LONG-TERM STRATEGY REVIEW AND REVISION OF COLORADO'S STATE IMPLEMENTATION PLAN FOR CLASS I VISIBILITY PROTECTION

PART II: REVISION OF THE LONG-TERM STRATEGY

COLORADO DEPARTMENT OF
PUBLIC HEALTH AND ENVIRONMENT

NOVEMBER 18, 2004

PREPARED BY:

COLORADO AIR POLLUTION CONTROL DIVISION
TECHNICAL SERVICES PROGRAM
VISIBILITY, FIRE, AND QUALITY ASSURANCE UNIT

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PART II: COLORADO'S CLASS I VISIBILITY PROTECTION PROGRAM STATE IMPLEMENTATION PLAN REVISIONS TO THE LONG-TERM STRATEGY

Part II of the Long-Term Strategy (LTS) consists only of the State Implementation Plan revision of Colorado's Class I Visibility Protection Program. Part I of the LTS is a separate document and contains background information and the review/report sections.

The State is adopting this SIP revision in order to update the LTS. This SIP revision is intended to amend the 2002 LTS portion of the Class I Visibility SIP.

References in this SIP revision to Colorado Air Quality Control Commission Regulation No. 9 (Open Burning, Prescribed Fire, and Permits) are intended only to provide information about the location of various aspects of Colorado's smoke management program. Regulation No. 9 is neither being submitted for EPA approval, incorporation into the SIP by reference, nor to be federally enforceable. It implements Colorado's program and is not federally required. The State is precluded from submitting this Regulation No. 9 for incorporation into this SIP by C.R.S. 25-7-105.1. The Colorado Air Pollution Control Division during summer 2004 submitted Regulation No. 9 to EPA for certification under EPA's *Interim Air Quality Policy on Wildland Prescribed Fire*, May 1998.

Regulation No. 3, Part D, Section XIV ("Visibility") is included in Appendix B. This part of Regulation No. 3 has been approved by EPA as part of Colorado's Visibility SIP. Since approval, Regulation No. 3 has been reorganized several times and the numbering scheme of the current version no longer matches what EPA approved in 1988. EPA has requested that the current version be included in the SIP revision so that it may refer to it in the context of Colorado's Visibility SIP without introducing confusion due to the section numbers having changed. There are no wording changes from the section approved by EPA in 1988 and the attachment.

The State of Colorado believes the strategies, activities, and plans outlined below in sections for Existing Impairment, Prevention of Future Impairment, Smoke Management, and Consultation and Communication with Federal Land Managers constitute reasonable progress toward the national visibility goal. The following Long-Term Strategy addresses the visibility issues that currently face the State of Colorado's Class I units within the framework of EPA's Phase I of the visibility protection program. The six factors required by the EPA to be considered in a LTS are embedded within the strategies below and marked with an asterisk for reference.

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I. EXISTING IMPAIRMENT.

The LTS must have the capability of addressing current and future existing impairment situations as they face the State. Generally, Colorado considers that its Air Quality Control Commission, Regulation No. 3, Part B, §XIV.D ("Existing Impairment") meets this long-term strategy requirement regarding existing major stationary facilities. The State believes that its existing regulations along with the strategies and activities outlined below have together provided for reasonable progress toward the national visibility goal.

A. Existing Impairment and the Mt. Zirkel Wilderness.

1. The Certification.

The U.S.D.A. Forest Service (USFS) concluded in its July 1993 certification letter to the State of Colorado that it was reasonable to believe that visibility impairment existed in the Mt. Zirkel Wilderness Area (MZWA) and that local existing stationary sources, the Craig and Hayden power stations, contributed to the problem.

2. Reasonable Progress for the Mt. Zirkel Wilderness.

a. Hayden.

The certification of impairment made by the USFS regarding the Hayden Station was resolved through a settlement process that began in late 1995. An agreement, the Hayden Consent Decree, was approved by the federal district court on August 19, 1996. The agreement was between the Sierra Club, State of Colorado, owners of Hayden Station, and Environmental Protection Agency/Department of Justice. The Decree was intended to resolve a number of issues, including a Sierra Club lawsuit against the Hayden Station, the needs of the State's visibility regulatory program in relation to Hayden, and an EPA complaint against the facility. In addition, the Decree was intended to make progress toward reducing acid deposition in the Mt. Zirkel Wilderness.

Emission limitations, construction schedules, and reporting requirements taken from the Hayden Consent Decree were incorporated into the Visibility SIP by the AQCC. The State believes that these significant emission reductions will effectively eliminate the visibility impairment in the MZWA that could be associated with the Hayden Station. The State further believes that the Hayden Consent Decree effectively resolves the certification of impairment brought by the USFS against the Hayden Station. The Forest Service has indicated that its complaint against Hayden has been satisfied.

The construction of Hayden's control equipment progressed ahead of schedule. All compliance dates in the SIP and Consent Decree were met and it appears that emission limitations for NOx, SO_2, opacity, and particulate matter are currently being achieved. The relevant emission limitations and monitoring requirements have been moved into the facility's Title V operating permit and the permit has been issued. As a result, the Consent Decree has been terminated by the court.

b. Craig Generating Station (Yampa Project).

The certification of impairment made by the USFS regarding the Craig Station Units 1 and 2 was also resolved through a settlement process that began in Fall 1999.

After Hayden was resolved in August 1996, the State's attention turned to Craig Station Units 1 and 2. In addition to the State and the USFS visibility certification, there are other issues concerning the emissions from Craig Station Units 1 and 2. The USFS has strong concerns about local emissions of SO_2 and NOx that may be associated with acid deposition and aquatic and terrestrial ecosystem effects in the MZWA. In addition, a citizen lawsuit under the Clean Air Act

by the Sierra Club directed against Craig Station Units 1 and 2 regarding opacity issues was initiated in late 1996.

After several years of preliminary efforts, studies, and workshops, in Fall 1999 the Sierra Club, Craig Owners, EPA, the State, and the USFS began global settlement talks with an independent mediator. The Craig owners and Sierra Club concluded a Consent Decree and filed it with the federal district court on January 10, 2001. It was approved by the court on March 19, 2001. The State resolved the certification of impairment in relation to Units 1 and 2 of Craig Station by the AQCC adopting emission limitations, schedules, and reporting requirements from the Craig Consent Decree into the Visibility SIP. The Forest Service concluded that all of its concerns related to the Craig Station and the 1993 Certification of Impairment are now resolved. The construction, tie-in, and start-up of Craig Station Units' 1 and 2 control equipment upgrade is on schedule and expected to be completed by mid-2004.

3. BART and Emission Limitations.

Although BART determinations were not made by the State regarding Hayden and Units 1 and 2 of Craig generating stations, emission limitations* for the two power plants were incorporated into the LTS SIP in August 1996 (Hayden) and April 2001 (Craig Units 1 and 2) and these SIP revisions remain incorporated into the Colorado SIP. These SIP amendments also address the enforceability of Hayden's and Craig's emission limitations* (the dates when the facilities must comply with emission limitations and the enforcement structure have been previously adopted into this LTS). Source retirement and replacement* and construction activities* are not required in the SIP or LTS at this time as the Division is unaware of any relevant issues triggering such a necessity.

a. Hayden's Emission Limitations.

The contents of the August 1996 LTS SIP revision incorporating emission limitations, construction and compliance schedules, and reporting requirements for Hayden generating station Units 1 and 2 are incorporated into this LTS SIP by reference.[1] EPA approved this SIP amendment on January 16, 1997.[2]

b. Craig's Emission Limitations.

The contents of the April 2001 LTS SIP revision incorporating emission limitations, construction and compliance schedules, and reporting requirements for the Craig generating station Units 1 and 2 are incorporated into this LTS SIP by reference. The SIP revision was adopted by the AQCC on April 19, 2001[3] and EPA published final approval of the SIP amendment after a public comment period on July 5, 2001.[4]

4. Monitoring.

It is important to track the effects of the emission changes on visibility and other Air Quality Related Values in and near Mt. Zirkel Wilderness Area. The Division commits to coordinating a monitoring strategy with other agencies and providing periodic assessments of various monitored parameters in "before" compared to "after" emission reductions periods.

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* A factor that must be considered in a LTS SIP revision according to EPA regulation.

B. Other Stationary Sources and Colorado Class I Areas and Additional Emission Limitations and Schedules for Compliance*.

There are no outstanding certifications of visibility impairment in Colorado. In addition, the Division has found no evidence that other stationary sources potentially subject to BART may reasonably be attributed to cause or contribute to visibility impairment at MZWA or any other Class I area in Colorado under Phase I of EPA's visibility program. The USFS certification of visibility impairment at Mt. Zirkel Wilderness Area has been completely resolved. Regional haze that impacts any Colorado Class I areas, including MZWA, will be addressed as a SIP revision for Phase II, regional haze, of the visibility program is prepared over the next few years. The State is prepared to respond to any future certifications as per AQCC Regulation No. 3 § XIV.D.

C. Ongoing Air Pollution Programs*.

1. PM_{10}.

The State of Colorado has attained and maintained the PM_{10} standard in its non-attainment areas throughout the State. PM_{10} attainment and maintenance plans have been approved by EPA for Aspen, Canon City, Denver, Pagosa Springs, and Telluride. The plans for Steamboat Springs and Lamar have also been approved by the AQCC and await EPA action. These various plans contain numerous air pollution control programs that are effectively reducing emissions. The attainment and maintenance of the PM_{10} standard will likely have some small effect (since the standard is only rarely exceeded) on improving visibility in pristine and scenic areas.

2. Urban Haze -- Brown Cloud.

There is a concern about urban haze in the eastern Front Range urban corridor from the Denver metropolitan area to Fort Collins. This Front Range area is approximately 25-50 miles from Rocky Mountain National Park, a Class I area. The National Park Service, the federal land manager of the Park, has not certified visibility impairment in the Park. Analysis of Brown Cloud data indicates it has improved approximately 28% between 1991 and 2003. The Division will continue to provide technical support to efforts to understand and reduce the Brown Cloud.

3. Prevention of Significant Deterioration Increment Tracking.

The cumulative growth of many minor sources of air pollution, including mobile, area and stationary sources, can slowly lead to degradation of air quality and have visibility impacts. In Colorado, a compliance demonstration with PSD increments is not required to obtain a minor source construction permit.

In 1999, the Division completed an assessment of nitrogen dioxide PSD increment consumption in S.W. Colorado and found that about 45% of the Class I increment has been consumed at Mesa Verde National Park and 20% for Weminuche Wilderness. The document is available on the Division's web page at http://apcd.state.co.us/permits/psdinc/index.html. Due to the large amount of proposed minor and major source development in the 4-Corners area, especially in New Mexico, the Division will continue to stay involved in and inform the

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* A factor that must be considered in a LTS SIP revision according to EPA regulation.

Commission about any future study findings that indicate visibility and/or PSD increment problems. The Division is currently involved in an effort with EPA, sovereign tribes, other 4-corner states, and federal land management agencies to further improve coordination and assessment of the issues emerging from emissions growth in the 4-Corners area.

4. Emission Tracking.

Federal land managers have been concerned about the growth of minor source emissions near various Class I areas and have encouraged the Division to develop tools to track minor source activity. The Division has implemented a stationary source emission inventory system and has built the capability to be able to track minor source emissions over time on a routine basis. The Division has produced emission tracking tables and graphs for S.W. Colorado that indicated a growth in nitrogen oxides of 65% between 1991 and 2003. However, the Division has no emission data from tribal lands and a significant amount of activity is believed to occur on such lands.

II. PREVENTION OF FUTURE IMPAIRMENT.

The LTS must establish mechanisms to address the prevention of future impairment and outline strategies to ensure progress toward the national goal.

A. Ongoing Air Pollution Programs*.

1. PSD and NSR.

Generally, Colorado considers that its NSR and PSD programs meet the long-term strategy requirements for preventing future impairment from proposed major stationary sources or major modifications to existing facilities. The State believes that its existing regulations along with the activity outlined below have together provided for reasonable progress toward the national visibility goal.

a. Modeling.

The Division has published modeling guidance that presents methods for estimating impacts from stationary sources of air pollution. The guideline is intended to help permit applicants, air quality specialists, and others understand the Division's expectations for the ambient air impact analysis and to prevent unnecessary delays in the permit process. It provides a starting point for modeling, but allows the use of professional judgment. The guidance contains sections on visibility modeling. In 2001, a technical peer review of the guidance was completed. A more general public review process was finished at the end of that year. The finalized guidance document is available via the Air Pollution Control Division's web site at: http://apcd.state.co.us/permits/cmg.html. The Division will continue to maintain and update the guidance as needed.

2. Minor Source Permitting.

Minor source permitting requirements include a demonstration that National Ambient Air Quality Standards will not be violated by operation of the proposed facility. Federal and State law do not require visibility analyses for such sources. Federal land managers and the Sierra

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* A factor that must be considered in a LTS SIP revision according to EPA regulation.

Club, commenting on various past LTS reviews and revisions, have indicated that Colorado should require Best Available Control Technology (BACT) on minor sources. Colorado regulation neither requires BACT for individual minor sources nor for groupings of minor sources. Therefore, the Division does not have the authority to impose BACT on a new minor source and cannot require BACT for such sources. Apart from regional haze impacts that are contributed to by nearly all sources of air pollution and will be addressed over time within the framework of the regional haze rule, the Division is unaware of any direct evidence that a minor source or grouping of minor sources are causing or contributing to visibility impairment in any Class I area in Colorado. Other perspectives may exist on this issue and any citizen, citizen group, or organization may directly propose a rule regarding BACT for rule-making before the Commission.

III. SMOKE MANAGEMENT PRACTICES*.

The LTS requires that smoke management practices of prescribed burning be addressed.

A. The Colorado Smoke Management Memorandum of Understanding and AQCC Regulation No 9.

In the past, Colorado's existing open burning regulation did not specifically address prescribed fire. In this absence, operational understandings evolved over many years between the Division and the users of prescribed fire for grassland and forestland management. These understandings regarding the details of permitting and reporting of prescribed fire activity are contained in the Colorado Smoke Management Plan and Memorandum of Understanding (MOU). The Colorado Department of Public Health and Environment, the Forest Service, National Park Service, Bureau of Land Management, Fish and Wildlife Service, Air Force Academy, U.S. Army (Fort Carson), U.S. D.O.E. Rocky Flats Field Office, City of Boulder Wildland Fire Department, Colorado Division of Wildlife, and the Colorado State Forest Service are voluntary signatories to the MOU. The AQCC adopted Regulation No. 9 (Open Burning, Prescribed Fire and Permitting) on January 17, 2002. Part of the intention of adopting this regulation was to also include the voluntary requirements contained in the MOU in the regulation and apply them to <u>all</u> users of prescribed fire. In addition, the regulation implements Senate Bill 01-214. Overall, Regulation No. 9 is the main vehicle in Colorado for addressing smoke management.

B. SB01-214.

Colorado Senate Bill 01-214 ("Concerning the Application of State Air Quality Standards to the Use of Prescribed Fire for Management Activities Within the State and Making an Appropriation Therefor") became law in 2001. Regulations implementing it were adopted as part of Regulation No. 9. The statute and implementing regulations require significant users of prescribed fire for grassland and forestland management to conform to the State standard to "minimize emissions using all available, practicable methods that are technologically feasible and economically reasonable in order to minimize the impact or reduce the potential for such impact on both the attainment and maintenance of national ambient air quality standards and achievement of federal and state visibility goals." All significant users are to submit planning documents to the Commission. The regulation asks that planning documents explain the

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* A factor that must be considered in a LTS SIP revision according to EPA regulation.

decision process and criteria the significant user applies to making choices about fuel treatment alternatives to achieve various land management goals and must demonstrate how the significant user will comply with the State standard. Each planning document will have a public hearing before the AQCC. The AQCC is to review and make recommendations and comments for each planning document. The Division cannot issue burning permits to any significant user of prescribed fire after July 1, 2002 if their plan for an area is not consistent with Commission comments and recommendations. To date, the Commission has had hearings on the planning documents of the U.S.D.A. Forest Service, U.S.D.I. Bureau of Land Management, Colorado Division of Wildlife, U.S.D.I. National Park Service, D.O.D. Fort Carson, U.S. Air Force Academy, and U.S.D.I. Fish and Wildlife Service. All were approved unanimously.

The statute also requires fees. Regulation No. 9 specifies that significant users shall pay fees of $59.98/hour to the Division for review of planning documents. Prescribed fire permitees also pay for the cost of the prescribed fire program based on a cost distribution methodology described in the regulation. The Division's Fiscal Officer has determined the cost of the program to currently be $144,309.85.

It is the State's intention that through this processes described above, the plans and practices of significant users will, over time, increasingly consider air quality and visibility concerns into their fuel management decision making.

The regulation, encompassing the new permitting regulation and the implementation of SB01-214, contains a comprehensive smoke management program with elements relating to review and approval of planning documents, permitting of specific fires, reporting actual activity, and a fee program regarding open burning. During summer 2004, the Division submitted its program to EPA for certification under EPA's *Interim Air Quality Policy on Wildland Prescribed Fire*, May 1998.

C. Program Development as Prescribed Burning Increases.

Recent catastrophic wildfires in Colorado and other western states have led to the development of the National Fire Plan and increased funding to federal land managers for increased prescribed fire. The Division is seeing approximately the same number of permit applications but much more burning than in the past. It also expects that the smoke management program will evolve over time as new situations and challenging burns are encountered. As the level and complexity of burning increases the Division will continually evaluate its regulatory program for this source of air pollution. Current activities include: increased field presence and compliance assistance to permittees, evaluation of different and more realistic models to forecast smoke output and impacts, and regulatory changes to allow the use of Air Curtain Destructors to burn piles with much fewer emissions.

D. Reporting.

The Division will continue to annually produce a report on prescribed burning activity and estimated emissions. The report will contain estimates of acres burned, piles burned, and estimated resulting emissions. The Division has annually prepared such reports since 1990.

IV. FEDERAL LAND MANAGER CONSULTATION AND COMMUNICATION.

The plans, goals, and comments of the federal land managers are to be addressed during SIP and LTS revisions. Good communication with the federal land managers is important to implementing the LTS and making reasonable progress toward the national goal.

A. Consultation.

The federal land managers (FLMs) with Class I areas in Colorado will be given opportunities to comment and provide input during the LTS review and revision process. The Division will provide, at a minimum, the opportunity for consultation with the FLMs at least 60 days prior to any public hearing on any element of the Class I Visibility SIP including LTS revisions and review.

B. Monitoring Plan.

C.R.S. 25-7-212(3)(a) requires the federal land management agencies of Class I areas in Colorado (i.e., U.S.D.I. National Park Service and U.S.D.A. Forest Service) to "develop a plan for evaluating visibility in that area by visual observation or other appropriate monitoring technique approved by the federal environmental protection agency and shall submit such plan for approval by the division for incorporation by the commission as part of the state implementation plan." The agencies have indicated that they have developed, adopted, and implemented a monitoring plan through the Class I visibility monitoring collaborative known as IMPROVE. EPA's Regional Haze Rule (40CFR51.308(d)(4)) indicates, "The State must submit with the implementation plan a monitoring strategy for measuring, characterizing, and reporting of regional haze visibility impairment that is representative of all mandatory Class I Federal areas within the State... Compliance with this requirement may be met through participating in the Interagency Monitoring of Protected Visual Environments network." The federal agencies' monitoring plan relies on this network and ensures that each Class I area in Colorado will have an on-site monitor or an off-site monitor that is representative of visibility in the Class I area. Letters from the National Park Service and Forest Service containing the monitoring plan are in Appendix A. Approval letters from the Division responding back to the federal land managers are also in the Appendix. This information is included here to conform to the requirements of state law to incorporate the monitoring plans into the SIP.

V. ENDNOTES AND REFERENCES

1. "Long-Term Strategy Review and Revision of Colorado's State Implementation Plan For Class I Visibility Protection, Part I: Hayden Station Requirements, Section VI. C 'Enforceable Parts of the SIP Revision: Definitions, Emission Controls and Limitations, Continuous Emission Monitors, Construction Schedule, Emission Limitation Compliance Deadlines, and Reporting'", August 15, 1996, Colorado Department of Public Health and Environment, Air Pollution Control Division, adopted August 19, 1996 by the Colorado Air Quality Control Commission.

2. "Clean Air Act Approval and Promulgation of Air Quality Implementation Plan Revision for Colorado; Long-Term Strategy of State Implementation Plan for Class I Visibility Protection, Part I: Hayden Station Requirements," January 16, 1997, 62 Federal Register, 2305.

3. "Revision of Colorado's State Implementation Plan for Class I Visibility Protection, Craig Station Units 1 and 2 Requirements, Section III 'Enforceable Portion of the SIP Revision, Definitions, Emission Controls and Limitations, Continuous Emission Monitors, Construction Schedule, Emission Limitation Compliance Deadlines, and Reporting', March 13, 2001, Colorado Department of Public Health and Environment, Air Pollution Control Division, adopted April 19, 2001 by the Colorado Air Quality Control Commission.

4. "Clean Air Act Approval and Promulgation of Air Quality Implementation Plan Revision for Colorado; Long-Term Strategy of State Implementation Plan for Class I Visibility Protection: Craig Station Requirements," 66 Federal Register, 35374.

APPENDIX A

Letters from the U.S.D.I. National Park Service, U.S.D.A. Forest Service and the Colorado Air Pollution Control Division Regarding Class I Area Monitoring Plans

STATE OF COLORADO

Bill Owens, Governor
Douglas H. Benevento, Executive Director

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Colorado Department
of Public Health
and Environment

October 27, 2004

Christine L. Shaver
Chief, Air Resources Division
National Park Service
P.O. Box 25287
Denver, CO 80225

Dear Ms. Shaver:

Thank you for submitting information in your letter of October 26, 2004 relating to the requirements of C.R.S. 25-7-212(3)(a) regarding plans for evaluating visibility in Class I areas in Colorado.

C.R.S. 25-7-212(3)(a) requires the federal land management agencies of Class I areas in Colorado (i.e., U.S.D.I. National Park Service and U.S.D.A. Forest Service) to "develop a plan for evaluating visibility in that area by visual observation or other appropriate monitoring technique approved by the federal environmental protection agency and shall submit such plan for approval by the division for incorporation by the commission as part of the state implementation plan."

The Colorado Air Pollution Control Division finds that the U.S.D.I. National Park Service plan for monitoring visibility is approved. The National Park Service letter provided, pointed to, and referenced information about monitoring requirements in EPA's Regional Haze Rule, criteria for selecting particular monitoring locations and the equipment chosen to be used, as well as overall strategy for designing a visibility monitoring network.

The Division bases its approval decision on several factors:

1. The plan and monitoring techniques have been developed, adopted and implemented through the Class I visibility monitoring collaborative known as IMPROVE (Interagency Monitoring for Protected Visual Environments).
2. The U.S.D.I. National Park Service's monitoring plan relies on this network and ensures that each Class I area in Colorado will have an on-

site monitor or an off-site monitor that is representative of visibility in the Class I area.

3. EPA has indicated that states may comply with EPA's monitoring requirements through participation in or use of data from the IMPROVE network (40CFR51.308(d)(4)). EPA has embraced IMPROVE and data produced from the network.
4. The criteria for selecting particular monitoring sites are logical and consistent with monitoring such a large-scale phenomenon as regional haze.

The Division therefore finds that while the data from these monitors may not answer every question relating to regional haze visibility impairment, data from these monitors may be used to calculate baseline and current conditions for the worst and best days as required by EPA. Consistent with the intent of C.R.S. 25-7-212(3)(a) the Division approves the U.S.D.I. National Park Service's monitoring plan.

The Colorado Air Pollution Control Division appreciates the time, effort and considerable monetary resources the U.S.D.I. National Park Service has dedicated over many years to support this monitoring network. We look forward to continued collaboration in the future.

Sincerely,

Margie M. Perkins

Margie M. Perkins
Director
Air Pollution Control Division

cc: Dan Ely (APCD)
Brian Mitchell (NPS)

STATE OF COLORADO

Bill Owens, Governor
Douglas H. Benevento, Executive Director

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Colorado Department
of Public Health
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October 27, 2004

Rick Cables
Regional Forester
U.S.D.A. Forest Service
Rocky Mountain Region
P.O. Box 25127
Lakewood, CO 80225-0127

Dear Mr. Cables:

Thank you for submitting information in your letter of October 15, 2004 relating to the requirements of C.R.S. 25-7-212(3)(a) regarding plans for evaluating visibility in Class I areas in Colorado.

C.R.S. 25-7-212(3)(a) requires the federal land management agencies of Class I areas in Colorado (i.e., U.S.D.I. National Park Service and U.S.D.A. Forest Service) to "develop a plan for evaluating visibility in that area by visual observation or other appropriate monitoring technique approved by the federal environmental protection agency and shall submit such plan for approval by the division for incorporation by the commission as part of the state implementation plan."

The Colorado Air Pollution Control Division finds that the U.S.D.A. Forest Service plan for monitoring visibility is approved. The Forest Service letter provided, pointed to, and referenced information about monitoring requirements in EPA's Regional Haze Rule, criteria for selecting particular monitoring locations and the equipment chosen to be used, as well as overall strategy for designing a visibility monitoring network.

The Division bases its approval decision on several factors:

1. The plan and monitoring techniques have been developed, adopted and implemented through the Class I visibility monitoring collaborative known as IMPROVE (Interagency Monitoring for Protected Visual Environments).

2. The U.S.D.A. Forest Service's monitoring plan relies on this network and ensures that each Class I area in Colorado will have an on-site monitor or an off-site monitor that is representative of visibility in the Class I area.
3. EPA has indicated that states may comply with EPA's monitoring requirements through participation in or use of data from the IMPROVE network (40CFR51.308(d)(4)). EPA has embraced IMPROVE and data produced from the network.
4. The criteria for selecting particular monitoring sites are logical and consistent with monitoring such a large-scale phenomenon as regional haze.

The Division therefore finds that while the data from these monitors may not answer every question relating to regional haze visibility impairment, data from these monitors may be used to calculate baseline and current conditions for the worst and best days as required by EPA. Consistent with the intent of C.R.S. 25-7-212(3)(a) the Division approves the U.S.D.A. Forest Service's monitoring plan.

The Colorado Air Pollution Control Division appreciates the time, effort and monetary resources the U.S.D.A. Forest Service has dedicated over many years to support this monitoring network. We look forward to continued collaboration in the future.

Sincerely,

Margie M. Perkins

Margie M. Perkins
Director
Air Pollution Control Division

cc: Dan Ely (APCD)
Bud Rolofson (USFS)
Jeff Sorkin (USFS)

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File Code: 2580
Date: OCT 15 2004

Ms. Margie Perkins
Colorado Air Pollution Control Division
4300 Cherry Creek Drive South
Denver, CO 80242

Dear Ms. Perkins;

Thank you for the opportunity to provide comments regarding your request for monitoring information. The USDA Forest Service - Rocky Mountain Region appreciates and values our good working relationship with the State of Colorado Air Pollution Control Division. This cooperative relationship is essential to the success of both programs.

As you are aware, the USDA Forest Service and the other federal land managers question the constitutionality of HB 1351, now codified as C.R.S. § 25-7-212(3)(a). As we have previously indicated, in the Federal Clean Air Act, Congress specifically stated that the federal government must only comply with requirements that apply equally to non-governmental entities. Regulation 42 U.S.C. § 7418(a). C.R.S. 25-7-212(3)(a) only applies to the federal government. Thus, Colorado seeks to impose requirements on the federal government that exceed the scope of the waiver of federal immunity in the Clean Air Act. Accordingly, and for the record, our position remains that C.R.S. 25-7-212(3)(a) is an unlawful application of state authority, and therefore is not binding on the United States and its agencies.

We appreciate the opportunity to assist the Colorado Air Pollution Control Division regarding how visibility is monitored in Class I areas managed by the USDA Forest Service in Colorado to ensure the laudable objectives expressed in the above referenced statute but without entangling ourselves in constitutional disagreements.

In the interest of comity and in an effort to further our mutual goal of protecting and improving air quality and visibility in Colorado, but without conceding the legality of C.R.S. 25-7-212(3)(a), we respectfully direct you to the following documents and web addresses. The following information sources contain the information Colorado seeks regarding the monitoring plans and network descriptions for regional haze tracking supported by the USDA Forest Service:

- The July 1, 1999 *Regional Haze Rule* (40CFR51.308(d)(4)) indicates that a state's plan to monitor regional haze that is representative of all Class I areas in the state may be met through participation in the Interagency Monitoring of Protected Visual Environments (IMPROVE) network. The *Rule* is available at http://www.epa.gov/ttn/oarpg/t1/fr_notices/rhfedreg.pdf;

- The criteria for selecting the particular sites and the equipment used in the IMPROVE network are described in the document, *IMPROVE Particulate Monitoring Network Procedures for Site Selection*, University of California, Davis, CA, February 24, 1999. The document is available at: http://vista.cira.colostate.edu/improve/Publications/SOPs/UCDavis_SOPs/select22.pdf; and
- EPA's *Visibility Monitoring Guidance* (EPA-454/R-00-003, June 1999) presents information, overall strategy, and considerations to be utilized when designing a visibility monitoring network. On page 2-42, the specific criteria and process used by IMPROVE to design the regional haze network are discussed as an example of how a regional scale network can be planned. The Guidance is available at: http://www.epa.gov/ttn/amtic/files/ambient/visible/r-99-003.pdf.

The IMPROVE program is a cooperative monitoring effort governed by a steering committee composed of representatives from Federal and regional-state organizations. The IMPROVE monitoring program was established in 1985 for aiding in the protection of visibility in Class I areas as stipulated in the 1977 amendments to the Clean Air Act. The objectives of IMPROVE are:
(1) to establish current visibility and aerosol conditions in mandatory Class I areas;
(2) to identify chemical species and emission sources responsible for existing man-made visibility impairment;
(3) to document long-term trends for assessing progress towards the national visibility goal;
(4) and with the enactment of the Regional Haze Rule, to provided regional haze monitoring representing all visibility-protected federal Class I areas where practical.

There are six IMPROVE monitoring sites in Colorado to represent visibility at Colorado's twelve federal mandatory Class I areas.

The USDA Forest Service and the Colorado APCD share the goal of protecting and improving air quality in the State of Colorado. We appreciate the opportunity to remain informed and involved throughout the implementation of the Regional Haze Rule.

Please contact Bud Rolofson (303-275-5752) or Jeff Sorkin (303-275-5759) of my staff with any questions you may have.

Sincerely,

Owal Weber
for
RICK D. CABLES
Regional Forester

cc: Bud Rolofson, Jeff A Sorkin, Ken Pitt

IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE
Air Resources Division
P.O. Box 25287
Denver, CO 80225

October 26, 2004

N3615 (2350)

Ms. Margie M. Perkins
Colorado Air Pollution Control Division
4300 Cherry Creek Drive South
Denver, Colorado 80242

Re: C.R.S. 25-7-212(3)(a)

Dear Ms. Perkins:

The National Park Service (NPS) is providing this letter in order to assist the Colorado Air Pollution Control Division in fulfilling a requirement related to visibility protection of mandatory Class I Federal areas. The visibility monitoring information we cite below is already in the public domain, and it is our pleasure to indicate its presence and availability for State use. Due to the nature of the Federal budget, the NPS cannot make a long-term commitment to participate in the referenced monitoring efforts without continuing Congressional authorization, although it is most assuredly to the advantage of the NPS and the visual resources under its management to do so.

As you know, Federal land managing agencies have previously questioned the constitutionality of Colorado House Bill 1351, codified as C.R.S. 25-7-212(1)–(3), requiring in part that Federal land managers develop plans for evaluating visibility in Colorado's mandatory Class I Federal areas. Nonetheless, in an effort to further our cooperative working relationship and our mutual goal of protecting and improving visibility in Colorado's mandatory Class I Federal areas, we respectfully direct you to the following documents and web addresses that contain information Colorado can utilize to help fulfill its monitoring strategy requirements under EPA regulations. To date, the NPS has spent millions of dollars supporting monitoring networks for visibility and regional haze tracking, and it is our goal to continue these efforts as resources allow.

- The July 1, 1999 *Regional Haze Rule* (40CFR51.308(d)(4)) indicates that a state's plan to monitor regional haze that is representative of all Class I areas in the state may be met through participation in the Interagency Monitoring of Protected Visual Environments (IMPROVE) network. The *Rule* is available at http://www.epa.gov/ttn/oarpg/t1/fr_notices/rhfedreg.pdf;

- The criteria for selecting the particular sites and the equipment used in the IMPROVE network are described in the document, *IMPROVE Particulate Monitoring Network Procedures for Site Selection*, University of California, Davis, CA, February 24, 1999. The document is available at: http://vista.cira.colostate.edu/improve/Publications/SOPs/UCDavis_SOPs/select22.pdf; and
- EPA's *Visibility Monitoring Guidance* (EPA-454/R-00-003, June 1999) presents information, overall strategy, and considerations to be utilized when designing a visibility monitoring network. On page 2-42, the specific criteria and process used by IMPROVE to design the regional haze network are discussed as an example of how a regional scale network can be planned. The Guidance is available at: http://www.epa.gov/ttn/amtic/files/ambient/visible/r-99-003.pdf.

The IMPROVE program is a cooperative measurement effort governed by a steering committee composed of representatives from Federal and regional-state organizations. The IMPROVE monitoring program was established in 1985 to aid the creation of Federal and State implementation plans for the protection of visibility in Class I areas as stipulated in the 1977 amendments to the Clean Air Act. The objectives of IMPROVE are:
(1) to establish current visibility and aerosol conditions in mandatory Class I areas;
(2) to identify chemical species and emission sources responsible for existing man-made visibility impairment;
(3) to document long-term trends for assessing progress towards the national visibility goal; and,
(4) with the enactment of the Regional Haze Rule, to provide regional haze monitoring representing all visibility-protected Federal Class I areas where practical.

As you may be aware, there are six IMPROVE monitoring sites in Colorado to represent visibility at Colorado's twelve mandatory Class I Federal areas.

Please contact Bill Malm of my staff at (970) 491-8292 with any questions you may have regarding our visibility monitoring activities.

Sincerely,

John Burzal

for Christine L. Shaver
Chief, Air Resources Division

cc:
Paul Hoffman
Assistant Secretary, Fish, Wildlife and Parks
1849 C Street, N.W.
MIB-3159
Washington, D.C. 20240

Steve Martin
Regional Director
Intermountain Region
12795 W. Alameda Parkway
Lakewood, CO 80228

APPENDIX B

Colorado Air Quality Control Commission Regulation No. 3, Part D, Section XIV (Visibility)

Regulation No. 3 Part D
Revision 4/16/2004

XIV. Visibility

XIV.A. Purpose

This section assures reasonable progress towards the national goal of preventing future, and remedying existing, visibility impairment in Class I areas, where such impairment results from man-made air pollution.

XIV.B. Applicability

This section applies to all Class I areas and to sources in Colorado the emissions from which may reasonably be anticipated to cause or contribute to any impairment of visibility in any such area (even if the area is in another state).

XIV.C. Definitions

For purposes of this section XIV.:

XIV.C.1. Adverse impact on visibility means for the purpose of section XIV.E., visibility impairment that interferes with the management, protection, preservation, or enjoyment of the visitor's visual experience of the Class I area. Any determination shall be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency and time of visibility impairments, and how these factors correlate with times of visitor use of the Class I area, and the frequency and timing of natural conditions that reduce visibility.

XIV.C.2. Best Available Retrofit Technology means an emission limitation achievable through the application of the best system of continuous emission reduction for each pollutant that is emitted by an existing stationary facility. The emission limitation shall be established on a case-by-case basis taking into consideration the technology available, the costs of compliance, the energy and non-air quality environmental impacts of compliance, any pollution control equipment in use or in existence at the source, the remaining useful life of the source, and the degree of improvement in visibility that may reasonably be anticipated to result from the use of such technology.

XIV.C.3. Existing stationary facility means any of the stationary sources of air pollutants defined in sections I.B.19., I.B.22. through I.B.25., I.B.34., and I.B.41. of Part A, section I.A.1.(c) of Part C, and section II.A.25. of Part D of this regulation, including any reconstructed source, that was not in operation prior to August 7, 1962, and had commenced construction on or before August 7, 1977, and has the potential to emit two hundred and fifty tons per year or more of any air pollutant. In determining potential to emit, fugitive emissions, to the extent quantifiable shall be counted.

XIV.C.4. Long-term strategy means a ten to fifteen year plan for making reasonable progress toward the national goal specified in section XIV.A. of this Part.

XIV.C.5. Natural conditions includes naturally occurring phenomena that reduce visibility as measured in terms of visual range, contrast, or coloration.

XIV.C.6. Reasonably attributable means attributable by visual observation or any other technique the state deems appropriate.

XIV.C.7. Significant impairment means, for purposes of section XIV.D.2.c., visibility impairment, that interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of the Class I area.

XIV.C.8. Visibility impairment means any humanly perceptible change in visibility (visual range, contrast, coloration) that would have existed under natural conditions.

XIV.C.9. Class I area means an area listed in section VIII.A. of this Part and any area that may be redesignated to Class I in the future.

XIV.D. Existing Impairment

XIV.D.1. The Federal Land Manager or the division may, at any time, certify to the division director that visibility impairment exists in any Class I area. The division may also certify that visibility impairment exists in any Class I area without the concurrence of the Federal Land Manager.

XIV.D.2. Each existing stationary facility located in Colorado to which the cause of or contribution to visibility impairment in any Class I area is reasonably attributable, shall apply for and obtain from the division a permit that requires the installation and operation of Best Available Retrofit Technology. The facility shall install and operate Best Available Retrofit Technology as expeditiously as practicable but in no case later than five years after permit issuance.

XIV.D.2.a. For fossil-fuel fired generating plants having a total generating capacity in excess of 750 megawatts, Best Available Retrofit Technology shall be determined pursuant to "Guidelines for Determining Best Available Retrofit Technology for Coal-fired Power Plants and Other Existing Stationary Facilities" (U.S. EPA Publication No. 450/3-80-009b, 1980), and state of the art information available at the time of Best Available Retrofit Technology analysis. Pursuant to Colorado Revised Statute section 24-4-103 (12.5), the document referenced in this section is available for public inspection during normal working hours, or copies are available for cost, from the technical secretary of the commission, 4300 Cherry Creek Drive South, Denver,Colorado 80246-1530. This Regulation No. 3 does not include later amendments to or editions of the referenced documents.

XIV.D.2.b. Should technological or economic limitations make the application of Best Available Retrofit Technology as previously defined infeasible, the state may instead prescribe a design, equipment, work practice, or other operational standard, or combination thereof, as representing Best Available Retrofit Technology. Where a facility is subject to section XIV.D.2.a., due to technological limitations, the facility shall install and operate Best Available Retrofit Technology as previously defined when new technology for control of the pollutant becomes reasonably available provided: 1) the pollutant is emitted by the existing facility; 2) controls representing Best Available Retrofit Technology for the pollutant have not previously been required under this section; and 3) the impairment of visibility in any Class I area is reasonably attributable to the emissions of that pollutant.

XIV.D.2.c. Any existing stationary facility required to install and operate Best Available Retrofit Technology under this section may apply to the division and the U.S. EPA Administrator for an exemption.

XIV.D.2.c.(i) An application under this section must include all available documentation relevant to the impact of the source's emissions on visibility in any Class I area and a demonstration by the existing stationary facility that it does not or will not by itself or in combination with other sources, emit any air pollutant that may be reasonably anticipated to cause or contribute to a significant impairment of visibility in any Class I area.

XIV.D.2.c.(ii) Any fossil fuel fired power plant with a total generating capacity of 750 megawatts or more may receive an exemption from Best Available Retrofit Technology only if the owner or operator of such power plant demonstrates to the satisfaction of the division that such power plant is located at such a distance from all Class I areas that such power plant does not or will not by itself or in combination with other sources emit any air pollutant that may reasonably be anticipated to cause or contribute to significant impairment of visibility in any such Class I area.

XIV.D.2.c.(iii) The existing stationary facility must give prior written notice to all affected Federal Land Managers of any application for exemption.

XIV.D.2.c.(iv) The Federal Land Manager may provide an initial recommendation or comment on the disposition of such application. Such recommendation, where provided, must be part of the exemption application. This recommendation is not to be construed as the concurrence required under section XIV.D.2.c.(iv).

XIV.D.2.c.(v) After notice and opportunity for public hearing, before the commission, the division may grant or deny the exemption.

XIV.D.2.c.(vi) An exemption granted by the division under this section will be effective only upon concurrence by all affected Federal Land Managers.

XIV.D.2.c.(vii) Any determination shall be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency and time of the visibility impairment, and how these factors correlate with time of visitor use of the Class I area, and the frequency and timing of natural conditions that reduce visibility.

XIV.D.2.d. The division shall process any application for a permit required by section XIV.D.2., above, or any application for exemption under section XIV.D.2.b., according to the time constraints stated in Part B, section III.B. of this regulation. All applications for permits or exemptions will be subject to public notice and public hearing requirements applicable to sources subject to the provisions of section VI. of this Part. Processing fees will be charged to the applicant to recover actual costs incurred by the division as stated in section VI. of Part A of this Regulation No. 3.

XIV.E. New Source Review
Applicants for new major stationary sources and major modifications shall demonstrate that the proposed source will not have an adverse impact on visibility in a Class I area as required by sections V.A.6., VI.A.6., and XIII. of this Part.

XIV.F. Long-term Strategy

XIV.F.1. The commission shall review and revise, if appropriate, the long-term strategy every three years.

XIV.F.1.a. During the long-term strategy development and review process, the commission shall consult with the Federal Land Managers.

XIV.F.1.b. A public hearing shall be held upon request of any interested person. The state shall provide written notification to each affected Federal Land Manager and other affected states at least sixty days prior to holding any public hearing.

XIV.F.1.c. The division shall prepare a report for the commission on any progress made toward the national visibility goal since the last long-term strategy revisions. The report will be made available on September 1, at least every third year following the submittal of the previous report. The report shall include an assessment of:

XIV.F.1.c.(i) The progress achieved in remedying existing impairment of visibility in any Class I area;

XIV.F.1.c.(ii) The ability of the long-term strategy to prevent future impairment of visibility in any Class I area;

XIV.F.1.c.(iii) Any change in visibility since the last such report, or in the case of the first report, since plan approval, including an assessment of existing conditions;

XIV.F.1.c.(iv) Additional measures, including the need for state implementation plan

revisions, that may be necessary to assure reasonable progress toward the national visibility goal;

XIV.F.1.c.(v) The progress achieved in implementing Best Available Retrofit Technology and meeting other schedules set forth in the long-term strategy;

XIV.F.1.c.(vi) The impact of any exemption granted under section XIV.D.2.c.; and,

XIV.F.1.c.(vii)The need for Best Available Retrofit Technology to remedy existing impairment in an integral vista declared since plan approval.