



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, WA 98101

FEB 15 2005

Reply To
Attn Of: AWT-107

Mr. Patrick A. Takasugi, Director
Idaho State Department of Agriculture
2270 Old Penitentiary Road
P.O. Box 790
Boise, Idaho 83701

RE: Assessment of Idaho's 2004 Agricultural Field Burning Program

Dear Mr. Takasugi:

The purpose of this letter is to provide EPA Region 10's assessment of the calendar year 2004 Idaho Agricultural Field Burning Program administered by the Idaho State Department of Agriculture (ISDA). As in the past, this assessment is based on field observations by EPA staff during the burn season, participation in daily smoke management decisions, familiarity with Idaho's current burn protocols, participation in the annual intergovernmental review meeting, and discussions with ISDA staff and managers, the Idaho Department of Environmental Quality (IDEQ), the Nez Perce Tribe, the Coeur d'Alene Tribe, the Kootenai Tribe of Idaho, and other interested parties.

The body of the letter discusses four key issues. Other programmatic concerns are discussed in an attachment. It is important to note that while some of the comments in the attachment are not major, considered as a whole they demonstrate a significant comprehensive challenge that requires your serious attention.

First, I would like to acknowledge the efforts you have made to improve the Smoke Management Program which should provide increased protection to public health. Your efforts to introduce legislation which extends the program statewide are significant. Additionally, I believe that through your efforts, the smoke management program has continued to improve this past year. Importantly, complaints are down from previous years and the number of documented smoke events has declined. If these trends continue they would indicate significant improvements in overall program performance. The Idaho Agricultural Field Burning Program is beginning to show benefits from increased management attention, increased and consistent staffing, enhanced public communication and notification during the burn season, and improvements in the tools available for making burn calls. We also acknowledge the excellent meteorological support provided during the year by Mr. Gary Bennett. Mr. Bennett's technical expertise, combined with his commitment to helping both tribes and the State, was a significant

factor in overall program performance.

In spite of these improvements, EPA continues to have concerns with smoke from agricultural burning and its impact on public health, welfare, and the environment. Specifically, there are four significant issues associated with the program this past year that are of great concern to EPA Region 10. These issues are:

Issue 1. The fatal accident in Shelley, Idaho on September 2, 2004, points to the need to improve the smoke management program statewide. EPA is very concerned about this field burning-related vehicle fatality. We believe the changes discussed on September 23, 2004, are needed to reduce the potential for future problems. Those changes include requiring farming activities statewide to participate in the smoke management program, notifying growers and agricultural interests of field burning requirements, grower training, and developing and maintaining a registry of field burning related accidents. I understand legislation, House Bill 35, has been introduced which creates a mandatory statewide program. We are pleased to see the legislation introduced that would apply registration requirements and penalty provisions statewide.

Issue 2. In spite of the program improvements noted above, a number of communities in Idaho and Washington were impacted in 2004 as a result of agricultural field burning in Idaho. Burning on the Rathdrum Prairie caused impacts on two of the five days when burning was authorized. On August 4, the plume failed to rise and drifted to the west side of the prairie. On August 17, strong surface winds did not allow adequate plume rise resulting in a one hour monitored value of 42 ug/m³. These two incidents occurred despite rigorous efforts of program staff and the meteorology contractor.

Elsewhere in North Idaho, there were smoke intrusions from agricultural field burning which resulted in one hour monitored levels over 40 ug/m³. These intrusions impacted other communities such as Grangeville, Idaho, and the Moscow/Pullman area. Many of these smoke intrusions occurred when meteorological indicators were "conditional", meaning the smoke dispersion conditions were marginal, and only "limited burning with caution" was recommended. ISDA management and Field Coordinators need to exercise additional caution during "conditional" periods to ensure public health is fully protected.

Also, in order to continually improve the smoke management program, EPA recommends that ISDA managers and staff analyze what went wrong during these and future intrusions to avoid future impacts to public health and welfare.

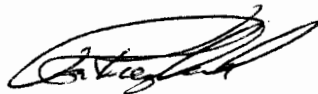
Issue 3. EPA believes Idaho should increase its emphasis on exploring alternatives to field burning and for securing resources to increase research in alternatives to fire. While some important and promising research is being conducted by universities in the Pacific Northwest, additional support is needed to accelerate and expand this research. Without alternatives to fire,

our mutual goals of protecting public health and supporting the important agricultural economies and activities that currently rely on field burning will continue to be at risk. Alternatives to fire are especially important to protect residents in those areas impacted every year by agricultural burning, such as the Rathdrum Prairie and Grangeville. Because of the impacts noted above, EPA continues to believe public health will continue to be at risk in these areas, regardless of improved smoke management skills.

Issue 4. The last significant issue relates to communication and information sharing with the public. We recognize the communication improvements ISDA made in 2004 including a new website, televised burn forecasts, and newspaper notifications. However, additional improvements are needed to provide more detail on the location of daily agricultural burning activities. This information will reduce the public's uncertainty about burning activities and provide more useful information so people impacted by smoke may take important precautionary measures. We also recommend a series of public workshops to get feedback from the public on ways to improve communication and notification procedures, as well as other feedback on the program. In addition, it is also important to evaluate the public complaint/hotline systems and address the program deficiencies as discussed at the annual program evaluation meeting on November 17 and 18, 2004.

EPA continues to support the efforts of the State of Idaho, both ISDA and the IDEQ, in building a program that both protects the general public, and also preserves Idaho's important agricultural sector. These goals are not mutually exclusive. Fire can be a viable tool for many areas of the State if adequately managed, funded, and implemented. We encourage Idaho to maintain the momentum realized over the last few years and are prepared to maintain open dialogue in determining how EPA can be of assistance. I would be happy to meet with you to discuss the issues identified in this letter in more detail, and to discuss ways to improve the program. If you have any questions, please do not hesitate to contact me at (206)553-1234, or your staff may contact Doug Cole at (208)378-5764.

Sincerely,



Ronald A. Kreizenbeck
Acting Regional Administrator

cc: Ernest Stensgar, Chairman, Coeur d'Alene Tribe
Anthony Johnson, Chairman, Nez Perce Tribe Executive Committee
Jim Yost, Office of the Governor
Toni Hardesty, Director, Idaho Department of Environmental Quality

**ISDA Smoke Management Program
Programmatic Improvement Areas
2004**

Improved burn protocols/compliance

Burn protocols for Field Coordinators need to be evaluated and strengthened where necessary. Issues needing attention include burn shut down times (i.e. 3:00PM vs 4:00PM near Grangeville), compliance with start/stop times, and approving burning only when protocols are met (i.e., crackle test)

Field coordinator staff in Camas Prairie and Boundary County

Given the size and complexity of these areas, combined with the difficulties associated with agricultural burning, we believe that an additional burn coordinator is needed in both Boundary County and on the Camas Prairie, outside the Nez Perce Reservation.

Field coordinator training

Field Coordinators are the foundation of a successful program in Idaho, and as such require additional training to better perform their duties. Specifically, training should focus on daily operational issues and less time on big picture. Coordinators need more hands-on training of computer forecasting tools such as MM5 and ClearSky. Also, additional meteorological training is necessary. Last, it is critical the Field Coordinators be given the opportunity to learn from case studies (evaluations of "bad" days), to avoid repeats of these intrusions.

Use of flaggers

There were numerous instances where smoke from field burning activities was impacting public roads, and flaggers were either not deployed, or were inadequate. This occurred throughout North Idaho. This situation creates obvious health and safety concerns, and requires immediate attention. We believe specific guidance is needed on when, how and where flaggers need to be deployed, and penalties for non-compliance should be considered.

Increase understanding of meteorological conditions in critical areas (Boundary County and Grangeville area)

There are a number of areas in North Idaho where meteorological conditions are not fully understood, making burn decisions more difficult. To address this, steps need to be taken such as increasing the deployment and use of meteorological equipment such as Pibals, SODAR, and portable and hand-help equipment, archiving and analyzing this information for trends, and undertaking focused analysis of local conditions using the meteorologic contractor.

Improved grower/field burner training

Grower/field burner training is needed on such issues as the field registration and burn process, how to burn fields effectively, and the advantages of being ready early in the burn season.

Improved interagency/interstate coordination

There were a number of instances this year where issues arose due to lack of coordination with either Washington State Department of Ecology and/or federal/state/local land management agencies who were conducting prescribed burning. Agreements are needed to increase coordination with the Washington State Department of Ecology where cross-state impacts occur, and with land managers during periods where prescribed burning and field burning overlap. EPA is prepared to assist in bringing the various agencies together and developing improved communication and coordination protocols.

Public input

It is important to get feedback from the public on what's working and what isn't, and to solicit suggestions on how to improve the notification process, and the program in general. As in the past, EPA is available to assist in conducting these meetings and getting public feedback and input regarding agricultural burning activities.