June 30, 2004

Note to EPA Employees

To sustain and accelerate our environmental progress, we must constantly search for better ways of solving environmental challenges. Based on initial ideas from Administrator Leavitt, this draft white paper was prepared by EPAs Innovation Action Council on how EPA can advance environmental protection through collaborative problem solving. The paper is a starting point for dialogue **B** within EPA, with our external partners, and more broadly with academic and other collaboration experts.

We define collaboration in two dimensions **B** an attitude that prompts people to approach their work in a spirit of proactive cooperation and shared effort that leads to better, more effective outcomes; and a specific approach to working with stakeholders, in which participants develop a mutually agreeable process for joint learning and problem solving.

EPA has been a pioneer in developing and using collaborative approaches to tackle important problems. In January, Administrator Leavitt charged us to build upon our past experience and chart a course for future activity. Over the past six months, we have reviewed **Success stories**eat EPA and have been impressed with the depth of experience across all EPA programs, the range of types of collaborations that have occurred in the core work of the Agency, and the potential opportunities that exist to further advance collaborative problem solving approaches to make significant progress on specific environmental problems.

Beginning with a discussion with EPAs senior executives on June 30th, our plan is to engage each organization in finding opportunities to build capacity and skills, share best practices, and identify promising areas to use a collaborative approach to environmental problem solving. Follow up activities will include meetings with each national program and visits to each regional office by Rich McKeown. We invite you to share your ideas with your Assistant or Regional Administrator and your Innovation Action Council member (Deputy Assistant Administrator or Deputy Regional Administrator).

The EPA Innovation Action Council

Solving Environmental Problems through Collaboration Draft White Paper for Discussion June 30, 2004

Introduction

Over the past three decades, the United States has made remarkable progress in protecting human health and the natural environment. EPA and state regulatory programs, innovative voluntary initiatives, strong enforcement, public education, research, and environmental monitoring have led to dramatically cleaner water, air and land -- and improved the quality of life for all Americans.

Underlying this environmental progress has been EPA's continuous efforts to improve our system of environmental protection by working together with stakeholders and the general public. Public involvement, conflict prevention, Federal advisory committees, regulatory negotiation, community-based environmental protection, alternative dispute resolution, and similar approaches have enabled EPA to develop more effective and more broadly supported policies, programs, and projects. In both regulatory and voluntary programs, collaborative approaches to environmental protection have led to superior outcomes.

Within the Federal government, EPA has been a leader in the use of collaborative approaches to accomplish strategic goals and objectives. Learning from this rich experience can help the Agency to realize the full potential of collaborative processes and accelerate environmental progress. The ability to collaborate effectively, internally and externally, is becoming more important as environmental problems become more complex and cross-cutting. This discussion paper is intended to provide a stimulus for discussion within EPA and among external parties about how the Agency might take collaborative problem solving to a new level.

Fostering a Culture of Collaboration

Collaboration can be thought of in two ways. First, collaboration is an attitude that prompts people to approach their work in the spirit of proactive cooperation and shared effort that leads to better, more creative outcomes. This attitude has long been a hallmark of EPA employees, who have led the way on myriad excellent collaborative efforts over the last 30 years and, through this work, have delivered significant environmental gains. Taking collaboration to a new level will require us to make this attitude a more prominent component of our organizational culture. This goal would be realized when:

- Agency managers and staff routinely and explicitly consider whether collaborative approaches should be used to support Agency decisions;
- Agency managers and staff are fully equipped with the skills, tools and resources to
 effectively implement collaborative problem solving projects across EPA programs, media,
 and organizations and with external stakeholders and the public;
- These collaborations achieve superior environmental outcomes;
- Agency accountability and recognition systems are aligned with these new expectations; and

• Organizations and groups outside EPA (government, non-profit and private) see the Agency as a catalyst for and willing partner in collaborative efforts to improve the environment.

Becoming more collaborative is part of viewing our jobs more broadly -- as environmental problem solvers, partners, facilitators, and leaders, not solely program implementers.

Maximizing the Effectiveness of Collaborative Problem-Solving Projects and Processes

Second, collaboration is a specific approach to working with stakeholders, in which participants develop a mutually-agreeable process for joint learning and problem solving. Collaboration takes many forms and can be either formal or informal, but it is distinct from other forms of engaging stakeholders and the public, such as *informing, consultation, involvement*, or *empowerment* (see Figure 1). The requisite degree of formality will depend upon the purpose of a collaboration process; the number and diversity of stakeholders; the scale, scope, and complexity of the issue at hand; the duration of the process; and other factors. In many situations, an *ad hoc* and informal process may be appropriate and sufficient to solve an environmental problem; in other situations, it may be necessary to convene a formal advisory committee under the auspices of the Federal Advisory Committee Act (FACA). In all of its forms, collaborative approaches to environmental protection can foster superior environmental outcomes.

Collaborative processes, however, are not appropriate in all situations. In many cases, another form of Agency-stakeholder interaction can more effectively generate improved public health and environmental outcomes while upholding democratic principles of participatory governance. Pre-collaboration *situation assessments* are a valuable tool that can help EPA managers and staff by providing an objective assessment to determine whether collaboration is appropriate in a given situation and, if so, what type of formal or informal collaborative approach would be most effective. Such assessments, which vary in their complexity and are often conducted by a neutral third party, entail a situation-specific analysis of an environmental problem's complexity and history, the needs and resources of interested and affected parties, and time constraints. Assessment results often lead to a detailed plan that describes the goals, process, participants, timing and structure of EPA-stakeholder interactions (e.g., FACA committee, stakeholder roundtables, etc.).

EPA's role in collaborative environmental problem-solving will vary. In many situations, EPA's statutory responsibilities will place the Agency in a leadership role that requires convening the relevant parties and facilitating interaction. In other situations, EPA will simply act as one of many interested parties in a collaborative problem-solving effort convened by another Federal agency; a state, tribe, local government; or a private sector entity. In still other situations, EPA may be the beneficiary of a collaborative problem-solving effort without actively participating in the collaboration itself. Collaboration cannot replace the core functions of a regulatory agency – standard setting, permitting, and enforcement and compliance assurance – nor compromise EPA's decision-making responsibility. In general, however, EPA looks to all affected stakeholders for ideas and innovative solutions and, where appropriate, incorporates stakeholder recommendations into policy and practice.

LEVEL OF PUBLIC ENGAGEMENT				
Informing	Consultation	Involvement	Collaboration	Empowerment
Participation goal				
To provide the public with balanced and objective information to assist them in	To obtain public feedback on analysis, alternatives, and/or decisions.	To work directly with the public throughout a process to ensure that public issues are consistently	To partner with the public in each aspect of decision-making, including the development of	To place final decision-making in the hands of the public.
understanding problems, alternatives, and/or solutions		understood and considered.	alternatives and the identification of a preferred solution.	
Wa will kaon		Pledge to the public		Wo will
We will keep you informed.	We will keep you informed, listen to and acknowledge your concerns, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and issues are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for direct and innovative solutions and, where appropriate, incorporate your advice and recommendations into decisions.	We will implement what you decide.
Example tools Public Workshops Sedend Citizen innies				
Fact sheetsWeb sitesOpen houses	 Public comment Focus groups Surveys Public meetings 	WorkshopsDeliberative pollingAdvisory committees	 Federal Advisory Committees Consensus building Regulatory negotiations 	Citizen juriesBallotsDelegated decisions

Figure 1. Conceptual framework outlining the spectrum of possible public roles in environmental decision-making, as developed by the International Association for Public Participation. NOTE: Description of these roles does not imply EPA endorsement, but is intended simply to illustrate and differentiate among diverse possible forms of government interactions with stakeholders and the public at large. (Source: adapted from the International Association for Public Participation, http://iap2.org/practitionertools/index.shtml)

When we do decide that collaboration is appropriate, our experience suggests that seven principles are the keys to effective collaborative problem solving. The remainder of this paper presents these seven principles.

Keys to Successful Collaborative Problem-Solving

In all of its work, EPA remains focused on delivering environmental results and committed to equitable processes and outcomes. Inherent to the Agency's focus on equitable processes and results is the introduction and transparent consideration of diverse perspectives through the participation of the public and affected stakeholders. These diverse perspectives help to enable EPA to design more effective policies and programs by matching the scale and scope of solutions to the scale and scope of problems, clearly defining rights and responsibilities, and by ensuring that solutions mirror variations in social and ecological conditions. Transparency and participation also help to ensure that EPA policies and programs achieve their desired impact through active Agency monitoring of compliance and environmental conditions, implementation of appropriate sanctions for noncompliance, and rapid resolution of disputes through ready access to conflict resolution mechanisms.

Where environmental problems require collaboration, Agency experience and academic research suggest that there are seven keys to successful collaborative problem-solving: a shared problem; a convener of stature; a committed leader; representatives of substance; a clearly-defined purpose; a formal charter; and a common information base. Collaborative efforts to solve environmental problems are more likely to succeed when these seven factors are present.

1. A shared environmental problem

Stakeholders are motivated to collaborate when all parties would benefit by solving a problem, but no single party has the capacity or incentive to do so. Collaborative responses to shared problems allow stakeholders to coordinate their activities, leverage resources, and to enhance accountability. Without a shared problem, stakeholders have little reason to collaborate. In some cases, the intensity of a problem will have risen to the level where common pain brings the parties to a table. In other instances, a common sense of the opportunity for better outcomes through a collective process will be sufficient.

This key to successful collaboration suggests the following Agency practices:

- *Collaborate to solve problems*. EPA should target its collaborative efforts on high priority shared problems. Collaborative processes are unlikely to sustain themselves in the absence of a motivating problem and are unlikely to resolve issues associated with fundamental rights or social values.
- Raise awareness. In some instances, a shared problem may exist but not be recognized
 by affected stakeholders. In these situations, EPA can catalyze collaboration by raising
 awareness of an environmental problem and the need for a collaborative approach to the
 development and implementation of solutions.

2. Convener of Stature

A convener of stature can catalyze collaboration by legitimizing the process, encouraging stakeholder participation, and shouldering initial organizational costs to bring parties together to address a shared problem. A convener of stature can help to sustain collaborative processes by reaffirming the process and the importance of all parties working together to solve a common problem.

This key to successful collaboration suggests the following agency practices:

- Convene strategically. Convening a collaborative process takes time, energy, and financial resources, so EPA must strategically decide when to serve as a convener of stature. Shared problems of national significance that clearly fall within the Agency's statutory authority are particularly strong candidates for EPA investment. But convening is not just the responsibility of EPA leadership and senior management; "stature" is context-dependent, so all EPA employees should seek opportunities to use their stature as environmental leaders to convene stakeholders to participate in formal or informal collaborative processes that address priority environmental problems.
- Ensure good standing. Where EPA lacks statutory authority or recognized credibility, it may facilitate collaboration by encouraging other agencies or organizations to convene stakeholders to solve a shared problem. In complex situations that involve multiple issues and stakeholders, it may be necessary for EPA to instill confidence in a collaborative process by using a respected neutral party to convene the relevant stakeholders and facilitate the process.

3. Committed Leader

While a convener of stature is necessary to bring a group together, a committed leader is necessary to craft an agreement among collaborating parties. When participants become disappointed or disillusioned, the committed leader – staff or manager – can sustain a group by reiterating the benefits of collective, coordinated action; the drawbacks of independent, uncoordinated action; and by emphasizing the personal commitments that participants have made to each other and to the collaborative process.

EPA can foster the committed leadership necessary to sustain collaboration by:

- Providing necessary capacity. Giving the individuals responsible for leading a
 collaborative process the capacity (time, resources, skills) to do so will enhance the
 likelihood that these EPA representatives can serve as committed leaders. To further
 promote collaborative problem-solving within the Agency, it may be necessary to create
 additional dedicated positions or organizational structures.
- Providing necessary authority. Successfully leading a collaborative process requires the
 authority to make decisions. In many instances, fostering committed leadership by EPA
 representatives will require conscious delegation of authority to the Agency staff "at the
 table".

• Assigning respected individuals. Successful leaders often advance collaborative processes by drawing upon their personal reputations and the "social capital" they have established with stakeholders. Assigning a dedicated, knowledgeable, and reputable person who is known to the other participants to represent EPA in a collaborative process can provide an initial reserve of trust and goodwill that enables effective leadership and facilitates collaboration.

4. Representatives of substance.

Successful collaborative problem-solving requires direct involvement of representatives of substance – individuals with sufficient authority to decide on behalf of, or sufficiently influence, their represented interest and who collectively, by virtue of prominence, role, or market share, can implement timely solutions to a given problem. These representatives must represent a critical mass of affected stakeholders; by bringing these stakeholders together, a collaborative process can foster development and implementation of an effective policy. Excluding key stakeholders from collaborative processes, by contrast, frequently leads non-participants to reject resulting decisions, undermine timely and complete implementation, and inhibit subsequent efforts to develop collaborative solutions to environmental problems.

This key to successful collaboration suggests that EPA should:

- *Identify key principals*. To ensure that a critical mass of affected stakeholders participates in collaborative processes, EPA will need to identify and recruit a balanced group of representatives who represent the full range of interests. Principals familiar with collaborative processes and with long time horizons (i.e., expectations of long term involvement with an activity or issue) are particularly good candidates to participate in collaborative processes because of their knowledge and expectations for the future.
- *Keep the group representative but manageable*. Collaborative processes are generally more likely to succeed when the number of participants is relatively small. While it may be tempting to reduce the complexity of a collaborative process by ignoring differences among stakeholder groups (e.g., geographic or cultural differences, different risk perceptions or exposures, etc.), differences should not be ignored in an attempt to facilitate collaboration by assembling like-minded participants.
- Enable early, ongoing, and meaningful stakeholder involvement. Stakeholders are much more likely to support (and participate in) collaborative processes if these processes provide ample opportunities for meaningful collaborator involvement. Early stakeholder involvement in collaborative processes enhances group "ownership" of both process and outcomes. In some instances, EPA may need to provide training and resources to ensure that stakeholders have the capacity to participate meaningfully in a collaborative problem-solving process.
- Foster accountability. To ensure the legitimacy of collaborative decision-making processes, EPA will need to foster the accountability of stakeholder representatives to their constituents. Stakeholder accountability can be fostered through both formal (e.g., elections) and informal (e.g., town hall meetings) mechanisms.

• *Enfranchise stakeholders*. Truly participatory decision-making involves not only consulting with affected stakeholders, but also enlisting them – to the extent possible – as partners in decision-making.

5. Clearly-Defined Purpose

"Bounded" problems are more easily overcome than large "fuzzy" issues. Therefore, collaborative efforts are more likely to succeed when groups develop a clearly–defined purpose for themselves. This purpose should respond naturally to the collective problem that the group shares. An overly ambitious or misaligned purpose can frustrate groups, undermining both the collaboration process and the development of viable policy solutions.

This key to successful collaborative problem-solving suggests that collaborators should:

- Frame problems judiciously. Setting boundaries around problems that are large or ill-defined (in scale or scope) can facilitate successful collaboration by providing focused, manageable problems for stakeholders to address and achieve results. In some instances, however, allowing stakeholder groups to define the scope of a problem more broadly can create new opportunities for negotiation and/or areas of common ground.
- *Maintain a problem-solving orientation*. In the course of a collaborative process, participants may lose sight of their purpose. Focusing on shared problems and problem-solving helps to maintain group purpose, facilitate collaboration, and minimize conflict.

6. Formal Charter

Because collaboration is a complex and high-stakes process that often involves many individuals and issues, clearly and collectively articulated roles and responsibilities are critical to timely success. A formal written charter fosters successful collaborative problem-solving by reducing the uncertainties and ambiguities among collaborating parties that can cause conflict and, thus, enhancing participants' confidence in each other and the collaborative process as a whole. A formal charter can also help to ensure that decision-making processes are transparent and participatory, enhancing the legitimacy, accountability, and "ownership" of collaborative processes by allowing stakeholders to understand how decisions are made and to have a voice in decision-making. Collective definition of purpose, roles, and procedures also enhances group ownership of both process and outcomes, enhancing the likelihood of successful collaboration. Together with committed leadership, this collective confidence and commitment is necessary to sustain collaborative efforts through difficult periods and to ensure timely implementation of group decisions.

This key to successful collaboration suggests that EPA should:

- Establish realistic timelines. Timelines establish a framework that encourages decision-making and results, providing useful measures of success and instilling group confidence in the process and progress. In many cases, establishing important milestones at the beginning of a collaborative process can provide momentum for participants.
- *Identify outcomes and performance measures*. Reliable measures help stakeholders to define the magnitude of a problem and to track progress toward its resolution. Measures also foster accountability by tracking indicators of stakeholder behavior and performance.

Measures should address both procedural outcomes (e.g., development of a shared understanding of an issue) and environmental outcomes (e.g., increase in a population of organisms) since changes in Agency policy or practice may take time to have the desired impact on human health or the environment.

7. Common information base.

A common information base enables collaborators to develop a shared understanding of the problem and possible solutions, facilitating development of viable, legitimate policy solutions through information exchange and dialogue. Information asymmetries (where different actors hold different information) can exacerbate power inequalities and foster conflict among collaborators.

This key to successful collaboration suggests that EPA should:

- *Engage in joint fact finding*. To ensure that all collaborators share a common information base on essential issues, participants should work jointly to identify key questions, assemble the relevant information, and to determine how to address information gaps.
- Align sound science with policy deliberation. Scientific analysis should inform deliberations about policy issues and policy dialogue should structure scientific inquiry to make sure that it is useful and relevant to the problem at hand.
- Provide capacity where appropriate. To ensure that all stakeholders are sufficiently knowledgeable and able to understand necessary information, EPA should provide stakeholders with the capacity to obtain independent technical assistance where necessary.
- Share information widely. Broad dissemination of information regarding both process and substance enhances the transparency of collaborative processes. Particular attention should be given to ensure that populations at risk and other marginalized groups have access to information.

The Path Forward

This paper will be circulated throughout the Agency and shared with external parties to stimulate internal and external discussions that can inform development of specific plans for enhancing collaboration at EPA. EPA's rich history of collaborative problem-solving provides a strong foundation for new activities that will help foster a culture of collaboration and improve the effectiveness of our collaborative projects and processes. We look forward to hearing your ideas for how we can harness the power of collaboration to solve significant environmental problems and accelerate the rate of overall environmental progress.