Farm, Ranch, and Rural Communities Federal Advisory Committee (FRRCC)
INAUGURAL MEETING

March 13–14, 2008
The Madison Hotel
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EXECUTIVE SUMMARY

THURSDAY, MARCH 13, 2008

Welcome and Overview of Charge to the Committee
James Moseley, Jim Moseley Farms, Inc., Committee Chair

U.S. Environmental Protection Agency (EPA) Administrator Stephen Johnson established the Farm, Ranch, and Rural Communities Advisory Committee (FRRCC) and has provided the Committee with an interesting and challenging assignment. The purpose of a federal advisory committee is to ensure that citizens have a voice in government. The FRRCC, specifically, will address the intersection between agriculture and the environment. Committee members represent the agriculture industry and rural communities; however, the greatest value of their participation on this Committee is their ability to bring their own personal experiences and observations to the table. The role of the Committee Chair is, first, to remain unbiased and to ensure that the Committee functions in an orderly, efficient manner and, second, to ensure that the concepts, ideas, attitudes, and opinions of Committee members are presented to EPA decision-makers.

Opening Remarks
Rafael DeLeon, Office of Cooperative Environmental Management (OCEM), EPA

Committee members represent an important community and were chosen from more than 200 applicants who expressed interest in serving on the FRRCC. This committee will continue beyond the current administration.

Introductory Remarks
Marcus Peacock, Deputy Administrator, EPA

EPA relies on federal advisory committees such as the FRRCC to provide practical, timely, and relevant advice to inform the Agency's decisions. In 2006, EPA adopted a National Strategy for Agriculture, which envisions the agriculture industry as a producer of environmental solutions. The strategy seeks to engage farmers, ranchers, and the communities in which they live in a cooperative and collaborative way to complement the Agency's existing regulatory programs. The FRRCC is one of the important ways in which EPA intends to connect with the agriculture industry and rural communities and to build a strong, lasting partnership that will help the Agency make decisions on a wide range of issues. EPA has determined that it would benefit from the FRRCC's advice on three major topics: (1) the role of agriculture in addressing greenhouse gas (GHG) emissions and renewable fuel issues, especially related to rulemaking under the Energy Independence and Security Act (EISA); (2) more effective approaches to the environmental issues related to animal agriculture; and (3) more effective communication and interaction with the agriculture industry. Deputy Administrator Peacock and Administrator Johnson are committed to providing feedback to the FRRCC on the Agency's response to the Committee's recommendations.

Discussion

The Committee discussed the important decisions facing EPA that will affect agriculture. The FRRCC may be able to provide input on decisions such as EISA rulemaking related to GHG standards and feedstock for biofuels and issues associated with the Farm Bill. EPA and the U.S. Department of Agriculture (USDA) work closely together on the development of farm policy conservation proposals, and the Committee's recommendations will be an important part of future efforts of this sort because it will advise EPA on how to advise USDA. The FRRCC should attempt to mobilize quickly enough to provide input on such far-reaching decisions. The FRRCC may find it valuable to consider the activities of agencies other than EPA and USDA that may influence EPA's decision-making, such as the National Science Foundation (NSF) and other agencies participating in the U.S. Climate Change Science Program (CCSP). In addition, the Committee's recommendations may prove useful to entities outside of EPA.

Committee members remarked that nobody has a stronger charge to protect the earth than agricultural producers because farmers make their living from the earth and must, therefore, treat the earth well. Conservation and environmental organizations share many of the goals of agricultural producers but may use different means to achieve such goals.

Committee members also discussed the following: (1) a lack of representation on the Committee from the human health community; (2) the potential for the Committee to address some aspects of sustainability as it applies to agriculture; and (3) the importance of receiving feedback regarding the fate of the Committee's recommendations.

Plenary Remarks by EPA Program Offices

Office of Prevention, Pesticides, and Toxic Substances
Jim Gulliford, Assistant Administrator, Office of Prevention, Pesticides, and Toxic Substances (OPPTS), EPA

OPPTS regulates pesticides and industrial chemicals in the United States. Within OPPTS, the Office of Pesticide Programs (OPP) has benefited from the recommendations of the Pesticide Program Dialogue Committee (PPDC), an external advisory committee. The PPDC provides a robust public forum to discuss a wide variety of pesticide regulatory issues, program implementation, and science policy questions regarding both agricultural and nonagricultural pesticides. Some current topics under discussion by the PPDC include pesticide spray drift, pesticide transition, volatilization, worker safety issues, the pesticide registration and renewal process, and endangered species. The FRRCC will address many cross-media environmental issues faced by farmers and rural communities, some of which will affect pesticide regulation. The FRRCC's efforts will complement those of the PPDC, which will continue to address pesticide-specific issues.

Office of Water
Mike Shapiro, Deputy Assistant Administrator, Office of Water (OW), EPA

Despite considerable progress since 1970 to achieve clean water goals, a majority of water bodies remain impaired. According to a 2002 report, agriculture is the leading known source of pollution to lakes and rivers nationwide and is associated with water quality impairments related to sediments and nutrients, as well as those attributable to low dissolved oxygen, habitat alterations, pathogens, and metals. The role of OW under the Clean Water Act (CWA) is "to restore and maintain the chemical, physical, and biological integrity of the nation's waters." EPA addresses major point sources using both a technology-based approach (via effluent limitation guidelines) and a water quality-based approach. All point sources, including concentrated animal feeding operations (CAFOs), need a National Pollutant Discharge Elimination System (NPDES) permit from EPA or authorized states to discharge into waters of the United States. For each impaired body of water a total maximum daily load (TMDL) must be developed. TMDLs serve as the basis for strategies to improve and protect water quality. In contrast to point sources,

no direct regulatory authority exists at the federal level for nonpoint sources, which are becoming an increasingly large source of water quality problems. Under the Safe Drinking Water Act (SDWA), EPA ensures that public drinking water supplies meet all appropriate standards to protect human health. Source water protection represents the intersection of OW's surface water and drinking water protection programs; the overarching purpose is to protect watersheds that are used either to recharge groundwater or to provide drinking water to communities across the country. OW now is considering the water quality impacts associated with the projected significant increase in biofuel production.

The CAFO Final Rule of 2003 was partially overturned in court. EPA issued a modified CAFO Proposed Rule in June 2006, to address the Court's decision and, on March 7, 2008, EPA issued a supplemental Notice of Proposed Rulemaking that includes a voluntary option for CAFOs to certify that they do not discharge. The implementation date is February 27, 2009. EPA and USDA work in partnership to ensure awareness of activities in each agency and areas of potential cooperation. For example, USDA worked with EPA on the development of the CAFO Rule, and EPA works with USDA on the Conservation Effects Assessment Program (CEAP). The engagement of agricultural producers in efforts to improve water quality can result in a better outcome for agriculture and for rural communities.

Office of Air and Radiation
Sally Shaver, Associate Counselor for Agricultural Policy, Office of Air and Radiation (OAR), EPA

Four offices are included within OAR. The Office of Air Quality Planning and Standards is responsible for setting the National Ambient Air Quality Standards (NAAQS) in conjunction with state partners. This office also sets standards for stationary sources, both for toxics and for criteria pollutants. The Office of Transportation and Air Quality sets the standards for motor vehicles and engines. The Office of Atmospheric Programs addresses acid rain, climate change, and stratospheric ozone depletion. The Clean Air Act (CAA) requires EPA to review the NAAQS every 5 years. In recent years, OAR has developed new particulate matter (PM) standards and has set a new ozone standard. OAR is engaged in ongoing reviews for nitrogen oxides, sulfur dioxide, carbon monoxide, lead, and PM. The Agency does not regulate ammonia as a precursor for fine PM unless it is a significant contributor to nonattainment in a particular area. In some areas, pesticide use is regulated to reduce volatile organic compound (VOC) emissions to meet the ozone standard. OAR also will revise its fire policy by July 2008.

OAR currently is grappling with the following questions: (1) Which, if any, CAA requirements apply to farms? (2) How should the source be defined? (3) Are agricultural emissions fugitive or nonfugitive? The Boiler Maximum Achievable Control Technology Rule and the Commercial/Industrial Solid Waste Incinerators Rule have been vacated. The Other Solid Waste Incinerators (OSWI) Rule, which dealt with animal incineration at animal feeding operations (AFOs), also has been vacated. OAR has a number of voluntary partnership programs to reduce emissions from engines currently in use. Atmospheric programs include the following: (1) voluntary GHG inventory; (2) appropriations language regarding mandatory GHG reporting; (3) the Methane to Markets Program; (4) the AgSTAR Program; (5) the ENERGY STAR Program; (6) the Stratospheric Ozone Program; and (7) the methyl bromide phase out. More information on OAR can be found on the EPA Web Site at http://www.epa.gov/oar. Technical information can be found at http://www.epa.gov/ttn. OAR works with several advisory committees exclusively on air issues.

Office of Solid Waste and Emergency Response
Debbie Dietrich, Director, Office of Emergency Management (OEM), Office of Solid Waste and Emergency Response (OSWER), EPA

OSWER comprises five main offices: (1) the Office of Superfund Remediation and Technology Innovation; (2) the Office of Brownfields and Land Revitalization; (3) the Office of Solid Waste (OSW); (4) the Office of Underground Storage Tanks; and (5) OEM. Information about OSWER can be found online at http://www.epa.gov/oswer.

The overall purpose of OSW is to ensure that solid and hazardous wastes are managed in an environmentally sound manner that is protective of human health and the environment. OSW serves as the OSWER lead on issues related to homeland security by addressing the identification, characterization, and disposal of wastes from natural disasters or other homeland security events. OSW also provides technical assistance to states and local governments on carcass disposal. In addition, OSW provides information, guidance, policy, and publications to help states and the regulated community address solid waste issues. The overall goal of OEM is to ensure that the nation is better prepared for environmental emergencies. OEM's key functional areas include the prevention of oil and chemical spills, planning and preparedness, response to environmental emergencies, and homeland security. OEM is responsible for implementing the Risk Management Program (RMP) under CAA Section 112(r), which is intended to prevent chemical accidents. Anhydrous ammonia held by farmers for fertilizer use and flammable substances used as fuel are exempt. Agricultural retailers are covered by the RMP if more than a threshold quantity of anhydrous ammonia (10,000 pounds) is present in a process. OEM works with state and local agencies to implement the Emergency Planning and Community Right-to-Know Act (EPCRA). OEM also oversees the Spill Prevention, Control, and Countermeasure (SPCC) Program under the CWA, which is intended to prevent oil discharge to navigable waters or adjacent shorelines. OEM has developed a proposed rule under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and EPCRA to provide an administrative reporting exemption for releases of hazardous substances to the air from animal waste. The public comment period closed March 27, 2008. OEM received a petition in August 2005 requesting CERCLA/EPCRA reporting exemption for releases of ammonia to the air from poultry production. OEM has issued a proposed rule but has not made a final decision on the petition. In October 2007, EPA proposed amendments to the SPCC program under the CWA; the amendments would provide further clarification as well as burden relief for agricultural producers. The compliance date for farms has been extended until EPA finalizes this rule.

Office of Enforcement and Compliance Assurance

Granta Nakayama, Assistant Administrator, Office of Enforcement and Compliance Assurance (OECA), EPA

OECA is responsible for enforcing all of the regulations and statutes for which EPA has authority and also is heavily involved in compliance assistance by educating people regarding the requirements and how to comply. OECA engages in administrative enforcement, civil enforcement, and criminal enforcement. OECA provides compliance assistance directly and through its Web compliance assistance centers, such as the National Agriculture Compliance Assistance Center (http://www.epa.gov/agriculture/agctr.html). OECA is responsible for enforcing all environmental laws and regulations as written; it does not write the regulations. OECA's work cuts across media and across all states. CAFOs are among OECA's national priorities with respect to enforcement of the CWA. Other agriculture-related concerns include drinking water safety and farm worker protection. Some of the older regulations probably were not written with agricultural operations in mind and are difficult to apply realistically to agriculture. This Committee is uniquely qualified to guide the Agency in the application of existing laws and regulations to agriculture. Mr. Nakayama welcomed Committee members to meet with him about any concerns, criticism, or questions.

Discussion

A Committee member pointed out that farm worker protection standards with respect to pesticides have been delayed. The PPDC will continue to consider farm worker safety issues for the next year, and the Agency then will release an advanced farm worker safety rule.

California has passed a law to include pesticides as hazardous materials for emergency response purposes to address fumigant drift problems; however, a participant asserted that the response has not been effective. At the federal level, EPA's pesticide regulations are developed by OPP. If a substance is listed as a hazardous material in existing federal statutes, OSWER will address it from an emergency response standpoint.

OW uses the U.S. Geological Survey (USGS) National Water Quality Assessment Program to assess long-term changes and emerging issues, such as pathogens and pharmaceuticals. OW is working with USGS and other agencies to create common frameworks that will allow EPA and the public to go to one place to access relevant EPA data, USGS data, and data from other agencies on a particular water body.

The Committee discussed the critical role of wetlands in water quality and quantity. OW considers wetland retention and enhancement to be a priority, and USDA conservation programs have been useful in protecting wetlands. Now, however, sensitive areas may be impacted by increased incentives to convert to agricultural uses land that had been set aside for conservation.

The FRRCC considered the sometimes significant contribution of atmospheric deposition to the nitrogen impairment lakes and rivers. In addition, legacy sediments may play a role in some impairments (e.g. phosphorus-dominated eutrophication and associated reductions in dissolved oxygen levels), but sediment from agriculture and other current nonpoint sources are important in some watersheds.

Regulation plays an important role in water quality protection but is not well tailored to some of the current nonpoint source issues. OW has taken a lead role in voluntary and partnership programs in the past decade, including the voluntary Nonpoint Source Management Program, which provides grants for projects addressing nonpoint sources of pollution.

In applications for conservation program funding, it was noted that small farms sometimes are rejected because larger farms generating more pollution are considered to be higher priorities by federal agencies. Although this is understandable at one level, farmers with smaller operations may gain the impression that they essentially will be penalized for doing a good job. Funds may make a greater impact if agencies address some of the smaller issues because many small problems can add up to a big problem. Planning on a watershed basis may represent one way to approach such a situation.

Poor rural communities in California require assistance to address problems with failing septic systems and wastewater systems. The Clean Water State Revolving Fund (CWSRF) offers an opportunity to address such problems through loans. These communities, however, cannot benefit from a loan, and state officials believe that the state cannot use the revenue from interest repayments to make grants. At least one state, Iowa, does allow states to use CWSRF interest as state revenue.

OAR is conducting an air monitoring study on emissions from manure storage facilities. At the conclusion of that study, EPA will develop methodologies for estimating emissions from all of these sources and will consider a regulatory approach. OAR also is working with individuals and groups on the use of anaerobic digesters.

As a result of litigation, the OSWI Rule was vacated and EPA has been ordered to reconsider the issues. EPA may remand parts of this rule or reevaluate the entire rule based on the court ruling. This affects the disposal of animal carcasses on CAFOs.

For incidents such as an avian influenza epidemic and the resulting carcass disposal efforts, EPA has broad authority but aims primarily to provide assistance to state and local agencies. OEM does have response resources—particularly technical assistance and expertise regarding proper disposal—and can aid in the response.

A Committee member noted that agricultural producers in California are considering the use of sludge as a fertilizer. Ms. Dietrich offered to provide information on potential regulation of such applications through OSW.

OECA developed 10 enforcement priorities using a public comment-based process and three criteria: a big environmental footprint, widespread noncompliance, and an appropriate federal rule. OECA selected

CAFOs as one of its water priorities, along with stormwater control, combined sewer overflows, and sanitary sewer overflows. OECA primarily has engaged in compliance assistance for CAFOs and has not undertaken many enforcement actions. Less than 0.1 percent of OECA's enforcement activities are directed toward CAFOs. Nevertheless, CAFOs are important because EPA believes that they can contribute to degradation of waters. A Committee member expressed concern that the self-certification process in the supplemental CAFO Proposed Rule lacks a paper trail other than an affidavit that a facility is not discharging. It is not possible at this time to say whether the Agency would increase inspections of self-certifying CAFOs to verify that they are not discharging. OECA is always focused on CAFOs, but addresses the most extreme cases first, such as CAFOs that have no permit and no self-certification. Committee members discussed the potential to provide individual comments on the supplemental CAFO Proposed Rule; comments were due April 7, 2008. It was decided that there was not adequate time for the Committee to comment, but the members were encouraged to submit comments as individual citizens.

OECA enforces regulations as written. If, by its plain text, the statute applies, OECA must fulfill its responsibilities to ensure compliance with the law. Many environmental statutes were written when it never was envisioned that they would be applied to agricultural operations. To the extent that OECA and EPA can work with the FRRCC as new statutes are written and old ones are revised to develop good definitions and a better understanding of how agricultural operations actually perform, the Committee will serve its intended purpose.

Enforcement includes a spectrum from compliance assistance to criminal enforcement. OECA attempts to be proactive to the extent possible with compliance assistance because that is always a more effective route. OECA becomes involved from an enforcement perspective when repeated, clear noncompliance is documented, such as emissions or discharges without a permit.

OECA is engaged in a major effort to encourage self-disclosures. A facility that self-discloses can receive a mitigation of the penalty of up to 100 percent depending on the violation. In addition, under an upcoming pilot program, a new owner of a facility will be given a period of time to discover any environmental violations and allow OECA to address the problems. This will provide the new owner an opportunity to start off with a clean slate.

Committee members considered the disservice to agriculture when those known to be repeat violators are allowed to continue to do so and are not brought to justice. Law-abiding farmers know that their reputation will be tarnished if the "bad actors" are allowed to get away with a serious violation of law. OECA has a Web site for reporting environmental violations (http://www.epa.gov/tips). Individuals may report anonymously or provide their contact information if they would like a response.

Welcoming Remarks and Discussion
Stephen L. Johnson, Administrator, EPA

The intersection between agriculture and the environment must be addressed, and the relationship between EPA and farmers and rural communities must be improved. The 2006 National Strategy for Agriculture aims to improve bidirectional communication between the agricultural community and EPA as the Agency addresses some of the major issues facing the nation. For example, how should this nation address energy security, respond to growing energy demand, and ensure that our energy is clean and affordable? In its focus on clean energy, the Agency also must recognize the bigger picture and choose a path that will benefit agriculture, rural communities, and the environment. Therefore, as EPA drafts regulations to implement the EISA, the Agency must grapple with fundamental issues, such as how to conduct life cycle assessments of GHG emissions and how to weigh the advantages and disadvantages of corn ethanol and cellulosic ethanol. The FRRCC will advise Administrator Johnson and future EPA Administrators regarding steps the Agency can take both to improve agriculture and rural communities and to improve our environment. The Agency takes advisory committees very seriously and spent a great deal of time and effort to establish the FRRCC. Administrator Johnson assured Committee members that their advice will reach not only himself, Deputy Administrator Peacock, and Mr. Jon Scholl (Counselor to

the EPA Administrator for Agricultural Policy), but also the senior leadership of the Agency. In addition, EPA has a responsibility to inform the Committee how its advice has been used. This will help reinforce the connection between the Committee and the Agency's decision-making.

Climate Change and Renewable Energy, EPA Staff Presentations

Introduction to Climate Change and Renewable Energy Panel
Sally Shaver, Associate Counselor for Agricultural Policy, OAR, EPA

The scientific community now exhibits greater agreement about the state-of-the-knowledge regarding climate change. In addition, a shift has taken place in this country regarding what can be done about it. For example, carbon markets now are proliferating across the country and internationally, the development of renewable energy sources is increasing, production of ethanol from corn and biodiesel are increasing, wind farms are spreading around the country, methane is captured from hog lagoons, anaerobic digesters are installed to handle manure from dairy farms and to produce energy, research is underway on cellulosic ethanol, and this country is even considering nuclear energy again. The FRRCC will be able to engage well with EPA on this topic and provide useful advice.

Mandatory Reporting of Greenhouse Gas Emissions
Reid Harvey, Director, Climate Change Division, Office of Atmospheric Programs, OAR, EPA

The Climate Change Division of OAR prepares the annual U.S. Greenhouse Gas Inventory as part of EPA's obligations under the United Nations Framework Convention on Climate Change. This division also implements a wide range of voluntary programs. A new provision for EPA included in the Omnibus Appropriations Bill for fiscal year (FY) 2008 requires the Agency to develop a mandatory GHG reporting rule, and EPA is moving forward with this rulemaking. The appropriations language gives wide discretion to the Administrator; therefore, this is a good time for the Committee to provide advice and input. The objective of the GHG reporting program is to provide data that could inform and support the development of a national climate policy. This is only a reporting obligation; it is not a requirement for any entity to reduce emissions and it does not trigger any other regulatory obligations. Among the major sources of carbon dioxide (CO_2) emissions, the largest source is the electrical power generation sector, followed by transportation and industry. The agriculture sector is not a major source of CO_2 emissions from a nationwide perspective. EPA will build on methods from existing mandatory and voluntary reporting programs. The Agency will develop the proposed rule and supporting analyses, conduct stakeholder outreach, and conduct inter- and intra-Agency reviews prior to releasing the proposed rule by September 2008. From October 2008 to June 2009, the Agency will hold public comment hearings, review stakeholder comments, develop the final rule and supporting analyses, and conduct inter- and intra-Agency reviews of the final rule, which the Agency expects to release in June 2009. One of the critical decisions is a determination of thresholds, such as a potential distinction between large and small facilities in terms of CO_2 emissions.

Discussion

Committee members considered the distinction between "global warming" and "climate change." Global warming can be considered a sub-element of the larger climate change problem, which involves effects other than temperature change. EPA and most scientists use the term climate change because it is a more all-encompassing term. EPA has a wide range of programs to address climate change—as do other federal and state agencies—including both mitigation and adaptation. The United States is working with other countries to put forward a concerted approach to consider what long-term commitments each country would be willing to make.

The rulemaking for mandatory GHG reporting is a U.S.-focused effort. Therefore, in developing methods and standards, the Agency is considering methods used in existing U.S. programs. A Committee member argued that, because climate change is a global issue and the United States is making agreements with

other countries, the United States should develop standards in line with those of other countries. It was noted that many methods used in other countries have been informed by U.S. experts and, under the U.N. Framework Convention on Climate Change, the United States has one of the best annual emission inventories.

EPA has a detailed reporting system in place for electric power generating facilities such that the Agency can estimate the emissions for each generating unit. For the transportation sector, EPA's estimates are based on fuels, rather than individual driving. For industry, EPA does not have bottom-up data on GHG emissions (i.e., from individual facilities), and this is probably the key data gap. Under the GHG reporting rule, EPA will collect emission data from major emission sources. Land use and forestry are considered to be a separate category; conversion of USDA Conservation Reserve Program (CRP) lands to agricultural uses would be included in this category.

One Committee member stated that fertilizer producers in the United States and Canada are aware of public concerns about GHG emissions and are doing what they can to minimize their environmental footprint. For purposes of analyzing emission sources, fertilizer production, which consumes energy, would be considered part of the industry sector. The application of fertilizer to soil also causes GHG emissions, and this aspect of fertilizers is included in the agriculture sector.

The Agency is at an early stage in the rulemaking process and has made no decisions, such as whether to collect emission data from fertilizer plants or CAFOs. EPA is looking for input on logical criteria to use in making such decisions.

U.S. EPA's Regulatory Action Under the Energy Independence and Security Act
Robert Larson, Associate Director, Transportation and Climate Division, Office of Transportation and Air Quality, OAR, EPA

The Transportation and Climate Division is a new division, created because of the recognition that the transportation sector is responsible for about 30 percent of U.S. GHG emissions. In December 2007, Congress passed the EISA and President Bush signed it into law. Regarding GHG emissions from transportation, the EISA directs EPA to: (1) mandate the use of 36 billion gallons of renewable fuel by 2022; and (2) set Corporate Average Fuel Economy (CAFE) standards, improving vehicle fuel efficiency to an average of approximately 35 miles per gallon by 2022. The parts of the Renewable Fuel Standard (RFS) set by the EISA are nested. Specifically, the standard for total renewable fuels (36 billion gallons by 2022), which primarily includes corn-based ethanol and other fuels that meet the GHG reduction threshold of 20 percent, is the overarching category. Within this category, 21 billion gallons of advanced biofuels must be used, and this includes set-asides specifically for biodiesel and for cellulosic biofuel. The EISA requires EPA to conduct a life cycle assessment to determine which fuels meet mandated GHG performance thresholds compared with the petroleum fuel replaced. A fuel life cycle GHG assessment compiles the GHG impacts of a fuel throughout its life cycle, beginning with the production or extraction of the feedstock and ending with tailpipe emissions. Such an analysis can be used to compare one or more fuels performing the same function. A life cycle comparison of gasoline versus corn ethanol now underway will assess both domestic and international impacts of the use of domestically produced feedstocks in the United States as an alternative fuel and will include effects of land-use changes. Many assumptions go into such modeling, and additional work is needed to improve the data on which the models are based. Specifically, EPA plans to: (1) build a consistent modeling framework that captures both domestic and international agriculture sector changes and GHG impacts; (2) work with experts to improve understanding of nitrous oxide emissions; (3) develop country-specific GHG emission factors associated with land-use change and agricultural practices; and (4) update the petroleum baseline data. EPA also is updating other biofuel life cycle GHG factors with this approach.

Discussion

Committee members considered the role of energy conservation, specifically in terms of the great distances across which agricultural products are transported and the concept of local food. EPA is interested in reducing GHG emissions at any step but will not address energy conservation in the rulemaking for the EISA. EPA also is not considering the conversion of agricultural land to urban uses because the Agency is assessing what would result specifically from this change in policy. The Agency's modeling will account for a potential reduction in domestic beef cattle and dairy herds resulting from an increased cost of corn both domestically and internationally.

The Committee considered concerns from the conservation community over the conversion of CRP lands to corn production for ethanol as well as the conversion of native habitat (e.g., prairie) to corn production. Others have expressed concern about the impacts of biofuel production on air and water quality. The Agency is evaluating expected impacts of the RFS on CRP lands, but habitat and biodiversity impacts are beyond the scope of EPA's analysis. The Division is, however, assessing the impact on water quality and perhaps water quantity. Region 7 is working with EPA's Office of Research and Development (ORD) to address some of the ecological impacts

Few sites in the United States provide a useful suite of measurements of GHGs associated with different cropping systems, tillage practices, and fertilization strategies. A Committee member argued that more data should be collected before further regulations are developed. The Agency is collecting more data and improving its understanding of agricultural GHG emissions; however, EPA will have to rely on the best available information and be open to future revision if needed.

Currently, one blend of ethanol and gasoline, E10 (10% ethanol), is used. Another fuel, E85 (85% ethanol), is not yet readily available. As automakers ramp up production of "flexible fuel" vehicles that can use E85, the Division is modeling the effects of this change in vehicle technology. EPA and the U.S. Department of Energy (DOE) also are considering E20 blends.

The Committee considered whether the United States should be growing feedstocks other than corn and whether cellulosic ethanol might be better from the standpoint of climate change. The EISA does not mandate the use of corn ethanol; in fact, it includes a cellulosic mandate. Currently, however, it is prohibitively expensive to produce cellulosic ethanol. Once the technology is developed, it can be applied to a wide range of feedstocks. One Committee member pointed out that, although cellulosic ethanol may be better in terms of climate change, it may have an adverse impact on the beef cattle industry by displacing range-grazed cattle. EPA has an opportunity to grant a waiver that reduces the mandate in the case of a national drought. Another waiver can be used to reset the standard if technology for cellulosic ethanol production does not evolve rapidly enough.

A Committee member noted that significant progress has been made in the use of canola oil as a fuel. EPA is assessing all feedstocks likely to come into play and will estimate the extent to which seed crops other than soybeans might provide oil. One company plans to convert feedstock corn oil to biodiesel at minimal cost. Sweet sorghum also may be an alternative feedstock.

Burning any fuel oxidizes organic material, releasing stored carbon into the atmosphere. In a renewable process, carbon is removed from the atmosphere and then is returned to the atmosphere, essentially recycling the carbon. Nevertheless, agricultural producers involved in biofuel production believe that public opinion has suddenly turned against them and the public thinks they are negatively impacting the environment. EPA still is learning about many aspects of the renewable fuel process. One researcher's recent analysis suggests that corn ethanol will worsen GHG emissions, but EPA's analyses have not shown this.

Climate Change and Renewable Energy, Committee Member Presentations

Opportunities for American Agriculture in the Voluntary Carbon Credit Market
Garth Boyd, Camco

Pre-industrial CO_2 emissions were low compared with the current 6 billion metric tons of emissions per year resulting from human activity. Models predict that, if we do not take action to reduce emissions of GHGs, the atmospheric concentration of CO_2 could be from around 500 to 1,260 ppm in 2100, and this could create catastrophic climate changes. A number of states have proposed or enacted legislation, formed regional climate change mitigation efforts, or initiated market-based programs to address climate change. At the national level, Congress has proposed legislation to address climate change. It appears likely that the United States will adopt a federal cap-and-trade system and offset program within 2–3 years, like much of the rest of the world. In a cap-and-trade system, the emitting sectors of society, such as cement manufacturing utilities, are subject to an emission cap and are given allowances based on some benchmark level of emissions. Firms or sectors that have implemented technology allowing them to remain below the emission cap may trade their allowances to firms that need to buy allowances. Under an offset system, if firms within the regulated sector still cannot stay under the emission cap, offsets from unregulated sectors can be used. For example, a dairy farm may implement a new, voluntary project, such as an anaerobic digester. If it is an action that the nonregulating sector would not otherwise have implemented, it creates a high-quality carbon credit that an emitting firm can purchase.

A carbon credit is a certified reduction in GHG emissions equivalent to one metric ton of carbon dioxide. In the U.S. voluntary carbon market, many organizations are making up their own rules for carbon credits and offsetting, whereas the rest of the world complies with a strict set of rules to create a high-quality, internationally recognized carbon credit. A high-quality carbon credit must be: (1) real in the sense that the project that created it has actually happened; (2) "additional," in the sense that the project is beyond "business-as-usual" activities; (3) measurable; (4) permanent such that emissions are not simply displaced temporarily; (5) independently verified; (6) unique (not used more than once to offset emissions); (7) transparent to the public; and (8) conservative in the assumptions, values, and procedures used. High-quality, agriculturally generated carbon credits will: (1) allow agricultural producers to command higher prices for their products; (2) improve rural economies; (3) avoid potentially damaging revelations that the agriculture industry is getting a "free ride" by getting paid for business-as-usual management; (4) promote the use of new technologies that otherwise are dependent on government subsidies; (5) involve an unregulated sector of society in solving climate change issues through financial incentives; and (6) provide numerous ancillary environmental benefits from GHG reduction permits. Global climate change issues represent a tremendous opportunity for agriculture.

Discussion

Committee members considered the implications of additionality. A no-till farmer may expect to be rewarded (i.e., allowed to generate offsets) for the long-term soil sequestration of carbon. Although such practices should be rewarded in some way, this reward would have to be outside of a carbon market. The project must result in an additional reduction in GHG emissions. The international market does not accept soil sequestration as a high-quality carbon credit because of concerns that soil sequestration of carbon is not permanent. The same issue exists for planting a forest that may burn.

Biofuel Implications for Agriculture and the Environment
Otto Doering, Purdue University

The expansion of U.S. ethanol production capacity is well ahead of the requirements of the EISA RFS. The share of U.S. corn used for ethanol will have increased 31 percent from 1995–1996 to 2015–2016. The explosion in the ethanol industry is partially explained by the tremendous financial incentive created by $2/bushel corn and increasing petroleum prices. In the United States, a rebalancing of land is occurring in response to market forces, resulting in changes in acreage planted in corn, soybeans, and other crops. For example, in the next year, corn acres are expected to decline and soybean acres are expected to increase. CRP acres also are expected to decline. Producers now are determining land use through a bidding process between the crops, rather than through the traditional crop set-asides, because of limited land availability. Historically, certain correlations have existed between agriculture and energy. For example, crude oil and gasoline have been strongly correlated, but ethanol has not been strongly correlated with corn. Over the next 5–8 years, corn and ethanol prices should begin to track each other.

In terms of policy costs—how much a policy costs the government, the taxpayer, or the fuel buyer—the consumer pays for the policy under an RFS with low oil prices, whereas the taxpayer pays for the policy under a fixed subsidy with high oil prices. One policy is not necessarily better than the other. Regarding the cost competitiveness of cellulosic ethanol, the estimated prices used by some at DOE are out of date. A more accurate estimate probably would be $70 per ton for switchgrass (and a land cost of $15–20 per ton), whereas corn stover should be closer to $40 per ton. The recent National Research Council report on water quality and biofuels considered the limited land base and expansions in corn production. To determine water quality impacts of biofuel production, however, one must know what is actually occurring out on the landscape and whether farmers' practices have adapted to that landscape in terms of fertilizer use, tillage systems, and so forth. More intensive corn production will result in a greater pesticide or nitrogen inputs, but the water quality impact will depend on the location and other factors, such as soil characteristics. Effects on CO_2 emissions will depend on the standards and what is included in the analysis. EPA will make decisions regarding biofuels on the basis of CO_2 emissions; therefore, it is critically important that we determine the CO_2 impacts.

Discussion

Committee members raised concerns about DOE's use of out-of-date prices for cellulosic material. It was noted that most DOE staff working in this area, however, recognize when the data are out of date and work to update them. Nevertheless, this suggests that citizens should be willing to sometimes question the math, logic, and assumptions used by the government in policy-making.

Despite the need for alternative and renewable fuels, at some point, using corn for fuel may cause a shortage of corn for feed, resulting in impacts on livestock and poultry farmers. A Committee member wondered whether farmers have increased corn production sufficiently to avoid running out of corn, especially considering the potential for a drought that will make matters worse. Major grain markets and grain uses, however, have changed dramatically, making grain prices and grain production difficult to predict. This is affected by the growth of the ethanol industry and the decline in the value of the U.S. dollar.

Comprehensive Livestock Management Strategy, EPA Staff Presentations

Introduction to Comprehensive Livestock Management Strategy Panel
Jon Scholl, Counselor to the Administrator for Agricultural Policy, EPA

More effective engagement of the agricultural community will occur, in part, through improved communication. Many of the agriculture-related programs and regulations overseen by the Agency require new tools and approaches. Environmental issues related to the livestock industry pose some of the most significant challenges for EPA, but they also represent some of the greatest opportunities. For EPA's

programs to succeed, the Agency must recognize the costs and challenges imposed by these programs. EPA must take a step back, assess the tools it is using with respect to the livestock industry, and find an approach through which the Agency can meet its environmental objectives in a way that is comprehensive and manageable to producers.

Animal Feeding Operations: Air Program Update
William Schrock, Environmental Engineer, Office of Air Quality Planning and Standards, OAR, EPA

In 2001, EPA and USDA asked the National Academy of Sciences (NAS) to conduct an AFO air emission study. The NAS study conclusions and recommendations for EPA included the following: (1) no reliable emissions factors exist for AFOs; (2) additional data are needed to develop methodologies for estimating these emissions; (3) current methods for estimating emissions are not appropriate; and (4) a process-based model for gaseous emissions should be used. Over the next 2–3 years, EPA plans to address issues related to CAA requirements. In particular, the Agency must first estimate emissions from AFOs. EPA also must define the source, consider an applicability cutoff for any potential regulation, address fugitive versus nonfugitive emissions, and assess the effectiveness of emission control technology. Finally, the Agency must consider what it can reasonably expect producers to be able to do in terms of emission monitoring, reporting, and recordkeeping. As a first step, OAR and OECA developed a consent agreement with representatives of the agriculture industry. This voluntary agreement allowed farms to sign up and pay a fine; in exchange, EPA agreed not to sue these farms for any past violations of the CAA, CERCLA, or EPCRA. A monitoring study, funded by the participating AFOs, is the core of the consent agreement. The purpose of the study is to gather data for developing reliable emission-estimating methodologies and to inform decision-making. Some of the challenges with this study include: (1) the role of weather and climate in emissions; (2) effective monitoring and modeling for partially enclosed, naturally ventilated buildings; (3) the effect of animal movements; and (4) effective monitoring and modeling for large, open sources. Monitoring began in 2007 and will continue for 2 years. Once researchers complete their data analysis, EPA will have 18 months to develop emission-estimating methodologies. Participants who signed up under this agreement must comply with any applicable requirements 120 days after publication of the emission-estimating methodology. Modifications to one area of an AFO can impact another area and another medium, so it is important to ensure that fixing one problem does not cause another. OAR still needs to consider the following: (1) regulations and/or guidance; (2) conservation practices; (3) emission-estimating methodologies; and (4) a process-based emission model.

Discussion

Committee members discussed some specifics of the consent agreement. Participating farmers were required to fund the study in addition to paying the penalty. The penalty portion of the money went to the U.S. Department of the Treasury, and a separate mechanism funded the study. Participants in the consent agreement must comply within 120 days of publication of the emission-estimating methodologies to maintain their protection under the agreement; however, compliance is expected from all farms. EPA did not recommend a size cutoff for operations participating in the consent agreement, but cooperative extension representatives may have made such recommendations. Farmers who signed up generally had some indication that their facilities may have exceeded mandated limits on, for example, ammonia or hydrogen sulfide. A Committee member recalled the dissension within the animal agriculture industry over this agreement, which entailed admitting to having been in violation and buying protection. Those who paid the penalty essentially subsidized those who did not.

One Committee member who also served on the NAS committee assessing AFOs and air emissions emphasized that committee's finding of a lack of appropriate data. EPA's multiyear study should go a long way toward filling this gap.

Update on the Concentrated Animal Feeding Operation NPDES Permit Regulation Development Program
Allison Wiedeman, Rural Branch Chief, Water Permits Division, Office of Wastewater Management, OW, EPA

In 1999, EPA and USDA together signed a unified national strategy for AFOs. Because both agencies have equal interests in some areas related to CAFOs, they decided to coordinate and collaborate. This relationship has continued and has provided many benefits. OW developed revised regulations for the CAFO industry in 2003, and in 2005, EPA was sued by environmentalists and the livestock industry. Since 2005, OW has been revising the regulations in accordance with the decision by the Second Circuit Court on the Waterkeepers case. OW has maintained its objective to address water quality impacts resulting from runoff from AFOs. OW issued the proposed rule in June 2006. OW refined parts of the proposed rule and issued the supplemental proposed rule in March 2008. The supplemental proposed rule focuses on two things: (1) which CAFOs must apply for an NPDES permit; and (2) the role of nutrient management in permitting processes. When OW develops regulations for the agriculture industry, it does so with extensive stakeholder input and in partnership with USDA. In particular, USDA has been instrumental in working with OW on the development of the CAFO Rule to ensure that the rule is viable and environmentally protective. EPA and USDA are engaged in a joint project on the development of a software package, the Manure Management Planner, which will produce a free nutrient management plan for farmers. In addition, EPA will fund confidential technical assistance to livestock operators; this will provide OW with data regarding the major challenges faced by producers in meeting regulations. Farms and other facilities are faced with myriad forms, regulations, and requirements that may overlap and could even be contradictory. Overcoming these challenges would benefit everyone because the easier it is to comply, the more facilities will comply.

Comprehensive Livestock Management Strategy, Committee Member Presentations

A Family Farm of Today with an Eye to the Future
Christine Chinn, Chinn Hog Farm

The viability of American farmers and ranchers is strategically important to our nation's economy, energy, environment, and national security. Agriculture is different from other industries, and EPA must consider these differences in the development and enforcement of laws and regulations that apply to agricultural producers. In particular, farmers and ranchers are price takers in the sense that they produce a commodity for their market, and the price can move above or below the cost of production. The individual buyers and sellers, relative to the market as a whole, are too small to influence prices. Virtually every agricultural product can be substituted. In addition, farming is affected by factors that are beyond the control of farmers and ranchers, such as weather. Some Americans believe that livestock and poultry operations should function as they did 50 years ago. Fifty years ago, however, life was much more difficult on the farm. On the Chinn Hog Farm, a 2,400-sow farrow-to-finish operation, hogs are housed in climate-controlled facilities where their health and comfort are easily monitored. This also makes it possible to raise hogs and simultaneously protect the environment. The Chinn Hog Farm follows, and often goes above and beyond, state and federal environmental laws and regulations. The farm has developed a comprehensive nutrient management plan and an environmental management system and is subject to internal audits conducted by an outside party. The farm monitors daily rainfall, tests the soil and manure, and uses scientific management to keep its animals healthy, the environment clean, and the farm productive. American farmers and ranchers in this country produce a safe and abundant food supply. America's livestock and poultry do generate more fecal matter than humans, but livestock and poultry do nothing to contribute to the large volume of grey water that is mixed with, and contaminated by, human feces. Manure is being successfully substituted for large quantities of synthetic fertilizer in U.S. crop production.

Many types of livestock businesses can be found in this country; the two things that they all have in common are their desire to farm and their desire to protect the environment. The Chinn Hog Farm provides jobs for people from the local community. The Chinn family owns their own feed mill, which

allows them to purchase all of their grain from local corn producers. As EPA considers new rules and regulations, it should consider the effects of these rules and regulations on farmers like the Chinns, the communities they represent, and other farmers they support.

Comprehensive Livestock Management Strategy—Some Key Opportunities To Make a Multimedia Approach Workable

Suzy Friedman, Environmental Defense Fund (EDF)

EDF is a national environmental organization that works on a broad range of issues. EDF considers both the economic and environmental opportunities to address pressing challenges and to do so collaboratively, working with industries and other nontraditional partners. EDF's Center for Conservation Incentives focuses entirely on incentive-based opportunities for conservation on private land. Regarding agriculture, EDF primarily works with partners to implement on-the-ground projects. Four issues and opportunities are crucial to a multimedia approach to agriculture-related conservation strategies. First, farmers need much more technical assistance than currently is available; this is especially true as farmers confront multiple issues, such as water, air, GHGs, and public health. The Waste Solutions Forum in the Shenandoah Valley of Virginia is an existing partnership opportunity that could be leveraged in this way. The Forum is a good model for the manner in which diverse public and private partners can come together, including environmental groups, industry, farmers, and state and federal agencies. Second, farmers require a strategy that focuses on adaptive management. This should not be a strategy that simply tells farmers what they should do; rather, it should provide sufficient information that farmers can understand the environmental issue, see what is happening on their farms relevant to that issue, and address the issue in ways that work economically and environmentally on that farm. For example, the On-Farm Network, created by the Iowa Soybean Association, has developed an extensive network of farmers who collect and analyze data from their farms regarding crop nutrient needs, fertilizers, and fungicides. This has enabled the farmers to significantly reduce fertilizer application in economically viable ways. Third, marketplace opportunities and challenges related to a multimedia approach must be considered. In addition to carbon credits, nutrient credit trading also exists, as do opportunities with wildlife habitat and wetlands; such approaches could enable farmers to tap into the marketplace. Finally, the needs both for technology and technology transfer must be addressed to determine how to enhance the development, refinement, and on-farm implementation of various technologies. With respect to animal agriculture, important technologies are those that can convert manure and litter into a value-added product that enables farmers to tap into fertilizer and organic benefits. Resources are needed to develop and demonstrate these technologies and to transfer them.

Discussion

The FRRCC considered some specifics related to the Waste Solutions Forum. The impetus for the formation of the Forum was the significant water quality challenges for the Chesapeake Bay and the occurrence of hotspots based on the intensity of animal agriculture. The average dairy farm in this area has fewer than 100 cows, so solutions regarding manure management that might work for larger farms do not translate to farms of this size. The Forum determined which practices and technologies would be applicable to the size and diversity of agricultural operations in this area and obtained funding to implement them. One Committee member noted that he was familiar with the Forum, stating that this project works and the people involved are engaged and working toward real solutions. One participant commented that resources from sources such as the USDA's Environmental Quality Incentives Program (EQIP) sometimes align with the need, but this varies across states.

Improved technical assistance and technology transfer will require coordination across EPA offices and across agencies. In terms of adaptive management, EPA should determine the different agencies and programs with which it might coordinate to foster the ability of farmers to gather information, make decisions, and pursue a solution that will work for them. Farmers should be given room to manage systems and not be so restricted that they do little more than check off boxes.

The FRRCC considered specifics related to the operation and environmental management of the Chinn Hog Farm. The farm hired an outside consultant to develop its environmental management plan. The consultant identified areas where the farm was doing well and areas where it was not and made suggestions for improvement. The farm addressed these gaps by, for example, developing a plan of action in case of an accidental spill. The Missouri Department of Natural Resources (DNR) requires annual audits of farms to ensure compliance with regulations. A primary contact at the Missouri DNR for farmers facilitates compliance.

The FRRCC considered two approaches to ensuring compliance with environmental regulations: a performance standard or best management practices (BMPs). Under a performance standard, producers would have discretion in how to achieve the standard. Traditional regulatory approaches, on the other hand, have relied on BMPs, such that producers using the BMP are in compliance, whether it works or not. The distinction is critical.

The Committee considered enforcement versus voluntary programs. Voluntary programs may be the preferred approach, but these are dependent on resource availability. A Committee member suggested that agriculture needs guidelines and regulations, but these should not be so prescriptive that farmers cannot function. Comprehensive rules and regulations should consider the spectrum of economic, environmental, and human problems of farms. One Committee member remarked that EPA historically enforces regulations aggressively, especially with the agriculture industry. When producers understand the problem and have a means to resolve it, they will be good stewards and improve the environment. Another Committee member pointed out, however, that the voluntary approach works very well if a "two-by-four is hidden in the closet." Further, some individuals will do nothing to address a problem until they are penalized. This leads to a tension in agriculture between those who are trying to do the right thing and those who are not willing to change.

The Committee began a discussion of producers' perceptions of EPA and the Agency's perceptions of agriculture. In particular, EPA tends to make an appearance almost exclusively in the context of enforcement. As a result, producers react to the Agency with fear and distrust. In contrast, the agricultural community has developed long-term relationships with the cooperative extension service, conservation districts, state departments of agriculture, and USDA. These may be the most appropriate organizations to approach farmers about environmental problems. On the other hand, cooperative extension service staff members may be reluctant to visit a farm and point out environmental problems for fear of alienating the producers. Agricultural producers may respond well to a peer-to-peer review process. One Committee member asserted that EPA's negative characterization of CAFOs is evident from the FY2006 OECA Accomplishments Report.

Public Comment
James Moseley, Committee Chair

A representative from the Pollinator Partnership urged the Committee to consider pollinators, which are important species that generate income for many people in rural America, and the beekeeping community. In particular, the Committee might advise EPA to engage in partnership efforts with USDA, the agriculture industry, and other stakeholders. More information is available at http://www.pollinator.org.

A pork producer and representative from the Michigan Farm Bureau described the Michigan Agriculture Environmental Assurance Program, which was established to address the environmental challenges faced by the agriculture industry in Michigan. This voluntary, incentive-driven program provides information on the standards that producers must meet to relieve themselves of some environmental paperwork and permit burdens. A farm-specific plan is developed based around a comprehensive nutrient management plan. This program may serve as a model for other states.

A cherry producer and representative from the Michigan Farm Bureau urged the Committee to advise EPA not to phase out azinphosmethyl. This organophosphate is very effective in the control of certain insects in the specialty crop sector, and alternative pesticides are not as effective and are more costly.

FRIDAY, MARCH 14, 2008

Communications and Partnerships Workshop, Part 1

Lisa Lybbert, Associate Administrator, Office of Public Affairs, Office of the Administrator, EPA, and Molly O'Neill, Assistant Administrator, Office of Environmental Information (OEI), EPA

EPA characterizes the agricultural community as producers of solutions. Agricultural producers need to ensure that the environment is not degraded; therefore, they should be viewed in a positive light. Administrator Johnson genuinely believes that the best solution can be achieved through open discourse. Administrator Johnson also says that there is more in the Agency's toolbox than just a hammer. By working together, EPA and the agricultural community can produce positive environmental, agricultural, and economic solutions. The agricultural community differs from others in its choice of media outlets. Through this Committee, the agricultural community has a good opportunity to tell the Agency which media outlets are most effective in reaching them and how the Agency can more effectively convey its message.

OEI engages in central collection of environmental data. OEI also addresses access and analysis of information in partnership with ORD and the Toxic Release Inventory Program. The Office of Public Affairs and OEI work together to develop new ways to disseminate both the information (the data) and the message (what the data mean). OEI stores data in large databases, which makes it difficult for people to access and use the data. Further, EPA does not house all environmental data. Therefore, federal agencies must partner with one another to bring the data together and make them more accessible. This Committee has a unique opportunity to help EPA deliver this information by indicating which information sources Committee members use, what is missing, and whether information is being delivered in a useful format.

Discussion

A Committee member recommended that EPA public affairs staff consider the importance of forming close working relationships with USDA public affairs staff and the coordination of messages. Further, the Agency should not assume that farmers are homogeneous in the manner in which they access information.

For agriculture-related issues, a majority of EPA's communications are proactive, partly because most of the Agency's agriculture-related activities are planned in advance. Communications regarding other issues are primarily reactive. EPA regional offices provide information on their Web sites, and staff members bring proactive messages to meetings of interest to the agricultural community. The media, however, tends to approach regional offices only for reactive stories.

Some Committee members suggested that the FRRCC should not spend time at this point addressing EPA's agriculture message. Instead, the Committee should address the critical substantive issues first. Other Committee members disagreed, stating that the topic of improved communication is one of the three issues that the Committee has been charged to address.

Committee members again returned to the tendency for EPA to appear only in an enforcement capacity. This is exacerbated because responsibility for most regulations is delegated to the states; farmers therefore interact with the state agencies rather than EPA. In contrast to livestock and poultry producers, crop producers almost never interact with EPA (except in the context of grants), relying instead on cooperative extension and USDA for information.

As a regulatory agency, EPA has drained producers' "emotional bank accounts." Presenting environmental stewardship awards to farms is one way to build a better relationship, but this should extend to a broader array of agricultural systems, including operations not regulated by EPA. Greater involvement with youth (e.g., through 4-H) and greater interaction with university researchers, students, and cooperative extension also may be beneficial. EPA could work through local programs (e.g., the Louisiana Master Farmer Program) to present itself in a better light. EPA should show its willingness to work with producers to try to find positive solutions to problems, rather than only acting as enforcer.

Several Committee members agreed that the Agency should work through the relationships that already exist between agriculture and cooperative extension, soil conservation districts, state departments of agriculture, and USDA field office staff. EPA cannot simply appear on the farm and develop an immediate relationship. Farmers are most receptive to a local source. The Agency should look for local agencies and work with both the public and private sector, including Certified Crop Advisers (>13,000 professionals certified through the American Society of Agronomy). Because farmers seek information from university researchers, one Committee member suggested that EPA take into account the valid, peer-reviewed results of researchers outside of the Agency.

Some Committee members asserted that the agricultural community's opinion of EPA is not as bad as EPA staff members might imagine. EPA has improved its communication with the agricultural community, but the Agency has a reputation to overcome.

Specific suggestions for effective media outlets and message delivery approaches include: (1) farm broadcast radio; (2) National Public Radio; (3) trade associations; (4) the Internet and e-mail; (5) messages delivered by farmers; (6) messages delivered in a language appropriate to the region (e.g., Spanish in some areas); and (7) an emphasis on real, rather than "feel-good," messages. Specific information needs of agricultural and rural communities include: (1) national reporting on pesticide-related illness; (2) interagency efforts to develop indicators and reports characterizing the environmental performance of the agriculture industry as a whole; (3) information on regulatory changes that is couched in the larger context of the suite of regulatory demands on farmers; and (4) advance notification of future regulations.

Communications and Partnerships Workshop, Part 2
John Askew, Regional Administrator, Region 7, EPA, and
Gary Mast, Deputy Undersecretary for Natural Resources and Environment, USDA

Of the 17,000 EPA employees, 50 percent work in the Agency's 10 regional offices. Many of the interactions agricultural producers have with EPA are with regional employees. EPA generally delegates responsibility for programs under the CWA, CAA, the Resource Conservation and Recovery Act (RCRA), and other laws to the states, and EPA regional offices have fiduciary and programmatic oversight of these state programs. EPA is a very mission-oriented organization that employs many scientists and engineers but few business or communications experts. EPA does not have expertise in those arenas and it shows. Region 7 works directly with state departments of agriculture, providing them with information and asking them to disseminate the information to producers. The regional office also works through cooperative extension, USDA/Natural Resources Conservation Service (NRCS), and state technical committees to disseminate information. A cross-media agriculture team, composed of regional office staff members who work on the ground every day, engages in outreach to the agricultural community. Region 7 also has developed a satellite environmental finance center with information on all available grant programs, including USDA program funding, and online training. This will allow farmers working in an impaired watershed to determine what they should do and how to pay for it. EPA regional offices do have some enforcement discretion and the ability to work with entities to get them on track. EPA must be a part of collaboration and communication with the agricultural community; this should improve compliance and reduce the need for later enforcement action. Region 7's plans for "Ag Month" activities include four panels addressing issues such as behavioral changes resulting from enforcement,

concerns related to the potential land application of the waste product from biodiesel production, and the sustainability of livestock operations.

Agriculture has come a long way since the founding of the People's Department, which now is USDA, in 1862. In 1940, one farmer fed 19 people; today, one farmer feeds more than 150 people. The agricultural industry now is producing fuel in addition to food and fiber. Domestic demand for renewable fuels, world demand for food, and urban development are putting significant demands on the land base. Some of the greatest demands are related to water quality and quantity. The agricultural community must help address these issues. When should we regulate, when should we incentivize, and how should we educate? NRCS works with partners to initiate on-the-ground programs in every county of every state. The Field Office Technical Guide, available through local NRCS offices and through the USDA Web Site, describes the correct implementation of conservation projects. NRCS employees are trusted by the people in their communities. That trust becomes apparent when farmers ask NRCS staff and their partners for help implementing a conservation project. Farmers and other landowners want to know how to do the project correctly and whether any funding is available. NRCS has a good delivery system so it was suggested that an EPA employee should work in each county with NRCS and its partners. It is very important for EPA and the agricultural community to work together. USDA is not sufficiently helping EPA to understand agriculture and is not doing enough to help initiate voluntary programs. Those in the agricultural community also need to listen and improve their efforts to educate EPA, neighbors in rural communities who do not farm, and the public at large. Congress mandated a regulatory function to EPA to protect human health and the environment. In comparison, USDA's long history has been one of providing support for stakeholders, including farmers and the general public. EPA and USDA do, however, share a mutual goal—to sustain and improve natural resources. EPA recently began to consider agriculture as a possible source of environmental emissions and considered regulation. EPA and USDA began a successful communication partnership that has expanded to include bimonthly EPA-USDA meetings. The two agencies also share technical information and conduct interagency reviews of guidelines, policies, and regulations. The FRRCC is the next big step. Through a continued partnership and frequent and frank communication, EPA and USDA will be better informed and better able to achieve their mutual goal of sustainable natural resources.

Discussion

The cross-media agriculture team includes staff from each program office and from about one-half of the regional offices. The team was established to facilitate cooperation and communication internally within EPA. The team's efforts should result in decisions that represent more of the reality for those in production agriculture, thereby creating a more workable product for producers.

Committee members discussed the apparent "good cop/bad cop" images of USDA and EPA. The respective roles of the two agencies are very important to the way in which the agricultural community does business and to the resolution of the conflicts at the intersection of agriculture and the environment. It appears that everyone wants to be a good cop, have a soft touch, and work together, but this will not be effective in addressing the bad actors. EPA must be the enforcer. On the other hand, because the Agency must deal with a tremendous amount of privately owned land to address nonpoint sources, a collaborative effort is needed. The majority of farmers already are doing good things and they do so not only to avoid enforcement, but because it is the right thing to do. Some Committee members, however, expressed concern over environmental statutes that require EPA to treat a facility that simply made a mistake as if it were no different from a bad actor. This system will stymie communication, so perhaps such statutes should be changed.

The Committee discussed the general lack of acceptance of the TMDL process by the agricultural community. If producers are identified as contributing to hotspots in an impaired watershed, it is important to invest in a planning process that is accepted by the agricultural community and by federal decision-makers. The Agency is concerned about not pointing fingers and making people nervous about regulation; however, at some point, regulation must come to the table.

Some Committee members suggested that the disconnect between USDA and EPA regarding regulations is not large. During development of the CAFO Rule, a team of USDA and EPA staff worked together. Further, many of the underpinnings of the CAFO Rule reflect USDA's conservation practice standards; thus, EPA did not impose unreasonable tasks that producers had never seen before.

Committee members considered the institutional history of USDA. NRCS has been portrayed at times as an enforcer and any conservation compliance through NRCS has been weakened by Congress to the point that it is now practically meaningless. NRCS is not suited to the role of bad cop. It is much easier for agriculture to point the finger at EPA and to make EPA the bad cop.

When a federal enforcement action affects agriculture, the state departments of agriculture often receive no advanced warning and are not aware of what has happened until approached for a comment by the local newspaper. A Committee member argued that, if EPA kept state departments of agriculture informed and worked with them on positive programs as well as enforcement, these agencies probably would be willing to stand with EPA to address a bad actor.

The FRRCC raised a number of concerns regarding federal budget cuts: (1) reduced funding for conservation technical assistance through NRCS; (2) a budget cut affecting the Soil Climate Analysis Network program; and (3) the loss of funding for the Pesticide and Fertilizer Use Survey of the National Agricultural Statistics Service.

The Committee discussed funding for the implementation of conservation practices. Quite often, the majority of a watershed's impairment comes from a minority of the watershed. A voluntary, incentive-based system that treats everyone fairly in terms of conservation funding may not work in the presence not only of bad actors, but also differential impacts of operations simply through their location in the watershed. This is the dilemma NRCS faces—whether to fix the biggest problem or to spread out existing resources to all who want to participate. A Committee member noted that the allocation of money speaks more loudly than any press release. Organic farmers and others that pollute relatively little may be disheartened to see funds distributed to the biggest polluters. Both agencies should, therefore, develop a more equitable, size-neutral system that does not appear to reward bad actors. Another Committee member observed that EPA has been silent on the issue of environmental justice; however, the President's budget includes strong funding for conservation assistance for small, beginning, disadvantaged, and minority farmers.

Although CEAP data will not be released until August 2008, a Committee member noted that some CEAP literature reviews, such as those conducted by the Soil and Water Conservation Society and The Wildlife Society, have concluded that some conservation practices are not very effective. Through a collaboration with EPA and the National Oceanic and Atmospheric Administration, NRCS will ensure that the agencies effectively prioritize funding of the most effective conservation practices.

NRCS has initiated a campaign called "Conservation: Our Purpose, Our Passion" that exemplifies 10 producers across the country. This kind of information could be helpful to producers because it can provide ideas for innovation that producers could apply to their own farms. Producers also might benefit from contact information for potential collaborators in conservation projects and guidance regarding how to obtain assistance with collaborative projects from USDA, EPA, OMB, or Congress.

Committee members again expressed some doubt over the utility of spending time attempting to improve general communication between the agriculture industry and EPA. Some thought the Committee could be most helpful with respect to communications about specific EPA regulations and tasks.

FRRCC Next Steps
James Moseley, Committee Chair

The Committee decided to form three workgroups: (1) Climate Change and Renewable Energy; (2) Comprehensive Livestock Management Strategy; and (3) Emerging Issues. Communication issues will be addressed as a component of each of these topics. A chair will be chosen for each workgroup, and a specific charge for each workgroup will be developed. Any Committee members who did not volunteer for a workgroup at the meeting may do so via e-mail following the meeting. Each Committee member will receive a list of workgroup membership as well as contact information for Committee members.

The Climate Change and Renewable Energy Workgroup will include the following Committee members (in addition to any who sign up via e-mail): Mr. Dave Nelson, Ms. Michele Laur, Ms. Suzy Friedman, Mr. Thomas Franklin, Ms. Karri Hammerstrom, Dr. Clifford Snyder, Ms. Martha Guzman Aceves, Mr. James Andrew, Dr. Teferi Tsegaye, Ms. Marion Long Bowlan, Dr. Otto Doering, Ms. Martha Noble, Dr. Garth Boyd, and Mr. William Willard.

The Comprehensive Livestock Management Strategy Workgroup will include: Mr. Tom McDonald, Mr. G. Douglas Young, Mr. Jeff Tee, Ms. Suzy Friedman, Ms. Christine Chinn, Ms. Martha Guzman Aceves, Mr. Dennis Treacy, Mr. Gary Cooper, Mr. Jeffrey Vonk, Senator Michael Brubaker, and Ms. Martha Noble.

The Emerging Issues Workgroup will include: Mr. Jay Vroom, Mr. Ralph Grossi, Ms. Martha Guzman Aceves, Ms. Karri Hammerstrom, Dr. A. Richard Bonanno, Dr. Robert Flocchini, Dr. Teferi Tsegaye, Ms. Marion Long Bowlan, Mr. Earl Garber, Senator Michael Brubaker, Mr. William Willard, and Dr. Clifford Snyder.

Committee members discussed how the Committee will function (e.g., whether it is necessary to reach consensus and how recommendations will be developed), how the workgroups will function vis-à-vis the full Committee, and lessons learned from the Agricultural Air Quality Task Force (AAQTF). In addition, they considered a number of points relevant to the specific charge of each workgroup, as follows.

<u>Climate Change and Renewable Energy</u>

The Committee should focus on a holistic, cross-media approach to climate change and renewable fuels to ensure that resolving one environmental problem does not exacerbate another.

In the next 2 years, Congress probably will pass legislation directing EPA to develop a broad cap-and-trade and offset system. The FRRCC could play a valuable role in advising EPA and fighting for agricultural offsets; however, the issue of how the United States should mitigate GHG emissions may be too broad for the Committee to tackle. Instead, the FRRCC should begin by focusing more narrowly on life cycle assessments for renewable fuels, perhaps addressing GHG emissions later. In addition, the Committee should be cautious of the increasing expectation for agriculture to compensate for the errors of others, which will reduce the ability of the agriculture industry to respond to global demand for food, fiber, and fuel. Committee members also raised the following concerns: (1) some individuals and groups are opposed to the notion of providing permits for the right to pollute; (2) the potential impacts of a cap-and-trade program on the rural community are unclear and probably will depend on the structure of such a program; (3) the implications of additionality should be fleshed out; and (4) the implications of agriculture's involvement in offsets are unclear.

Emerging Issues

Some members thought the FRRCC should consider addressing sustainability as it applies to agriculture. Others, however, noted that sustainability may be too broad for the Committee to discuss constructively. Further, it is not clear that EPA should be the leader on sustainable agriculture.

The Committee should address some issues that currently receive little regulatory attention, such as groundwater and drinking water contamination.

Comprehensive Livestock Management Strategy

The Committee should consider cross-media approaches but should not limit itself to considering how to combine water and air permits into one system.

Next Meeting

The next meeting will be held during the second or third week of September 2008, in Kansas City, Kansas. This meeting will include a farm tour. An exact date for the next meeting will be determined via e-mail.

Potential presenters at the next face-to-face meeting could include United Nations representatives who can discuss climate change policy approaches or researchers who can update the Committee on a potential process-based model to address agricultural emissions.

One participant noted that the Committee members would have more time to deliberate with each other and to interact with experts if most of the meeting materials were provided in advance, via e-mail, rather than through presentations at the meeting.

Action Items

- ✧ Mr. Moseley will work with Ms. Alicia Kaiser, Designated Federal Officer for the Committee, and Mr. Scholl to provide a suggested reading list to Committee members on environmental issues.
- ✧ Senator Brubaker will provide the Franklin and Marshall College report on legacy sediment to Mr. Moseley for distribution to all Committee members.
- ✧ Mr. Shapiro will provide information to the Committee on flexibility in the CWSRF.
- ✧ Ms. Shaver will provide more information to the Committee on the OSWI Rule to indicate whether EPA will remand parts of the rule or reevaluate the entire rule based on the court ruling that vacated it.
- ✧ Ms. Dietrich will provide information to the Committee regarding the potential for EPA (OSW) to regulate the use of sludge as a fertilizer in agricultural production.
- ✧ Mr. Harvey will provide information to the Committee regarding emissions from fertilizer plants compared with emissions from other sources.
- ✧ Ms. Kaiser will provide Committee members Ms. Shaver's presentation.
- ✧ Ms. Lybbert will provide each Committee member a "Swiss cheese" press release.
- ✧ Committee members who have not yet volunteered to serve on a workgroup will do so via e-mail by March 28, 2008.

- ✧ Mr. Moseley will select a chair for each workgroup by March 28, 2008.

- ✧ Mr. Moseley will ensure that contact information for all Committee members and the membership of each workgroup are disseminated to Committee members.

- ✧ Each workgroup will develop a specific charge; workgroup chairs will provide the specific charges to Mr. Moseley and the full Committee.

- ✧ Ms. Kaiser will e-mail Committee members with proposed dates for the next meeting in the second or third weeks of September 2008.

- ✧ Ms. Kaiser and Ms. Laur will ensure that FRRCC and AAQTF members are kept apprised of their respective meeting dates.

Farm, Ranch, and Rural Communities Federal Advisory Committee (FRRCC)
Inaugural Meeting—March 13-14, 2008

Meeting Participants

Committee Chair:

James R. Moseley
Owner
Jim Moseley Farms, Inc.

Members:

Martha Guzman Aceves
Legislative Advocate
California Rural Legal Assistance Foundation

James O. Andrew
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Leonard M. Blackham
Commissioner
Utah Department of Agriculture and Food

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Pleasant Valley Gardens

Marion Long Bowlan
Farmer
Long-Bowlan Farms

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Senior Vice President
Camco Global

Senator Mike W. Brubaker
Senator
Pennsylvania State Senate

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Chinn Hog Farm

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Center for Conservation Incentives
Environmental Defense Fund

Earl J. Garber
President
Louisiana Association of Conservation Districts

Ralph Grossi
President
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Five Rivers Ranch Cattle Feeding

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Global Ethanol

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Sustainable Agriculture Coalition

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Dawn Riley Consulting

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International Plant Nutrition Institute

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Panhandle Environmental Resource Coalition

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Smithfield Foods, Inc.

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Natural Resources and Environmental Sciences
Alabama A&M University

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Secretary
South Dakota Department of Game, Fish,
and Parks

Jay Vroom
President
CropLife America

William F. Willard
President
Willard Agri-Service

G. Douglas Young
General Partner
Spruce Haven Farm

Designated Federal Officer:

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Special Assistant for Agricultural Policy
U.S. Environmental Protection Agency

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Jannell Young-Ancrum
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Hank Zygmunt
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Other Participants:

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Pat Albright
Michigan Farm Bureau

Tom Van Arsdall
Pollinator Partnership/Coevolution Institute
VanArsdall & Associates

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Hillary Barile
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Bette Stallman
The Scientific Consulting Group, Inc.

These minutes are an accurate depiction of the matters discussed during this meeting.

James R. Moseley 5/28/08

_____

James R. Moseley
Chair
Farm, Ranch, and Rural Communities Committee

The Farm, Ranch, and Rural Communities Committee is a federal advisory committee chartered by Congress, operating under the Federal Advisory Committee Act (FACA; 5 U.S.C., App.2). The Committee provides advice to the Administrator of the U.S. Environmental Protection Agency on a broad range of environmental issues. The findings and recommendations of the Committee do not represent the views of the Agency, and this document does not represent information approved or disseminated by EPA.