding of the regulatory intent and requirements.

### **Flexible Implementation –**

**Comment:** Section 4 is a new area both for agriculture and the Division. We hope that where problems are identified the Division will work with the agricultural community to change the rules where they need to be changed so that fire can continue to be an effective management tool.

**Response:** Program evaluation is a mechanism to assess the adequacy of the smoke management program, and is a requirement of the Regional Haze Rule. WDEQ-AQD will host an annual meeting between January 31 and April 1 with all burners and interested stakeholders to assess the adequacy of the design, impact and implementation of the program, based on actual implementation of Section 4. These annual program evaluations will be used to revise and improve the Guidance Document and Section 4, as needed.

### **Tim Rogers, Black Hills Corporation (Oral and Written Comment)**

#### **Threshold between SMP-I and SMP-II –**

**Comment:** Black Hills Corporation is concerned that raising the threshold between SMP-I and SMP-II (2 tons/day to 5 tons/day) will not allow for governmental and non-governmental entities to adequately assess and evaluate air pollution/visibility impacts from prescribed fire. Black Hills Corporation also believes that wildfire, prescribed wildfire, and prescribed burning have a significant impact on visibility to National Parks (Class I Areas). The higher threshold will also eliminate the implementation of common sense prescribed burning practices designed to reduce air pollution/visibility impacts from these activities. Respectfully, Black Hills Corporation requested that the threshold in the proposed regulation be lowered to a level at or below 1 ton that will ensure that visibility impacts from prescribed fire are adequately assessed and that common sense control measures are used to reduce air pollution and visibility impacts.

**Response:** The WDEQ-AQD agrees that the threshold should not be raised. Please see the WDEQ-AQD response to the Michele Barlow comment on the SMP-I / SMP-II Threshold. However, the WDEQ-AQD does not agree that the threshold should be lowered to 1 ton PM<sub>10</sub> per day. The WDEQ-AQD recognizes the time, energy, and compromise devoted in the Stakeholder Process to develop Section 4 for rulemaking. The Development Team wanted to create a threshold that would enable most burners of field crops to be in SMP-I. Since any requirements related to smoke management would be the most burdensome for the private landowners who have not been regulated in the past, the group wanted to set a threshold that would mean that most private landowners would fall into the less rigorous level. According to the farmers in the Development Team, most daily burns would not be anticipated to exceed 100 acres, and emissions tables show that 130 acres of field crops are equivalent to 2 tons PM<sub>10</sub>. The WDEQ-AQD believes that honouring that collaborative process is vital and altering the thresholds proposed as a result of the Stakeholder Process would be completely arbitrary and unfounded.

#### **Equity in implementing the Regional Haze Rule –**

**Comment:** Black Hills Corporation documented the visibility reviews and Regional Haze Rule requirements their power plants have had and will have to comply with along with a comparison of PM<sub>10</sub> power plant emissions to that produced by prescribed fires. Information is also presented

demonstrating that fire has a documented impact on visibility to National Parks. Black Hills Corporation stated that all sources impacting visibility need to be assessed and regulated accordingly, if the Regional Haze Rule is to be complied with to improve visibility at the Class I Areas.

**Response:** The WDEQ-AQD agrees. Governor Freudenthal announced on July 30, 2003 that the State of Wyoming had made the decision to develop a Regional Haze SIP under Section 309. The Section 309 Regional Haze SIP developed by the WDEQ-AQD addresses all sources impacting visibility, including fire, in a comprehensive strategy to remedy regional haze.

An integral component to satisfying the Section 309 Regional Haze Rule requirements for fire is a smoke management program and associated regulation. A smoke management program is a framework of procedures and efforts for managing smoke to minimize emissions and impacts to air quality and visibility. There are nine elements required to comprise a smoke management program to protect public health and visibility. Section 4 as proposed in the Draft 12/12/03 Proposed Revision, is based on requirements tailored to the needs within the State of Wyoming and incorporates all nine required elements to protect public health and visibility.

Raising the lower threshold for Section 4 from 10 acres/day or 1,000 cu ft/day to 100 acres/day or 5,000 cu ft/day, effectively eliminates consideration of all smaller burns (Federal, State, and private). By raising the SMP-I to SMP-II threshold from 2 tons/day PM<sub>10</sub> to 5 tons/day PM<sub>10</sub>, even larger burns (Federal, State, and private) would most likely fall into the SMP-I level. These changes effectively eliminate the required smoke management program elements of Burn Authorization, Regional Coordination, Actions to Minimize Emissions and Alternatives to Fire. These changes also minimize the effectiveness of the required smoke management program elements of Public Information, Smoke Dispersion, and Monitoring. As a result, the viability of EPA recognizing Chapter 10, Section 4 as a smoke management program containing all nine required elements to protect public health and visibility and satisfy the Section 309 Regional Haze Requirements is highly uncertain.

#### **Collection of Information –**

**Comment:** Black Hills Corporation wants to see enough information collected regarding burning so that when the glide path toward improved visibility is reassessed in the future, the portion of visibility impairment contributed to by fire can be assessed along with that from industry sources.

**Response:** The WDEQ-AQD agrees that compliance with the reporting requirements within Section 4 for SMP-I and SMP-II level planned burn projects as well as unplanned fire events is critical. Compliance with the reporting requirements as well as the long-term planning requirements is critical to serve as a basis upon which to base future assessments and decisions regarding emission control strategies to improve visibility as required by the Regional Haze Rule. Further, raising the lower threshold for Section 4 from 10 acres/day or 1,000 cu ft/day to 100 acres/day or 5,000 cu ft/day and the SMP-I to SMP-II threshold from 2 tons/day PM<sub>10</sub> to 5 tons/day PM<sub>10</sub> would severely restrict the amount of burn data reported to the WDEQ-AQD calling into question the validity of future assessments and decisions based on a limited amount of data.

**Fernando Roman, Wind River Environmental Quality Commission (Oral Comment)**

**Support for Chapter 10 –**

**Comment:** The Wind River EQC expressed thanks for developing the regulations as they see a clear need for them.

**Response:** The positive support of the Wind River EQC for the proposed revisions to WAQSR, Chapter 10 is appreciated. The WDEQ-AQD would also like to extend our appreciation for Fernando Roman's valuable participation in the Development Team.

**Geographic Limitations of Airsheds –**

**Comment:** The Wind River EQC is concerned about the number of people allowed to burn within a small airshed. The example provided in support of this concern was the City of Lander, where the airshed is fairly enclosed and the number of people burning can contribute significantly to the air quality and haze in the area.

**Response:** Coordination of burning activity is critical to avoiding cumulative impacts (on public health and visibility) within and across airsheds and to address regional transport issues (e.g., with other states, tribes, countries). The airshed/cumulative effects assessment must be a part of the smoke management program to fulfill the required Burn Authorization and Regional Coordination required smoke management program elements. The assessment is to determine if cumulative impacts to a particular airshed, or part of an airshed, are potentially excessive, and to determine what appropriate action is needed to mitigate the potential impacts. This is best accomplished by the WDEQ-AQD as the central smoke management authority.

Based on airshed/cumulative effects assessment, modification of some burn projects may be necessary. If so, WDEQ-AQD would initiate burn modification as provided for in Subsections 4(f)(ii)(B) and 4(h)(iii)(B). Possible modification protocol options include, but are not limited to,

- first-come-first-serve basis based on registration form submittal date,
- number of emission reduction techniques used, and
- burn objective.

Maintaining the lower threshold for Section 4 and the SMP-I to SMP-II threshold as proposed, 10 acres/day or 1,000 cu ft/day and 2 tons/day PM<sub>10</sub>, respectively, is critical to allowing the airshed/cumulative effects assessment to function correctly to protect public health and visibility to the maximum extent practicable.

**Regional Transport –**

**Comment:** The Wind River EQC is also concerned about off reservation burns contributing significantly to the haze on reservation due to the corridor and wind coming out of the northwest and then into the valley.

**Response:** Please see the WDEQ-AQD response to the Fernando Roman comment on the Geographic Limitations of Airsheds. Regional coordination can be tailored to reflect the affected

level of concern and may range from a passive mode of information sharing to a more complex active coordination for burn modification. The WDEQ-AQD looks forward to working collaboratively with the Wind River EQC and adjacent states to address this concern in the application of the new regulation as well as at the annual program evaluation meetings.

**Renee C. Taylor, Belle Fourche Pipeline Company (Written Comment)**

**Section 2(a)(iv) & Section 4(a)(xi) Population definition –**

**Comment:** BFPL proposed the following changes in bold font.

(iv) Population means the total number of individuals **not involved with the actual burn activity** occupying a fixed area. Fixed areas include, but are not limited to dwelling units, **places of employment**, and **improved** recreation areas, **but do not include areas or buildings under control of the person conducting the open burn.**

These changes help clarify that those individuals assisting in the burn activity should not be counted as part of the area population. As proposed, virtually all of Wyoming would constitute a “recreation area” and as such would be counted in the population determination. Inclusion of “improved” recreation areas clarifies that concern and should protect those populations that the definition intended.

**Response:** The definition of population was changed, capturing the intent of the BFPL proposed changes, at the AQAB meeting in the Draft 1/12/04 Proposed Revisions.

**Section 2(a)(v) Prohibited materials definition –**

**Comment:** It is requested the definition specifically exclude the burning of household waste products, petroleum products burned in conjunction with emergency spill response cleanup activities, and temporary flares that are associated with oil and natural gas exploration and production activities. As burning of these types of materials may cause “dense smoke discharges” they would be defined as a prohibited material.

**Response:** The definition of prohibited materials was changed to clarify that it excludes refuse at the AQAB meeting in the Draft 1/12/04 Proposed Revisions.

As other prohibited materials other than petroleum products may need to be burned in an emergency situation, the prohibited materials definition will not be modified in regard to petroleum products. Instead, The WDEQ-AQD will propose to the EQC on March 17, 2004 to include a provision for “Emergency open burning” for purposes of eliminating an imminent danger to public health, safety, or the environment.

The “temporary flaring” associated with oil and natural gas exploration and production activities has never been considered an open burn and is not subject to the provisions of Chapter 10, Section 2. The WDEQ-AQD *Oil and Gas Production Facilities Chapter 6, Section 2 Permitting Guidance* specifies that flaring or venting associated with well testing, completions, and well workovers are subject to WAQSR Chapter 1, Section 5. The Oil and Gas Guidance further clarifies that the minimum reporting requirements for these circumstances may be found in the WDEQ-AQD Memorandum, “Reporting Guidelines for Well Flaring or Venting”, dated

December 7, 1999. However, to clarify the intent, the WDEQ-AQD will propose to the EQC on March 17, 2004 to modify the definition of prohibited materials to clarify that it excludes flaring associated with oil and gas well testing, completions and well workovers.

**Section 2(b)(ii) & Section 4(d)(ii) –**

**Comment:** As access to a proposed burn site may cross several different individuals private properties, the person(s) conducting the burn may not be able to obtain and provide the Division with the necessary authorization to trespass across third parties property. The necessity for this requirement is questionable, as it seems unlikely that in the past the Division has been precluded from site visits by third parties or by the burner. It also seems unlikely that in the past the Division researched land ownership and access agreements prior to a site visit in order to verify a lawful and legal entry was obtained.

**Response:** Please see the General Response to Comments noted above regarding private property rights. The proposed rules require the burner or jurisdictional fire authority to provide the Division with the permission to enter the property upon which the burn has or had occurred. The Division anticipates accessing the property along the same possible route(s) which the burner or jurisdictional fire authority would utilize. The Division has proposed these rules as statements of general applicability. The Division recognizes that there could be unique access situations and issues, which would need to be addressed individually.

**Section 2(d)(i) –**

**Comment:** BFPL proposes to change the number “600” to “150”. As long as only refuse is burned, 150’ is a more reasonable and practical buffer distance for these types of activities, especially for the typical farm and ranch barrel burns. It is also recommended that a definition of “refuse” be included in the regulation.

**Response:** Please see the WDEQ-AQD response to the Ken Hamilton comment on Section 2(d) in regard to the setback.

A definition of refuse was added at the AQAB meeting in the Draft 1/12/04 Proposed Revisions. In the process of the AQAB voting in favor of forwarding the January 12, 2004 proposed revisions to WAQSR Chapter 10, Smoke Management to the EQC a modification to the definition of refuse proposed by Ronn Smith, AQAB Chairman, was overlooked. Therefore, to remedy this oversight, the WDEQ-AQD will propose to the EQC on March 17, 2004 to modify the definition of refuse to clarify that it is only residential waste material.

**Section 2(d)(ii) –**

**Comment:** BFPL proposes to change the word “is” to “should be”. While it is understood that burning during this period of time allows for optimal dispersion, it may not always be practical or possible to complete the burn within this window. In the event that the burn is not completed within 2 hours of sunset, it seems impractical and unreasonable to require the extinguishing of the fire and then to again restart the burn one-hour after sunrise the following day. This contradicts the current practice of the counties for allowing open burning which advocates burning very early in the morning when the air is still.

**Response:** The purpose the smoke dispersion requirement is to use meteorological conditions to help identify when burning is suitable and permissible based on the ability to minimize smoke impacts. Burning under optimal weather conditions maximizes smoke diffusion, thereby minimizing impacts. Better dispersion conditions usually occur during the daytime hours, thereby making this the most straightforward smoke dispersion requirement possible. Backyard burning is more harmful to our health than previously thought and the impacts can be exasperated when smoke settles due to poorer dispersion conditions that usually occur during the nighttime hours.

The counties advocating burning very early in the morning is most likely to stress fire safety while the WDEQ-AQD requirement stresses smoke dispersal. There are times when these two goals may conflict with one another. Further, there are other agencies enforcing fire safety, which overrides air quality considerations. Therefore, there is nothing in the regulation that addresses fire safety.

**Section 2(d)(iii) & Section 2(e)(iv) & Section 2(f)(ii)(D) –**

**Comment:** Are records documenting the dispersion, direction and impacts of the smoke required to be kept? How will this observed data be used by the Division? How are dispersion and impacts measured? What is the burner expected to do if any of these three variables changes? In the event of small, deminimis contained burns, it is ludicrous to require the burner to attend and observe this activity. Application of this requirement to burn barrels, as currently written is unnecessary. This requirement should be deleted.

**Response:** Please see the WDEQ-AQD response to the Ken Hamilton comment on Section 2(d) in regard to the attend and observe requirement.

**Section 2(e) Restrictions on open burning –**

**Comment:** Previously, industry was able to obtain emergency verbal burn permits for petroleum spill cleanups. In these cases, time is of the essence if industry is required to prepare and submit a form and then wait for written approval by the Division, additional damage to the environment will result. It is requested that language be added to specifically allow the Division to verbally authorize burn permits for emergency response activities.

Does the Department seriously expect anyone burning weeds in irrigation ditches and along fence lines to write them for permission prior to conducting such activity? How far in advance does the Department require these request to be submitted, what is the anticipated turn around time? Burning is often conducted spontaneously when the winds are calm.

As proposed, this Section could also apply to the “temporary” flaring of natural gas or liquid hydrocarbons (e.g., trade wastes) associated with oil and gas exploration and production activities. These activities are presently regulated by the WOGCC and are routine in their nature and very important to industry. There is no benefit in the WAQD also regulating this activity. It is requested that specific language be placed in the regulation that exempts “temporary” flares that are associated with oil and natural gas exploration and production activities from complying with the open burning requirements of this Subsection.



**Response:** Please see the WDEQ-AQD response to the Bob Dundas comment on the Burn Permits for Emergency Response in regard to the ability to obtain emergency verbal burn permits.

Burning of irrigation ditches and fence lines is the burning of vegetative material and is therefore subject to the requirements within Subsection 2(f) or Section 4, which are structured as a permit by rule, depending on the size of the burn, not Subsection 2(e). Nevertheless, the WDEQ-AQD will address the questions regarding timing for the submittal of requests and receiving approval.

The existing language provides for a request to be filed in the form of an application and approval of the application by the WDEQ-AQD. Implementation of the existing language by the WDEQ-AQD has taken place historically with some measure of common sense, with the result that there is naturally variations in the application statewide. Historically the WDEQ-AQD has received open burn requests ranging from a month to an hour in advance of the ignition of the burn and has granted approval either immediately or within a few days of receipt of the request. Given the various types of open burns subject to Subsection 2(e), the processing of requests and approvals will continue to be as varied as those situations we address.

The “temporary flaring” associated with oil and natural gas exploration and production activities has never been considered an open burn and is not subject to the provisions of Chapter 10, Section 2 and is already subject to WAQSR Chapter 1, Section 5. Please see the WDEQ-AQD response to the Rene Taylor comment on Section 2(a)(v) Prohibited materials definition.

**Section 2(e)(iv) –**

**Comment:** BFPL proposes to change the number “600” to “150”. It is requested that a second sentence be inserted to read: “Unless otherwise approved by the Division for emergency response burn activities.” As the efficacy of a petroleum release cleanup activity is greatly influenced by the initial response effort, the responder should not be precluded from burning in the evening. The buffer distance is also proposed to be decreased to 150 feet for consistency with other distances as proposed by BFPL.

**Response:** The WDEQ-AQD will propose to the EQC on March 17, 2004 to modify Section 2 “Restrictions on open burning” to make a waiver option available for those wanting to burn outside the daytime hours and/or less than 600 feet from a population.

Instead of modifying Subsection 2(e)(iv) in regard to emergency response burn activities, The WDEQ-AQD will propose to the EQC on March 17, 2004 to include a provision for “Emergency open burning” for purposes of eliminating an imminent danger to public health, safety, or the environment.

**Section 2(f)(ii) –**

**Comment:** It is unclear from the regulation what the practical basis for the 10-acre/1000 cubic feet of pile burn area is.

**Response:** The upper thresholds for Subsection 2(f) applicability (i.e., 10 acres/day or 1,000 cu ft/day) were established because they are simple and easy to quantify by the typical open burner

and are intended to capture most residential-type burning. Burns below these thresholds are likely to produce a minimal impact on public health. These thresholds are also consistent with those used by the State of New Mexico. The most likely residential-type vegetative material to be open burned is a combination of grass, weeds, shrubs, etc. For these vegetative materials, 10 acres and 1,000 cubic feet are roughly equivalent in emissions. However, the emission numbers are approximations and are not exact, as emissions from a given acreage or pile volume can vary widely depending on a number of factors (e.g., fuel moisture, fuel loading, etc.). These thresholds were included in Section 2 to define applicability levels for vegetative burning between Section 2 and Section 4 (open burning versus smoke management requirements).

**Section 2(f)(ii)(A-C) –**

**Comment:** Given the de minimis nature of the burns authorized under this Section, it seems excessive to require notification (written?) to Division and local fire authorities for each burn event. Additionally, as the noted burn areas are small, dispersion should not be a significant issue and evening burns should be allowed if necessary. It is requested these three Subsections be deleted.

**Response:** Although vegetative material open burns below 10 acres/day or 1,000 cu ft/day are likely to produce a minimal impact on public health, the WDEQ-AQD disagrees that the notification, public notification and smoke dispersion requirements are excessive. Your comment to delete these requirements implies that the responsibility to deal with smoke related impacts should shift from those causing the impact to those adversely affected by the result. This is contrary to the whole notion of environmental responsibility. It also runs counter to my personal belief that the members of the agricultural community, by and large, are effective environmental stewards and, by the intrinsic culture of those individuals, good neighbors. I would submit to you that as a private entity planning to conduct an open burn of vegetative material under the concept outlined in the proposed Subsection 2(f) you should have both the time and the resources to conduct that burn in an environmentally responsible manner when conditions are best.

Please see the WDEQ-AQD response to the Doug Cooper comment on the Notification Concerns and Public Education.

**Section 2(f)(ii)(C)(I) –**

**Comment:** BFPL proposes to change the number “600” to “150”. The proposed setback distance of 600 feet may preclude the burning of ditches or other areas under certain circumstances. It is suggested based on comments provided at the December EQC meeting that a setback of 150’ is more reasonable. Additionally, it is requested that waivers to this requirement may be obtained verbally prior to ignition of the burn. Written prior approval should not be required.

**Response:** This Subsection already provides a waiver option to address those situations in which the 600 feet setback may preclude burning. If an open burner anticipates the need for a waiver, a waiver request should be submitted in advance of ignition and in writing outlining the reasons that a waiver is justified. By requiring the waiver request to be submitted in writing, inconsistent application of the regulation is minimized allowing all waiver requests to be considered on a case-by-case basis.

#### **Section 2(f)(ii)(C)(II) –**

**Comment:** The rationale for the 0.5-mile downwind trajectory should be explained. As the burn front will continually advance, it may be difficult for the burner to maintain the required 0.5-mile setback. Given the very broad definition of “population”, this Subsection will be difficult to comply with. Additionally, for many farmers it will be impossible to ever conduct a controlled burn in any of their fields, as there may be “populations” in all directions within a 0.5-mile area. Wind directions routinely change in Wyoming and this downwind trajectory requirement will essentially require the burner to maintain a 0.5 mile buffer in all directions at all times in order to accommodate a change in wind direction. This requirement is simply impractical and unnecessary. Due to the nature of the vegetative burn material, and the small aerial extent that is authorized to be burned, it is suggested that the 0.5-mile downwind trajectory requirement be removed.

**Response:** The purpose the smoke dispersion requirement is to use meteorological conditions to help identify when burning is suitable and permissible based on the ability to minimize smoke impacts. Burning under optimal weather conditions maximizes smoke diffusion, thereby minimizing impacts. In addition to the simple time of day requirement, which is included as better dispersion conditions usually occur during the daytime hours, there are two approaches to satisfy the requirement. It is the open burner’s choice as to which option to follow.

The first option provides simple requirements (i.e., setbacks), with a waiver option, that are easy to follow for the open burner. The inclusion of the second more complex smoke dispersion option (i.e., wind speed and wind direction), with a waiver option, consistent with that developed for SMP-I within Section 4, was discussed at Development Team Meeting 3 as an option for those that believed the simpler setback may be too restrictive for private burners. As indicated in the regulation, this is one of two options available to the open burner to satisfy the smoke dispersion requirement and it is the open burner’s choice as to which option to follow. I would submit to you that as a private entity planning to conduct an open burn of vegetative material that the two options outlined in the proposed Subsection 2(f)(ii)(C) provide you with enough flexibility to conduct that burn in an environmentally responsible manner by maximizing smoke dispersion.

#### **Section 4(a)(xv) Vegetative material –**

**Comment:** What is meant by “agricultural plant residue”?

**Response:** It is, quite simply, the part of the crop that remains in the field after production and harvesting (e.g., barley stubble).

#### **Section 4(b) Applicability –**

**Comment:** BFPL concurs with the EQC that the proposed 10 acres/day or 1000 cubic feet of pile volume/day size is too conservative. A more reasonable threshold for this level of regulation is 100 acres/day or 5000 cubic feet of pile volume/day.

**Response:** Raising the lower threshold for Section 4 from 10 acres/day or 1,000 cu ft/day to 100 acres/day or 5,000 cu ft/day, effectively eliminates consideration of all smaller burns (Federal,

State, and private). Burns of this magnitude include almost any vegetation type and also produce more significant emissions and impacts as illustrated in the following table.

<b>Vegetative Material</b>	<b>100 Acres</b>	<b>5,000 Cu Ft</b>
Field Crops	1.5 Tons PM <sub>10</sub>	
Shrub Land	2.9 Tons PM <sub>10</sub>	
Forest	4.3 Tons PM <sub>10</sub>	
Grass	1.0 Tons PM <sub>10</sub>	
Shrub / Forest Piles		1.0 Tons PM <sub>10</sub>

These changes effectively eliminate the required smoke management program element of Regional Coordination. These changes also minimize the effectiveness of the required smoke management program elements of Public Information, and Smoke Dispersion. As a result, the viability of EPA recognizing Chapter 10, Section 4 as a smoke management program containing all nine required elements to protect public health and visibility and satisfy the Section 309 Regional Haze Requirements is highly uncertain.

**Section 4(e) &(f) Thresholds –**

**Comment:** Instead of establishing a threshold based on an arbitrary area or pile volume size, the determining criteria should simply be based on PM<sub>10</sub>/day emissions. Ultimately, PM<sub>10</sub> emissions are the major concern, not the size of the source proposed for burning. BFPL concurs with the EQC that use of 2 tons of PM<sub>10</sub>/day emissions is overly conservative and supports increasing the threshold emission rate to less than 5 tons PM<sub>10</sub>/day emissions and greater than 5 tons PM<sub>10</sub>/day emissions for the criteria in determining SMP-I or SMP-II status.

**Response:** The WDEQ-AQD disagrees with the proposed raising of the threshold. Please see the WDEQ-AQD response to the Michele Barlow comment on the SMP-I / SMP-II Threshold.