

MEETING SUMMARY

of the

EXECUTIVE COUNCIL

of the

NATIONAL ENVIRONMENTAL JUSTICE ADVISORY COUNCIL

**April 13 through 16, 2004
New Orleans, Louisiana**

Meeting Summary Accepted By:

**Charles Lee
Designated Federal Official**

**Veronica Eady
Chair**

**Mary Nelson
Vice-Chair**

**CHAPTER ONE
MEETING OF THE EXECUTIVE COUNCIL**

1.0 INTRODUCTION

The twentieth meeting of the Executive Council of the National Environmental Justice Advisory Council (NEJAC) took place on Tuesday, April 13, Wednesday, April 14, and Friday, April 16, 2004, during a four-day meeting of the NEJAC in New Orleans, Louisiana. Ms. Veronica Eady, Tufts University, serves as the newly appointed chair of the Executive Council. Mr. Charles Lee, Associate Director for Policy and Interagency Liaison, U.S. Environmental Protection Agency (EPA) Office of Environmental Justice (OEJ), serves as the Designated Federal Official(DFO) for the Executive Council. Exhibit 1-1 lists the members who attended the meeting and identifies those members who were unable to attend.

This chapter, which summarizes the deliberations of the Executive Council, is organized in four sections, including this *Introduction*. Section 2.0, *Remarks*, summarizes the remarks of senior EPA and Louisiana Department of Environmental Quality (DEQ) officials. Section 3.0, *Cumulative Risk and Impact Policy Dialogue*, summarizes the following items: The discussion of the draft report titled *Ensuring Risk Reduction in Communities with Multiple Stressors: Environmental Justice and Cumulative Risk/Impact* (the cumulative risk report), including its of key concepts, overarching recommendation themes, and action items; the testimony provided by the Cumulative Risk/Impacts Work Group of the NEJAC (referred to hereafter as the NEJAC work group); recommendations for improvement of the cumulative risk report discussed by the members of the real work group and the Executive Council; EPA senior officials perspectives on cumulative risks and impacts and their understanding of the report; and presentations made to the Executive Council by the community impacts panel. Section 4.0, *Presentations and Reports*; provides an overview of presentations and reports made to the Executive Council on various other topics.

Chapter Two of this report summarizes the public comment sessions held on April 13 and 14, 2004. Chapters Three through Eight summarize the deliberations of each of the NEJAC subcommittees that met on April 15, 2004.

2.0 REMARKS

Ms. Eady opened the meeting by welcoming the members of the Executive Council and introducing Mr. Barry Hill, Director, EPA OEJ. The remarks of Mr. Hill and other senior EPA and Louisiana DEQ personnel are summarized below.

2.1 Remarks of the Director, EPA OEJ

Mr. Hill addressed the Executive Council and welcomed everyone on behalf of Ms. Phyllis Harris, Principal Deputy Assistant Administrator, EPA Office of Enforcement and Compliance Assurance (OECA). Mr. Hill read a statement written by Ms. Harris, explaining that New Orleans was selected as the NEJAC meeting venue

Exhibit 1-1

EXECUTIVE COUNCIL

**Members Who Attended the Meeting
On April 13 through 16, 2004**

**Ms. Veronica Eady, Chair
Ms. Mary Nelson, Vice Chair
Mr. Charles Lee, DFO**

Mr. Charles Collette
Ms. Judith Espinosa
Mr. Walter Handy, Jr.
Mr. Robert Harris
Ms. Jodena Henneke*
Mr. Philip Hillman****
Ms. Lori Kaplan*
Ms. Pamela Kingfisher
Mr. Juan Parras
Dr. Graciela Ramirez-Toro
Dr. Andrew Sawyers
Ms. Wilma Subra
Ms. Connie Tucker*
Mr. Kenneth Warren***
Mr. Terry Williams

**Members
Who Were Unable To Attend**

Mr. Richard Gragg
Mr. Jason Grumet

* Attended on April 13 and 14, 2004, only
** Attended on April 14 and 15, 2004, only
*** Attended on April 15, 2004, only
**** Attended on April 16, 2004, only

because Louisiana and other states in EPA Region 6 face significant issues related to cumulative risks and impacts. As EPA continues to assess human health and environmental impacts, it was especially fitting for this NEJAC meeting to focus on cumulative risk. EPA's approach to understanding these impacts must be broadened to reflect a more holistic approach for assessing the vulnerability of communities to environmental hazards. EPA needs to fully understand these impacts and is looking to the NEJAC for advice in this area. The efforts of the members of the NEJAC are invaluable in assisting EPA to address issues related to environmental justice and to make informed decisions for the protection of human health and the environment.

Mr. Hill continued that the NEJAC meeting is very important because of its focus on a very difficult question, a question that is important for the future of EPA and its efforts to ensure environmental protection and environmental justice for all communities. This meeting gives EPA the opportunity to benefit from the deliberations of the NEJAC on a complex issue and to proactively develop collaborative risk analysis and risk management strategies in the context of overall community goals. The NEJAC has come a long way since its inception and is fulfilling its mission of being an effective advisory committee as defined by the NEJAC charter and the Federal Advisory Committee Act (FACA). Mr. Hill joined Ms. Harris in commending the NEJAC for its diligent work and for offering policy advice that is critical in the light of changing policies, culture, and behavior.

Mr. Hill then quoted the EPA Administrator, Mr. Mike Levitt: *While it is appropriate for the Federal Government to establish national environmental hazards, environmental plans that consider localized, ecological, economic, social, and political factors often enjoy more support and involvement and therefore, can reach national standards more efficiently and effectively.* Toward that end, Mr. Hill stressed, the agency and OEJ understand the importance of traveling throughout the country to make the NEJAC meetings more accessible to members of the public and to encourage them to provide their comments on various issues. Mr. Hill pointed out that Ms. Harris believes that environmental justice issues require many stakeholders to be part of the solution and encouraged all parties to participate in the public comment sessions at the meeting.

Finally, Mr. Hill stated that Ms. Harris's last comment was very significant. The states for their active participation in the NEJAC meeting as highlighted by the presence of representatives of Louisiana DEQ. This would not have been possible five years ago, Ms. Harris stated, and is a reflection of how far the NEJAC has come over the years and the respect that it has gained over time.

2.2 Remarks of the Deputy Regional Administrator, EPA Region 6

Mr. Larry Starfield, Deputy Regional Administrator, EPA Region 6, welcomed the members of the NEJAC to New Orleans. He stated that EPA Region 6 is committed to continuing its efforts to ensure environmental justice for all communities. He thanked the members of the NEJAC work group and acknowledged their efforts in preparing the cumulative risk report.

Mr. Starfield also noted the presence of state partners in EPA Region 6 at the meeting: Ms. Karen Gautreaux, newly appointed Deputy Secretary of Louisiana DEQ, and Ms. Jodena Henneke, Director, Texas Commission of Environmental Quality (TCEQ), and a member of the NEJAC work group and the Air and Water Subcommittee of the NEJAC. He stated that this was a significant step toward EPA and state collaboration in the development of a more cooperative and proactive environmental justice program. Mr. Starfield added that the current leadership at Louisiana DEQ has a very strong commitment to environmental protection, to communities, and to partnership and that EPA looks forward to working with Louisiana DEQ in the coming years.

Mr. Starfield pointed out that EPA Administrator Levitt is committed to two central themes: collaborative problem-solving and neighborhood solutions. The NEJAC work group, he continued, is taking the agency in that very direction. This direction is important to communities that are subjected to cumulative risks and impacted by multiple sources, communities where children and adults suffer from illnesses and disabilities, Mr. Starfield added. These communities, he continued, frequently turn to the government, whether Federal, state, or local, and ask the question: What can you do for my children? He stated that the NEJAC work group has put together a roadmap that could provide an effective answer to this

question. Finally, Mr. Starfield stated that the NEJAC work group advocated an essential message: identify the multiple factors that affect communities, find ways to address those factors, try to achieve real-world results one step at a time on the road to a more comprehensive solution, make use of partnerships, and bring all stakeholders together for the overall benefit of each community.

2.3 Remarks of the Deputy Secretary, Louisiana DEQ

Ms. Gautreaux welcomed the members of the NEJAC to New Orleans on behalf of Louisiana Governor Kathleen Babineaux Blanco and Dr. Mike McDaniel, Secretary of Louisiana DEQ. Ms. Gautreaux stated that the newly appointed officials of Louisiana DEQ are very committed to making Louisiana DEQ an agency that undertakes its mission in a fair and equitable manner, and they encourage input from all stakeholders in this process.

Continuing, Ms. Gautreaux stated that Louisiana DEQ recognizes the need to work with individual communities on a statewide basis in order to ensure environmental justice for all the residents of Louisiana. She cited some of the efforts currently underway at Louisiana DEQ, including the introduction of environmental justice panels, renamed community justice panels, that seek to bring together community members and industry officials in a professionally facilitated, nonadversarial setting. These voluntary panels, she added, are designed to encourage residents and industry to discuss and resolve concerns with minimum government intervention. Other ongoing efforts at Louisiana DEQ, she said, include development and implementation of a standard operating procedure to promote environmental justice best practices, such as providing improved access to public documents in electronic formats. Recently, Ms. Gautreaux explained, Louisiana DEQ invited EPA Region 6 to offer environmental justice training to senior Louisiana DEQ managers and other employees. This training, she said, was found to be beneficial by both the participants and the EPA training staff.

Finally, Ms. Gautreaux stated that Louisiana DEQ's efforts have helped to build trust in communities previously subjected to environmental injustice. She added that under the leadership of Secretary McDaniel, Louisiana DEQ is developing a strategic four-year plan for achieving environmental justice in all communities and welcomes advice from the members of the NEJAC.

3.0 CUMULATIVE RISK AND IMPACT POLICY DIALOGUE

In its continuing efforts to provide independent advice to the EPA Administrator in areas related to environmental justice, the NEJAC focused its twentieth meeting on a specific policy issue: cumulative risks of exposure to pollutants and related impacts on communities. Cumulative risk is defined as the aggregate of current or acute risk and long-term exposure. On Tuesday, April 13, and Wednesday, April 14, 2004, the members of the NEJAC participated in a dialogue about this topic.

Exhibit 1-2

NEJAC WORK GROUP

Ms. Sue Briggum, Co-Chair
Ms. Judith Espinosa, Co-Chair

Dr. Tim Fields
Mr. Hector Gonzalez
Ms. Jodena Henneke
Ms. Patricia Hynes
Mr. Shankar Prasad
Ms. Wilma Subra
Ms. Connie Tucker

This section summarizes the following items: a discussion of the cumulative risk report, including key concepts, overarching recommendation themes, and action items; the testimony provided by the NEJAC work group; recommendations for improvement of the cumulative risk report discussed by the members of the NEJAC work group and the Executive Council; EPA senior officials' perspectives on cumulative risks and impacts and their understanding of the cumulative risk report and presentations made to the Executive Council by the community impacts panel.

Mr. Lee introduced the NEJAC work group, whose members are identified in Exhibit 1-2:

3.1 Introduction of the NEJAC Work Group Process

Ms. Judith Espinosa, ATR Institute and member of the Waste and Facility Siting Subcommittee of the NEJAC, introduced the NEJAC work group process and said that so far in her career, this was the most important thing that she had done in the areas of environmental justice and cumulative risk. She stated that the process had been an extraordinary experience for her, especially because the subject was one of great significance to many communities and EPA. She commended the other members of the NEJAC work group for sharing their experiences and expertise and for their commitment to providing a good work product that would be meaningful to impacted and environmentally overburdened communities and tribes.

Continuing, Ms. Espinosa said that the process had worked because it embodied the core concept in the cumulative risk report, which is a community-based problem-solving model for addressing cumulative risks and impacts. The NEJAC work group, she said, wanted to put into action what communities have been saying for many years with respect to the multiple impacts and risks that they face on a daily basis. Ms. Espinosa stated that the NEJAC work group process involved dialogue, argument, and discussion conducted with civility and respect, with the goal of sharing scientific evidence and facts and developing a mutual vision. The NEJAC work group understood that this work would go a long way toward addressing real-life public health and environmental risks and multiple stressors for environmentally overburdened people of color, low-income communities, and tribes, Ms. Espinosa said.

The product of the dialogue and reasoned argument, Ms. Espinosa continued, was the decision to adopt a bias for action approach, which is the main theme of the cumulative risk report. This approach involves early identification of and response to cumulative risks and impacts. This approach, she said, emphasizes that we should not wait for decades before taking action; instead, we should adopt a unified, place-based approach that transcends the single-medium, single-program focus of current environmental solutions. She further stated that the cumulative risk report is an affirmation of the picture portrayed for decades by environmentally overburdened people of color, low-income communities, and tribes. This picture, she said, is firstly one of vulnerability because of the environmental insults and the social and economic disparities that these communities have endured over the years. Secondly, she said, this picture shows the loss of social capital resulting from the cumulative risks that these communities have endured and the multiple stressors inflicted upon them over time.

Additionally, Ms. Espinosa stated that the cumulative risk report is a recognition and validation of the skills and expertise that communities and tribes have developed over the decades. These skills and expertise, she further explained, involve performing community need assessments, community-based research, data collection, and analysis of the risks that they are exposed to on a daily basis and are reflected in the recommendations of the cumulative risk report and the call for collaborative problem-solving and community-based participatory Research (CBPR).

Finally, Ms. Espinosa stated that the NEJAC work group would carefully address all comments and questions raised during the meeting to further refine the cumulative risk report and bring it to completion.

Ms. Sue Briggum, then continued the introduction of the NEJAC work group process by describing the process as an educational experience. To overcome years of frustration in trying to resolve the issue, Ms. Briggum explained, the work group identified the need for a better model than had been recommended before, and this gave rise to the bias for action theme and the impetus for an interagency collaborative model. The work group, she said, benefitted from having members who had worked previously with the NEJAC who were familiar with the issues being raised, and who consequently became a productive stakeholder group. Ms. Briggum stated that the work group did not focus on legalisms or what could not be done. Instead, the work group emphasized recommendations that would resolve cumulative risk and impact issues in communities and that would forge genuine partnerships between business and industry and community members, with the government acting as a facilitator.

Ms. Connie Tucker, Southeast Community Research Center and member of the Waste and Facility Siting Subcommittee of the NEJAC, commented that the cumulative risk report and the preceding *Framework for Cumulative Risk Assessment* published by EPA in May 2003 are major victories for the environmental justice movement. She noted that the issue of cumulative risks and impacts was the greatest of concerns for many environmental justice communities that were angry and frustrated after facing years of exposure to hazardous chemicals and the resulting diseases. Yet for many years, state regulatory agencies and EPA were not able to identify either the causes or the effects, she explained. Ms. Tucker further stated that the communities disagreed with the approach that EPA used with respect to using risk assessment as a tool to address their concerns. The reason for this disagreement, Ms. Tucker explained, was that risk assessment tools did not take into consideration that communities were exposed to multiple pollutants and faced synergistic impacts, which are additive effects of exposure to multiple chemicals in these communities. These communities, she added, have the right to be angry and the right to a solution. The cumulative risk report, Ms. Tucker said, provides an avenue to a solution and would help the states and regulatory agencies better understand the issue of synergistic impacts.

Mr. Hector Gonzalez, provided a public health perspective on the issue of cumulative risks and impacts and the NEJAC work group process. He stated that for 20 years, public health officials have been trying to resolve the relationship between the general health status of a population such as good health care, proper nourishment, and access to physician versus an absence of health care, malnourishment, and lack of health insurance and thus access to physicians and its susceptibility to biological and chemical agents. The same question, he noted, is being asked today, and the cumulative risk report sought to answer it to some degree. Mr. Gonzalez further indicated that the cumulative risk report is a major paradigm shift compared to a few years ago in that public health officials and environmental advocates are involved in a joint effort to study the issue of cumulative risks and impacts in communities and tribes. He emphasized the importance of local government and community participation in the effort to better understand the issue of cumulative risks and impacts. He also presented an overview of the matrix that was used to study the issue of cumulative risks and impacts, using the border community of Laredo, Texas, as an example to explain the concepts.

Ms. Henneke commended the professionalism displayed by the NEJAC work group in the process of producing the cumulative risk report. She stated that she grew up in Tar Creek, a Superfund site in the lead and zinc mine area of northeast Oklahoma, and that back then, the health department was responsible for all environmental cleanups. In response to Mr. Gonzalez's statement, she said that although it took two decades for public health officials and environmentalists to understand that they would need to work together in order to achieve a common goal, they are now beginning to cooperate in areas such as cumulative risks and impacts.

3.2 Overview of the Cumulative Risk Report

Ms. Wilma Subra, Louisiana Environmental Action Network (LEAN) and member of the NEJAC work group and the Air and Water Subcommittee of the NEJAC, presented an overview of the cumulative risk report. She quoted a statement first voiced by a civil rights activist, Ms. Fanny Lou Haimer: "I am sick and tired of being sick and tired." This sentiment is repeatedly voiced at every NEJAC meeting, Ms. Subra said, and reflects a cry for help and a plea for assistance from environmentally overburdened people of color, low-income communities, and tribes. These communities, she added, are angry, frustrated, and bewildered with state, Federal, and local officials as well as public health officials for being unresponsive and failing to alleviate their situations. Concurring with Mr. Gonzalez's remarks, Ms. Subra said that exposures to physical, chemical, biological, social, and cultural factors result in a community being more susceptible to environmental toxins, because of compromised abilities to cope with and recover from such exposures. She further pointed out that there is a rising demand from such communities that government, business, industry, and the public health sector take notice of these issues and initiate effective and immediate action to improve conditions in the communities.

In response to the community demand, Ms. Subra continued, EPA and OEJ asked the NEJAC to address the following question: In order to ensure environmental justice for all communities and tribes, what short-term and what long-term actions should the EPA take to proactively implement the concepts contained in the *Framework for Cumulative Risk Assessment*?

Ms. Subra further explained that the cumulative risk report provides a mechanism to (1) systematically focus on multiple exposures, risks, impacts, and stressors and on environmental, health, social, economic, and cultural factors; (2) set priorities for action; and (3) institutionalize a bias for action so that action can be taken immediately and not after many years.

Using the cumulative risks and impacts faced by communities along the 2,000-square-mile Mississippi River industrial corridor as an example, Ms. Subra explained the matrices that were developed to study the multifaceted, interconnected, and complex issues in such communities. These matrices, she added, illustrate the range of cumulative impacts and the factors that decrease the ability of communities to cope with or recover from environmental exposures. She listed the various pollution sources, ranging from petrochemical industries to agricultural operations, that expose the communities to toxic chemicals through pathways such as air, drinking water, food crops, and seafood. Lack of access to health care and social and cultural disparities further compound these problems, she said. Thus, Ms. Subra explained, cumulative risks and impacts are a collection of individual stressors that occur simultaneously and in combination in communities.

The starting point for assessing and responding to cumulative risks and impacts is the identification of multiple stressors, Ms. Subra stated. Furthermore, she continued, to be sensitive to community concerns, common conceptual frameworks and definitions need to be developed that deal specifically with cumulative risks and impacts and that can be agreed to by all stakeholders. This framework, Ms. Subra said, should be coherent, consistent, and transparent. She indicated that impacted communities consider the cumulative stressors to include multiple stressors that occur concurrently and geographically. Hence, she said, the concept of multiple stressors must address multiple media to attain a comprehensive approach, and this is the starting point for a bias for action.

Ms. Subra then provided a brief outline of the evolution of the concept of cumulative risks within EPA. Past risk assessments, she said, were designed to address the sources of pollution using technology-based regulations or an individual chemical-by-chemical approach. Continuing her outline, Ms. Subra stated that the 1970s saw the beginning of risk assessment with an emphasis on oral routes of exposure, the 1980s saw the development of remedial action guidelines and databases, and in the 1990s, the focus shifted to innovative approaches, mechanisms of action, and for the first time, ecological assessments. In May 2003, she said, EPA published the *Framework for Cumulative Risk Assessment* to address environmentally disadvantaged and underserved communities and tribes. Describing the framework further, Ms. Subra stated that it took a broad view of risk; called for population- and place-based analyses involving multiple stressors, both chemical and nonchemical; dealt with vulnerability based on biological as well as social factors; and involved impacted communities as well as other stakeholders. It also emphasized planning, scoping, and problem formulation, she continued, and linked risk assessment to risk management in the context of community health goals.

Ms. Subra then described the NEJAC's response to the EPA charge outlined in the cumulative risk report. The main recommendation, said Ms. Subra, is to adopt a community-based, collaborative, problem-solving model in order to address cumulative risk and impacts. She indicated that this model would address multiple stressors in impacted communities, create transparent processes that instill confidence and trust and generate social capital in the communities, institutionalize the bias for action, develop a coherent and consistent framework, address the issue of vulnerability, use screening, describe prioritization methods and tools to bring about significant risk reduction on the part of the communities, and encourage regulatory authorities to bring responsible parties to the table.

Furthermore, Ms. Subra noted, the model builds on the recommendations presented in the 2003 NEJAC report title *Advancing Environmental Justice Through Pollution Prevention* and consists of the following seven elements: (1) issue identification; (2) community vision and strategic goal setting; (3) community capacity-building; (4) consensus-building and dispute resolution; (5) multi-stakeholder partnerships, including supportive and facilitating roles for the government; (6) sound management and implementation; and (7) evaluations, lessons learned, and replication of best practices.

Use of the community-based, collaborative, problem-solving model, she concluded, with all stakeholders contributing to the community-wide effort to reduce cumulative risks, will result in healthier and less impacted environmental justice communities throughout the United States.

Ms. Eady then invited the NEJAC members to present their questions and comments on Ms. Subra's presentation and the cumulative risk report.

3.3 Discussion of the Cumulative Risk Report and Recommendations for Its Improvement

In response to Ms. Subra's presentation, Ms. Tucker pointed out that the community-based, collaborative, problem-solving model that had been displayed during the presentation lacked CBPR, a critical element that needed to be inserted between Community-Based Issue Identification and Consensus Building and Dispute Resolution. CBPR, Ms. Tucker added, provides the opportunity to have the community meet internally and then with other stakeholders, particularly those in the community, to learn about equitable partnerships. Ms. Subra responded that the change would be made to the model.

Dr. Andrew Sawyers, Maryland Department of the Environment and acting chair of the Waste and Facility Siting Subcommittee of the NEJAC, complimented the NEJAC work group on the contents of the cumulative risk report. He pointed out that the work group would need to develop a practical framework for implementing the recommendations in the report in order to effectively achieve its goal. He also commended the work group for addressing fundamental concepts such as vulnerability, loss of social capital, and bias for action. He suggested that the term bias for action be clarified.

Ms. Briggum responded to Dr. Sawyers's request for clarification, stating that bias for action stresses a proactive approach to solving problems using currently available tools to quickly address the situation in impacted communities rather than waiting for research to reveal a better solution. Dr. Tim Fields, Tetra Tech EM Inc., concurred with Ms. Briggum, stating that the approach emphasized early intervention based on the limited information available and avoiding the delay involved in trying to get the latest and best information before making a decision. This approach, he said, is critical for communities impacted by cumulative risks and impacts.

Ms. Espinosa noted that bias for action is a validation of the CBPR that communities have been carrying out for many years. CBPR involves communities performing their own research, risk assessments, and data collection; identifying multiple stressors; and assessing their vulnerability to these multiple stressors.

Ms. Patricia Hynes noted that this discussion had raised a significant issue, which is the importance of taking action with imperfect knowledge. Communities, she stated, are very conscious of what needs to be done to improve their situation and of what actions need to be taken to improve their living conditions. She then described a project that she had been involved in, the Healthy Public Housing Initiative, which was funded by the U.S. Department of Housing and Development (HUD) and EPA in Boston, Massachusetts. This project, Ms. Hynes stated, had studied the impacts of household insects and rodents and resulting allergens on the health of asthmatic children. She noted that public meetings indicated that the research with which communities most identified was that which they conducted themselves. The meetings also served as indicators, she said, of whether the research carried out by scientists and EPA corresponded with the needs of the communities. Another important lesson learned from the project, Ms. Hynes continued, was the need for concrete action items at the conclusion of a project rather than simply expressing the need for more research. For the HUD and EPA project, she

said, community health advocates learned about integrated pest management (IPM) and how to effectively apply its principles in the arena of public housing. She stated that the action item at the end of the project was to arrange for Federal job training for a cohort of residents who wished to become IPM assistants and then to create jobs, both in the private sector and the public housing authority, for the residents to work in IPM. That, Ms. Hynes noted, is a good example of bias for action.

Dr. Sawyers supported Ms. Hynes's statement about the need for bias for action, but he emphasized the importance of having a robust implementation plan, especially in situations that involve multiple agencies such as Federal, state, and local agencies.

Mr. Terry Williams, Tulalip Tribes and acting chair of the Indigenous Peoples Subcommittee of the NEJAC, commended the NEJAC work group for its approach to the issue of cumulative risks and impacts. From a tribal perspective, he suggested adding some clarifications to the cumulative risk report, including clarification of the government-to-government interaction process between tribes and local and state governments, tribal jurisdiction in terms of roles and responsibilities to protect the health and welfare of tribal members, and tribal jurisdiction on off-preservation lands where tribes would have access to environmental resources such as water and fishing resources. Furthermore, Mr. Williams requested clarification of the joint decision-making process and the role of tribes as cooperating agencies in addressing issues of cumulative risks and impacts. Another issue of great importance to tribes involves the direct, indirect, and cumulative effects to on- and off-reservation lands and the loss of resources, he stated.

To clarify his point, Mr. Williams stated the example of the Tulalip Tribes, a Federally recognized tribe in Washington, and the watersheds that they use on a regular basis. These watersheds, he said, are now very different from the original watersheds, and about 75 percent of the ecosystem functions have been altered or lost as a result of natural processes causing landscape changes or industrial development. The loss, Mr. Williams pointed out, manifests itself in a manner similar to the impacts of pollutants on tribes, leading to loss of traditional foods and medicines and increases in the rates of diabetes, cancer, and heart disease. Even when available, the resources are often polluted and cause similar impacts, he added. Hence, he noted, tribal jurisdiction or any other type of input into management of these resources would be of great value to tribal communities.

Dr. Graciela Ramirez-Toro, Inter-American University of Puerto Rico and chair of the Puerto Rico Subcommittee, indicated that she found the cumulative risk report very useful and suggested that EPA look at the issue of capacity development, which is the underlying thread of all the issues related to cumulative risks and impacts. It is very important, she noted, that there be a consensus within the agency about what constitutes capacity development. She suggested recommending that EPA evaluate capacity development carefully both within the agency and in communities.

Ms. Mary Nelson, Bethel New Life Inc., vice-chair of the Executive Council, and member of the Waste and Facility Siting Subcommittee of the NEJAC, said that she hoped that the cumulative risk report would produce substantive results. She suggested that the NEJAC work group also confront issues such as making funds for CBPR as easily accessible to community groups as they are to academic institutions. Secondly, she suggested recommending the process discussed in the cumulative risk report as a framework for EPA and other regulatory agencies for other issues, not just the issue of cumulative risks and impacts. She also suggested that EPA adopt the theme of bias for action as a way to achieve quick results.

Ms. Pamela Kingfisher, Shining Waters and vice-chair of the Health and Research Subcommittee of the NEJAC, expressed her satisfaction that the NEJAC work group had considered tribal issues in its discussions of cumulative risks and impacts. In doing so, she noted, the work group had opened a Pandora's box, and she hoped that this step would go a long way in bringing tribal issues to the forefront. Also, she said, it was important to understand that the contamination issues that tribes face usually are not

their issues to begin with. The solution to these issues, Ms. Kingfisher noted, was greater corporate accountability for contamination problems and releases of hazardous chemicals into the environment.

In response to Ms. Kingfisher, Ms. Briggum clarified that the underlying presumption in the cumulative risk report is that to operate in a community, one must be a responsible citizen. Ms. Briggum explained that as part of this presumption, the business sector is expected to go beyond compliance and understand the responsibilities of operating in the community. To achieve this goal, enforcement actions would have to be conducted, and the business sector would have to be challenged to contribute more effectively to the community, Ms. Briggum said.

Mr. Gonzalez provided a brief overview of the matrix that was used to study the issue of cumulative risks and impacts. He used the border community of Laredo, Texas, as an example to explain the concepts. He described the border community in Laredo as a mix of metropolitan and rural communities, including underdeveloped and unincorporated subdivisions known as colonias. He noted that the population of Laredo is about 200,000 but that environmental issues across the border in Mexico also need to be considered, making the total affected population in this area about 1 million. He further stated that the community has a mostly Mexican-American population with an average age of 27 years.

Mr. Gonzalez then listed the following multiple stressors affecting the Laredo community: (1) sources of contamination such as warehouses; (2) lack of health care for 65 percent of the population, mostly women and children who are uninsured or underinsured; (3) hampered access to the few existing health care facilities because of a railroad dividing the community; (4) contamination of the only source of potable drinking water (Rio Grande River) by both Laredo, Mexico, and Laredo, Texas. In addition, Mr Gonzalez noted, the lack of affordable housing in Laredo causes families to seek substandard housing in the colonias, where about 90 percent of homes lack sewer service or running water.

Finally, Mr. Gonzalez stated that the community is looking for answers to many questions, such as the relationship between diseases such as diabetes and cancer and environmental pollution. He said that local, state, Federal, and international agencies, would have to work together to provide the answers to the community.

In response to Mr. Gonzalez's description of the Laredo matrix, Mr. Lee noted that use of matrices is one of 11 methods for analysis of cumulative environmental effects described in a 1997 White House Council on Environmental Quality (CEQ) report titled *Considering Cumulative Effects Under the National Environmental Policy Act*. The CEQ report, he added, recommends use of matrices to determine the cumulative effects on resources, ecosystems, and human communities by combining individual effects resulting from different actions.

3.4 EPA Senior Officials Perspectives on Cumulative Risks and Impacts and Their Understanding of the Cumulative Risk Report

Mr. Lee called on senior EPA officials to provide their perspectives on issues related to cumulative risks and impacts and the cumulative risk report.

Mr. William Farland, Deputy Assistant Administrator for Science, EPA Office of Research and Development (ORD), said that he greatly valued the process of peer participation and review in the preparation of the cumulative risk report. He spoke about the unique role of research and development (R&D) at EPA, especially at ORD, which conducts research in advanced science in addition to focusing on problem-driven or problem-related science issues. It is this kind of work, he said, that is particularly important for environmental justice communities. He gave a number of examples to illustrate his point. He described a study of the health effects of particulate matter (PM) in air, such as soot, smog, and other particles; available research indicates that PM has disproportionate effects on children and the elderly. He said that in that particular study, ORD is focusing its research on sensitive groups such as nursing home residents and school children who might be particularly susceptible to PM.

On the public health front, Mr. Farland noted, ORD has been working with the Centers for Disease Control and Prevention (CDC) since 1996, state and local health departments, and international groups like the Pan-American Health Organization (PAHO) to address environmental health concerns and other community issues. He described some measures developed by ORD, including indicators to better reflect health impacts in border communities. Mr. Farland also stated that ORD would be starting a new national children's study. The study is to be a long-term, interagency examination of influences on children's health that will involve 100,000 children over the next 20 years.

Mr. Farland then touched briefly on the impact of environmental regulations on R&D. He stated that starting with the National Environmental Policy Act (NEPA) in the 1960s, environmental regulation has challenged science to do better. Some examples that he noted were the Safe Drinking Water Act (SDWA) amendments, and the Food Quality Protection Acts, which challenged scientists at EPA to look at cumulative risks, impacts, and multiple exposure pathways. Mr. Farland stated that cumulative risk tools have only recently been developed by EPA and cited the publication of the *Framework for Cumulative Risk Assessment* in May 2003. He also stated that the ability of ORD to develop tools such as the *Integrated Exposure Model for Lead* to predict lead impacts in communities is important in the study of issues such as cumulative risks and impacts. Mr. Farland also highlighted the science inventory, an agency-wide, searchable database of over 4,000 scientific and technical work products that he described as the agency's mechanism to communicate its science activities. He also noted that environmental justice has been incorporated into the science inventory as a common search term.

Mr. Farland then announced upcoming workshops such as the workshop on the Science of environmental justice to be held in Boston, Massachusetts, in May 2004. This workshop would be conducted by ORD in conjunction with the Boston University School of Public Health and would focus on areas such as air toxics, asthma and children's environmental health, land-based risks, and water quality. In addition, he announced a science forum meeting to be held in May 2004 in Washington, DC, that would focus on science issues within the agency, such as issues involving healthy communities and ecosystems. He stressed that ORD's focus is on pursuing scientific innovation to protect human health and the environment, delivering science-based information to decision-makers, and using science to make a difference.

Finally, Mr. Farland mentioned some promising research areas and new tools such as toxicogenomics, which can be used to improve the ability to assess individuals, their susceptibilities, and the impacts of multiple exposures. He stated that these tools would be even more effective when coupled with CBPR.

Mr. Larry Weinstock, Senior Advisor and Program Innovation Coordinator, EPA Office of Air and Radiation (OAR) described his involvement in an agency-wide effort to develop a new initiative called Community Action for Renewed Environment, or CARE. He defined CARE as a community-based, multimedia toxics reduction grant initiative that allows quick assessment of risk reduction in a community using existing tools, brings together stakeholders, and prioritizes voluntary programs to meet the specific needs of the community. Mr. Weinstock said that EPA hoped that CARE would bring communities together and provide them with additional resources, tools, and information to improve their environments. An example of such success, he said, was OEJ's grant to a community organization in Charleston, South Carolina. The grant of about \$100,000.00 was ultimately used to leverage \$5 million in additional resources. This kind of empowerment will allow communities to build capacity for their own environmental stewardship, Mr. Weinstock noted.

Mr. Weinstock expressed a need for cooperation between various offices and programs of EPA. He said that although the *Toxin Report* released by the EPA Office of Management and Budget (OMB) indicates that the health benefits of the Clean Air Act (CAA) outweigh those of all other EPA programs such as the Clean Water Act (CWA) and the Toxic Substances Control Act (TSCA), this should not hamper cooperation within the agency. He further stressed that EPA needs to bring down barriers within the agency in order to focus on the environment as a whole, go beyond pilot efforts, and focus on building

overall environmental stewardship in communities. He stated that overburdened communities continue to need help and that EPA should work to address the issues at the national level.

Ms. Eady then requested that Mr. Weinstock list at least one CARE community in each EPA region for the benefit of the NEJAC members.

Mr. Weinstock responded with the following list of 2004 CARE communities in the 10 EPA regions: Region 1 - the Mystic River watershed near Boston, Massachusetts; Region 2 - Rochester, New York; Region 3 - Elizabeth River, Virginia; Region 4 - Louisville, Kentucky; Region 5 - Detroit, Michigan; Region 6 - Albuquerque, New Mexico; Region 7 - St. Louis, Missouri; Region 8 - northeast Denver, Colorado; Region 9 - West Oakland, California; and Region 10 - the Yakima Valley.

Mr. Starfield described some of the challenges faced in implementing cleanup efforts in communities. He provided an example of a community in El Paso, Texas, that had lead-contaminated soil. Community members resisted cleanup efforts because they believed that the contamination was not a major issue and were more concerned that the cleanup efforts would negatively impact real estate prices in the area. This issue, Mr. Starfield noted, was solved by involving the community in a meaningful manner by conducting free workshops in which the community, the city, the state, and EPA participated. The workshops were conducted on various subjects such as cleanup levels, new technologies, and liability and property resale issues that were of concern to the community, he said. Another challenge to implementation of cleanup efforts, Mr. Starfield noted, was the issue of litigation involving communities that resist cleanups. He noted that EPA would need to partner with state and local governments to effectively implement its environmental justice agenda.

Mr. Starfield raised another important issue, which was the forging of cross-cultural understanding between EPA and the tribes. He stated that the environmental justice Tribal Office is working with EPA Headquarters to put together an alternative dispute resolution (ADR) procedure to be used with tribal nations; the procedure would take cultures and customs into consideration. He provided the example of New Mexico, which is conducting a series of regional listening sessions devoted solely to tribal issues.

Mr. Starfield commended the NEJAC work group for putting forth the bias for action theme. He stated that this theme encouraged all parties involved to continue the process of cleanup and development with available resources and information rather than be discouraged by scarcity of resources and the need to prioritize cleanups in communities because of lack of adequate funds. The key to making this happen, he said, is forging partnerships between agencies, communities, industries, and businesses. Also, he said, the recommendation in the cumulative risk report that EPA should target vulnerable communities was important because it would help direct the resources to communities that really need them.

Finally, Mr. Starfield indicated that EPA would appreciate specific recommendations from the NEJAC in addressing two questions: (1) How can industry be included in the environmental justice process? and (2) How can EPA build trust in communities and encourage them to participate in the process?

Mr. William Sanders, Acting Director, EPA Office of Children's Health Protection, previously with the EPA Office of Pesticides and Pollution Prevention, highlighted an important public health study on children, the National Children's Study. This 20-year prospective study, he noted, is a longitudinal cohort study on environmental effects on children's health and development and will follow 100,000 pairs of mothers and children from conception to age 21. He encouraged the NEJAC to provide comments and guidance at this early stage of the study so that it can be improved to provide valuable information on children's health.

Commenting on the cumulative risk report itself, Mr. Sanders congratulated the NEJAC work group for providing recommendations and guidance on the subject of cumulative risks and impacts, which EPA has been struggling with since the inception of the environmental justice movement. He also noted that the cumulative risk report shifts the focus of the way that the agency measures performance.

Quoting the old adage what gets measured gets done, Mr. Sanders said that for a long time all EPA programs that worked to improve community health assumed that their individual efforts would combine to benefit communities. However, he said, EPA soon realized that this fragmented approach failed to benefit the communities in the long run. Instead, he stated, EPA would make progress toward achieving its goal if it made community health in its entirety a priority. He suggested formulating a more integrated approach to measuring risk reduction. Addressing individual media such as air, water, and soil produces a fragmented picture and fails, to reduce health disparities within communities. Mr. Sanders stated that EPA would need to build on existing efforts instead of starting from scratch and to recognize the need for an integrated approach. To illustrate this point, Mr. Sanders provided the example of the Environmental Justice Collaborative Problem-Solving Grant Program in the Office of Children's Health Protection, which would address multimedia concerns with respect to children's health issues.

Mr. Sanders noted that the issues of multimedia concerns and working across programs in EPA could be addressed using an approach that has been adopted by some EPA regions over the last decade. He pointed out some regional efforts that exemplify this approach, including Region 1's urban initiative, the Chelsea Creek Comparative Risk Study; Region 7's work in St. Louis, Missouri; and Region 9's work in south Phoenix, Arizona, and west Oakland, California. The key, he said, would be to build on these initiatives and then move them up to the level of agency-wide policy and practice.

Recognizing that EPA alone would not be able to implement all these initiatives, including some of the recommendations in the cumulative risk report, Mr. Sanders stressed the need for (1) pilot projects to build the experience needed for the initiatives and (2) partnerships within all levels of government as well as with communities, which would encourage the collaborative problem-solving efforts recommended in the cumulative risk report.

Finally, Mr. Sanders stated that the cumulative risk report pulls together a host of important ideas and builds significantly on efforts to address environmental health over the past several years. The report, he said, has the potential to move the discussion forward and to catalyze the changes that will be needed to make progress. He asked the NEJAC for advice on how to effectively communicate the findings and recommendations of the report to a broader audience.

Mr. Thomas Voltaggio, Deputy Regional Administrator, EPA Region 3, described a cumulative risk study conducted in 1993 and 1994 in Chester, Pennsylvania. He noted that this was one of the first cumulative risk studies of an area where the major issue was the exposure of young children to lead. He noted that Mr. Reginald Harris, EPA Region 3, was the chief scientist for the project. Also, he said, lessons learned from this project expand our knowledge of cumulative risks and impacts. He then proceeded to briefly describe the study and some of the important findings.

The study, Mr. Voltaggio said, focused on finding the most important risk factors that affect children, and in the process EPA studied exposures via air, water, and waste. He stated that this study revealed that the most significant risk was ingestion of lead-based paint by children of ages six and under. He further stated that factors such as poverty played a role in the exposures because low-income, urban families lived in older housing with lead-based paint. On the other hand, low-income, rural families were exposed to lead emissions in air.

Another important finding of the study, Mr. Voltaggio noted, was that emissions and effluents that were affecting the health of the population were in fact in compliance with Federal regulations. This was in part due to environmental regulations developed in the 1980s and early 1990s that did not consider the issues of environmental justice and vulnerable populations, he stated. Enforcement was not the solution in this situation, Mr. Voltaggio said; instead, voluntary reductions on the part of industry and business would be needed. He emphasized the importance of a robust, voluntary reduction program as a major tool in achieving environmental justice. He concluded that a voluntary reduction program would be a significant tool for reducing risks resulting from industrial emissions and effluents.

Mr. Voltaggio stated that the Chester study also brought to light nuisance issues, such as noise pollution, dust blown from dirt piles on windy days, and idling trucks carrying hazardous materials. He stated that although these issues contribute to health problems in several communities, they are not regulated by law. He recommended that the cumulative risk report include suggestions on how these nuisance issues may be addressed, whether under a regulatory scheme or through voluntary efforts.

Finally, Mr. Voltaggio praised the cumulative risk report and noted that the recommended process included the components needed to resolve or minimize environmental impacts on environmental justice communities. He hoped that the report would benefit from the lessons learned in the Chester study.

Ms. Tucker introduced Ms. Harris to the NEJAC. Ms. Tucker stated that although she had only a distant working relationship with Ms. Harris, she had closely followed Ms. Harris's work in EPA Region 4 before she worked for OECA. Ms. Tucker stated that Ms. Harris was not guided by politics or special interests and credited Ms. Harris for bringing to light the extensive contamination in Anniston, Alabama. She applauded Ms. Harris's work in EPA Region 4 and thanked her for participating in the NEJAC meeting.

Ms. Harris thanked Ms. Tucker for the introduction and noted that many offices at EPA were involved in the environmental justice process, which indicates maturation of the process. She highlighted the work of OECA, especially that involving major settlements with utilities and refineries regarding releases of PM such as nitrogen oxides and sulfur oxides. Noting her many personal experiences with disadvantaged communities in EPA Region 4, Ms. Harris stated that the situations faced by such communities are very real. She noted some significant hot spots such as Fort Valley and Norfolk, Virginia; Louisville, Kentucky; Memphis, Tennessee; and Anniston, Alabama. She stated that OECA is in the process of drafting important principles that will continue to address the issues of environmental justice. Ms. Harris also emphasized the need for smart enforcement that focused on compliance by industries and large businesses rather than by small businesses and individuals. She further noted that integrating enforcement with compliance assistance and injunctive relief for complying parties would encourage industries and businesses to comply with environmental regulations.

Ms. Harris also stressed the importance of assessing and reviewing the effectiveness of each program within EPA. She stated that in addition to the EPA Office of the Inspector General's (OIG) review of the effectiveness of programs across the agency, it is important for each program to conduct an assessment of its own effectiveness. Ms. Harris also noted the importance of communicating environmental, public health, and compliance outcomes. She noted that in 2003 alone enforcement actions resulted in the reduction of over 600 million pounds of pollutants; these included significant actions involving utilities and refineries, and 67 percent of the actions resulted in a specific environmental or public health benefit. Over the next several years, she said, OECA would strive to increase this percentage by embarking on a new set of priorities for the Enforcement Compliance Assurance Program that would be consistent with the priorities of all the program offices within EPA. She noted that new initiatives would ensure the integration of environmental justice into the process of setting priorities.

With respect to measuring the effectiveness of the new initiatives, Ms. Harris stated that OECA convened a work group and consulted with the NEJAC Enforcement Subcommittee to develop an environmental justice *Concept Paper*. Ms. Harris explained that this concept paper would identify a consistent set of parameters for measuring the work being done in environmental justice communities and would support development of tools for identifying disproportionate impacts in communities.

Finally, Ms. Harris stated that OECA realizes that environmental justice problems and particularly those related to cumulative risks and impacts cannot be solved by EPA alone. A collaborative process would be required, with all stakeholders participating constructively in formulating solutions, she said. She asked the NEJAC to provide advice and recommendations on how EPA can move forward with regard to cumulative risks and impacts.

3.5 Presentations of the Community Impacts Panel

On Tuesday, April 13, 2004, the members of the NEJAC received a series of presentations from a panel composed of representatives of various community groups. The panel was introduced and chaired by Ms. Subra and represented a wide range of racial and ethnic groups, including African-Americans, Native Americans, Hispanics, and Vietnamese (who could not participate). The presentations were designed to provide insight into relationship of environmental justice and cumulative risks and impacts in communities that face multiple stressors such as exposure to hazardous chemicals, racial discrimination, lack of health care, and poverty. Ms. Subra explained that the 2003 CDC report on health disparities referred to these minority groups in terms of their higher susceptibility to poor health and premature death as compared to other communities. These minority communities, she said, ranged from urban to sparsely populated and rural.

The panel consisted of the following individuals:

Ms. Helen Vinton, Southern Mutual Help Association
Ms. Clementine Matthews, Four Corners Mutual Help Association
Ms. Marylee Orr, LEAN
Ms. Rebecca Jim, Tar Creek, Local Environmental Action Demanded (LEAD) Agency Inc.
Mr. Genaro Lopez, Southwest Workers Union, Kelly Air Force Base (AFB)

Ms. Vinton described the work carried out by the Southern Mutual Help Association, explaining that its mission is to find fair and innovative solutions for rural communities facing challenges such as environmental contamination, economic disparity, health problems, inadequate housing, unemployment, illiteracy, and discrimination. The Southern Mutual Help Association, she stated, recently received an award for its work from the National Community Reinvestment Coalition.

Ms. Vinton described the multiple, cumulative, environmental risks and impacts faced by the Vietnamese fishery communities, which consist of more than 2,500 families scattered along the coast of Louisiana. She explained that members of these communities rarely make appearances in public because of their fear of discrimination. Free trade policies have resulted in a catch-22 situation for these communities, she continued, because they are torn between loyalty to the American fishing industry and supporting economic progress in their native Vietnam, where the Vietnamese fishing industry profits from exporting large quantities of fish to the United States.

Ms. Vinton noted that most members of the Vietnamese communities are legal permanent residents of the United States, and that some are American citizens. She explained that they are in urgent need of technical assistance that would help them attain citizenship rights in the United States and thus integrate them into the mainstream of society.

Ms. Vinton described some of the multiple stressors in the predominantly non-English speaking Vietnamese communities, which include exposure to hazardous commercial chemicals imported from across the United States and other countries, the presence of a large number of hazardous waste dump sites in residential areas, contamination of surface and drinking water sources, improper sewage disposal and sanitary infrastructure, poverty, lack of nutrition and access to health care, and discrimination by seafood processors. These communities, she noted, were in immediate need of environmental justice.

Finally, Ms. Vinton expressed appreciation that the NEJAC would be discussing the important issue of cumulative risks and multiple impacts.

Ms. Matthews described a poor, predominantly African-American community in Four Corners, St. Marys Parish, Louisiana. She noted that the pollution sources in this farming community include carbon black manufacturing facilities and sugar mills (three carbon black plants and four sugar mills within a 15-mile radius); strategic petroleum reserves; applications of pesticides; herbicides, and fertilizers to sugar cane crops; and burning of sugar cane adjacent to homes. She added that substandard housing with lead

pipes and inadequate sewer systems, lack of health care, and poverty further compound the cumulative risks and impacts faced by this community.

Ms. Matthews also described the actions taken to address the issues in Four Corners, which include a Self Help Housing Initiative to improve the quality of housing in the community, health fairs to bring health awareness into the community, environmental workshops, leadership development workshops, scholarship programs, and increased community involvement. Leadership training, she said, allowed community members to serve on the water and sewer board and the school board.

Finally, Ms. Matthews noted that the actions taken have resulted in less burning of the sugar cane crops, an improved water system, and better housing in the community.

Ms. Orr commended the NEJAC work group for the findings in the cumulative risk report and thanked the group for putting into words what we experience everyday, for what you wrote, we live. She also congratulated the work group for stressing bias for action and for incorporating the community into the decision-making process and into the solution.

She described the multiple, aggregate, and cumulative risks and impacts along the Mississippi River industrial corridor. She stated that the community in this region included a significant African-American majority (63 percent) with Caucasian (30 percent) and Asian (3 percent) minorities. She described some of the pollution sources along the Mississippi River industrial corridor, which included petrochemical facilities; refineries; wastewater treatment facilities not meeting permit limits; agricultural field runoff containing pesticides, herbicides, and fertilizers; and the burning of sugar cane during the fall harvest season, which generated air particulates. Ms. Orr further stated that although generations had lived off the land, they had benefitted little from the industrial development in the area. Lack of social capital, she said, is the major cause for concern in this area, whose residents have minimal education and poor community infrastructure.

Continuing, Ms. Orr noted that an important issue that the NEJAC work group had only briefly touched on was that of worker exposure. This is an important issue in the Mississippi River industrial corridor because most members of the community are employed in industries, she said. She also called for a commitment on the part of industry management to ensure the safety of employees. She added that Louisiana has 19 new fish advisories, indicating the quality of the water bodies.

Finally, Ms. Orr quoted women in Bhopal, India, a community that faced acute exposure to a deadly, poisonous gas from a Union Carbide chemical plant in the mid-1980s and that continues to suffer from ill effects even today. Ms. Orr said that she derived inspiration and encouragement from their determined fight for justice and their thoughts: We are not expendable. We are not flowers to be offered at the altar of profit and power. We are dancing flames committed to conquering darkness. We are challenging those who threaten the survival of the planet and the magic and mystery of life. Through our struggle, through our refusal to be victims, we have become survivors, on our way to becoming victors.

Ms. Jim described the Tar Creek Superfund site, where five generations have been subjected to the ill effects of lead poisoning. This 40-square-mile site in northeast Oklahoma is part of the historic Tri-State Mining District consisting of Missouri, Kansas, and Oklahoma. The site, she explained, contained five mining towns, and their drinking water sources were contaminated by acid mine drainage containing heavy metals such as lead, cadmium, and arsenic. Other sources of contamination at the site, she noted, include benzene releases from chemical plants and agricultural runoff containing pesticides, herbicides, and fertilizers.

The site, Ms. Jim stated, was initially ignored by Federal agencies, such as EPA even though community members from Love Canal, New York, had brought media attention to Tar Creek. A student who made Tar Creek the subject of his master's thesis found that 32 percent of the children in the community

suffered from lead poisoning. This student's work succeeded in bringing the community into EPA's focus, she said.

Ms. Jim noted that although sites in Kansas and Missouri have achieved significant cleanup and rehabilitation, the main pollution sources in Tar Creek, piles of mine waste, as high as 150 feet, continue to exist on roadsides where children play and teenagers ride their four-wheelers and party at night. It is the only Superfund site in the nation I challenge you that you can still play on, Ms. Jim said. Acid mine drainage from these waste piles continues to pollute the surface and drinking water sources in the community with heavy metals, she continued.

Ms. Jim described the poor Native Americans and other minority groups in the area, who are predominantly subsistence fishermen and hunters who depend heavily on the land. She further noted that lack of adequate health care, lack of testing of populations to determine the extent of human contamination, and inadequate evaluation of contamination in environmental media compound the cumulative risks and impacts in the community.

Ms. Jim described recent environmental justice efforts in the area, which include working with tribal and nontribal communities with the help of a Technical Assistance Grant (TAG). TAGs are initially worth up to \$50,000 and are available to qualified community groups so that they can hire independent technical advisors to interpret and help the community understand technical information about the site. The community is also partnering with Harvard University researchers for a birth cohort study, which is examining the lead and manganese levels in newborns in the area, and with the National Institutes of Health (NIH) to study health trends in the area and establish a Children's Health Center.

Finally, Ms. Jim stated that much more remains to be done at Tar Creek and EPA cannot do it alone. This effort, she emphasized, would require interagency collaboration.

Mr. Lopez stated that Kelly AFB has been in San Antonio since 1918. It is one of the oldest AFBs in the nation and one provided most of the logistical and aircraft maintenance support for the U.S. Air Force. In addition to Kelly AFB, San Antonio is home to eight other military installations, all of which contribute to the pollution problems in the surrounding communities, he added. Mr. Lopez stated that under the 1995 Base Realignment and Closure (BRAC) decision, Kelly AFB was officially closed and is now called Kelly USA. Companies such as Boeing, Lockheed Martin, and General Electric continue to provide logistical and aircraft maintenance support to the Air Force, continuing the impacts on neighboring communities.

The communities surrounding Kelly AFB have various groundwater contaminants, including trichloroethylene (TCE), tetrachloroethylene (PCE), and vinyl chloride (VC), and soil contaminated with lead and other heavy metals.

Mr. Lopez described the struggle to revitalize the predominantly 95 to 100 percent Mexican-American communities around Kelly AFB that are affected by multiple health problems such as asthma, central nervous system disorders, low birth weights, birth defects, and cancer. He also described socio-economic factors that compound the cumulative risks and impacts faced by these communities, such as single-parent homes, high school dropout rates, and lack of adequate health care. Mr. Lopez also noted that about 10 different agencies such as the Agency for Toxic Substances and Disease Registry (ATSDR), CDC, the Department of Defense (DoD), EPA, TCEQ, the San Antonio Metropolitan Health Department, and the City of San Antonio, have been involved in cleanup and community efforts, but lack of coordination between them presents a challenge to achieving any further progress.

Mr. Lopez questioned the cleanup decision to use monitored natural attenuation (MNA) at Kelly AFB. MNA is a passive cleanup approach that allows natural soil and groundwater microflora to degrade polluting chemicals over many years. He stressed that the decision would only mean that the communities would face several more years of exposure to the hazardous chemicals.

Finally, Mr. Lopez emphasized the importance of educating communities, mobilizing people at the grassroots level within the communities to stand up for themselves, and helping them to understand the issues as well as to make changes necessary to improve their lives. He noted some important achievements by the San Antonio communities over the last few years, such as demolition of jet fuel storage tanks in the communities, halting further construction efforts by the Air Force, and community participation in an interagency working group.

Ms. Eady then invited the members of the NEJAC to present their questions to the community impacts panel.

Ms. Tucker thanked Ms. Orr for pointing out the issue of worker safety and agreed that it would have to be addressed in the cumulative risk report. Ms. Tucker also expressed disappointment at the racial make-up of the Louisiana panel members. She noted that a large proportion of the impacts in Louisiana are seen in the African-American communities and that she expected a significant percentage of the panel members to represent that group. She stated that such communities need more representation on the panel.

Responding to Ms. Tucker, Ms. Orr said that it was a challenge for community representatives to be present at meetings to express their concerns and that it was important to be inclusive and respectful of those who do come forward with their problems and issues. It is also important not to discourage representatives from any community from talking about the issues that they feel strongly about. She noted that everyone's knowledge collectively is important.

Ms. Eady then called on Ms. Henneke and Ms. Briggum to talk about state and local government and industry perspectives and why this approach would be helpful.

Ms. Henneke stated that she felt more like a community resident because she had grown up in Tar Creek, which Ms. Jim had described earlier. Growing up, she confessed, she had not realized that she was in an environmental justice community. From the perspective of a state regulator, Ms. Henneke admitted that the community impacts panel presented issues that are very significant.

Ms. Henneke noted the difficulty in dealing with facilities that are no longer operating or that are operated by entities different from the original operators, such as at Kelly AFB. Ms. Henneke also stated that although the situations at Tar Creek and Kelly AFB are very different, the cumulative risks and impacts faced by the residents of the communities at these sites are the same. As a regulator, she said, it is important to see and hear different perspectives, referring to Ms. Tucker's earlier remark.

Providing an industrial and business perspective to the discussion, Ms. Briggum stated that industries and businesses are reluctant to take responsibility for their actions. This, however, should not deter a community from naming names and clearly stating which industry or company is polluting its neighborhood and environment. She hoped that the cumulative risk report would encourage industries to take responsibility and show accountability for their actions by providing them with incentives for contributing to community revitalization and moving beyond mere compliance with environmental regulations.

Dr. Sawyers thanked the community impacts panel members for their insights and compelling presentations. He asked them for recommendations on how the NEJAC can improve the cumulative risk report and on new policies and different approaches that may help address some of the concerns that they expressed during their presentations. He also asked the panel members to share some of their success stories.

In response, Mr. Lopez stated that the collaborative problem-solving model recommended in the cumulative risk report was perhaps the most significant change in policy for communities and agencies. This process, he noted, would encourage better flow of information to the communities, and prevent anger

and frustration within the communities. To illustrate his point, Mr. Lopez pointed out that the communities surrounding Kelly AFB had to struggle to obtain information and were being asked to go back and forth between the Air Force, TCEQ, and other agencies. He pointed out that the current process of obtaining information was extremely complex and inefficient, as it involved the filing of Freedom of Information Act (FOIA) requests. It is very important for communities to be able to obtain information so that they can actively participate in decisions that affect them, Mr. Lopez said.

Ms. Orr expressed the need for more enforcement. She also noted the importance of collaboration, citing the work of LEAN in conjunction with the Louisiana Department of Health and Hospitals (DHH) to produce an educational pesticide brochure for rural communities, using funding from EPA and the Louisiana Department of Agriculture and Forestry (LDAF). She stated that LEAN is considering publishing this brochure in Spanish as well and a new brochure on IPM. Some of the other successes of LEAN, Ms. Orr noted, included distribution of nebulizers in public schools, educating nurses and doctors in asthma management, and conducting an asthma camp for children from environmental justice communities.

Ms. Jim expressed her support for the bias for action theme in the cumulative risk report, stating that this was really important in Tar Creek. She also noted the success of remedial yard work that was being done in residential neighborhoods in Tar Creek. This work involved excavation of lead-contaminated soils, which in turn reduced lead levels in children.

Ms. Espinosa noted that the presentations made by the community impacts panel members highlighted the importance of CBPR. It was obvious, she said, that they knew much more about their own communities, having experienced first-hand the symptoms, diseases, and pain, than any outside regulator or researcher. On the issue of cooperation between multiple agencies raised by Mr. Lopez, Ms. Espinosa expressed the need for one agency to take the lead in such a matter regardless of whether that agency has regulatory control or enforcement power. She stated that regulators and agencies would have to recognize that community representatives are not paid for their efforts to get more information and that they sacrifice valuable time with their families and loved ones to bring attention to their problems.

Mr. Lopez then addressed the issue of worker impacts. He stated that among the 15,000 to 20,000 workers at Kelly AFB, over 150 cases of Lou Gehrig's Disease have been identified.

Ms. Lori Kaplan, Indiana Department of Environmental Management and member of the Health and Research Subcommittee of the NEJAC, noted that as a state regulator, she supported collaboration between communities, industry, and the government to achieve results. She noted, however, that the cumulative risk report lacked emphasis on the importance of regulatory tools. It would be important not just to possess enforcement powers but also to take cumulative risks and impacts into account while issuing permits, she added.

Mr. Weinstock agreed with Ms. Kaplan about the need for regulatory and enforcement tools. He also pointed out the role of voluntary programs at EPA, that help businesses improve their environmental performance without hampering their profits. He cited two examples of such voluntary programs: the Design for Environment Program in Cleveland, Ohio, which helped small, community-based chrome electroplating businesses to reduce emissions of chromium and to benefit financially, and the Environmental Management Systems program, which can help large businesses improve their performance and profits. This positive approach, he noted, would encourage business and industry to contribute to community revitalization.

Following up on Ms. Kaplan's comments, Mr. Starfield said that regulatory flexibility like that in the Resource Conservation and Recovery Act (RCRA) program would be very useful in dealing with environmental issues. Third-party monitoring would also be useful, Mr. Starfield noted, citing the examples of areas north of Albuquerque, New Mexico and in Ponca City, Oklahoma where the issue of air toxin levels prevented collaboration between the communities and industry. The communities believed that the cause of their problems was high levels of toxins in the air, but industry claimed that levels of

toxins in the air were low, he said. This situation was resolved, he explained, by installing state-sponsored monitors. These monitors showed that the air quality in Albuquerque was acceptable, but that was not the case in Oklahoma, he said. These examples, Mr. Starfield noted, emphasized the importance of establishing an information base that cannot be easily refuted by industry and that would force it to accept at least part of its responsibility .

Ms. Briggum wholeheartedly agreed with Mr. Starfield s remarks , saying that ultimately, clear regulatory obligations would certainly obtain results, but it would take a while to get to that point. In the meantime, she added, information can be a very powerful tool in and of itself.

Joining in the discussion, Mr. Lee noted that all this discussion was asking a single, underlying question: What is the relationship between cumulative risk and regulation? He said that there was actually another important question here: What is the relationship between the use of law and dispute resolution in terms of addressing issues that may not be directly related to regulation? He stated that some of these questions would be partially answered by a set of case studies that OEJ asked the Consensus Building Institute to put together regarding the issues of dispute resolution and environmental justice. He noted that these case studies are available for downloading on EPA s internet web site at: <http://www.epa.gov/compliance/environmentaljustice>. He also pointed out that OEJ has been developing dispute resolution training for communities and other groups that would be introduced as a pilot effort in New Mexico in fall 2004.

Adding to Mr. Lee s comments and addressing earlier comments by Mr. Starfield, Dr. Fields, stated that communities now recognize that litigation can bring things to a screeching halt and look for alternative, collaborative methods such as ADR or other tools to resolve issues. Hence, Dr. Fields said, the bias for action has real potential for being implemented because this approach has acceptability not only from industry but also from the communities themselves as well as other stakeholders in the process.

Agreeing with Dr. Fields, Mr. Starfield wondered whether EPA could deliver such a message alone and asked whether there was a way that the NEJAC could assist in that process. Acceptability and credibility for this approach would be wider if it were to be propagated not just by EPA but also by industry and the communities, he concluded.

3.6 Discussion of Key Concepts in the Cumulative Risk Report

To ensure that the NEJAC members clearly understood the key concepts discussed in the cumulative risk report (see Exhibit 1-3), Mr. Lee introduced the next series of presentations by members of the NEJAC work group on the various key concepts, such as stressors, vulnerability, CBPR, proportional response, qualitative analysis, and others.

Exhibit 1-3

KEY CONCEPTS ADDRESSED IN THE CUMULATIVE RISK REPORT
Stressors
Vulnerability
CBPR
Proportional Response
Qualitative Analysis
Efficient Screening, Targeting, and Prioritization Methods and Tools
Unifying the Fields of Public Health and Environmental Protection
Social Capital

Mr. Gonzalez began his presentation by defining stressor as any entity, not just chemical, physical, or biological, but including stress due to age, sex, economic status, social conditions, housing, or healthcare. He also offered the definition in the EPA *Framework for Cumulative Risk Assessment*:

A stressor is a physical, chemical, biological, or any other entity that can cause an adverse response in a human or other organism or ecosystem. Exposure to a chemical, biological, or physical agent (e.g. radon) can be a stressor, as can the lack of, or

destruction of, some necessity, such as a habitat. The stressor may not cause harm directly, but may make the target more vulnerable to harm by other stressors. A socioeconomic stressor, for example, might be the lack of needed health care, which could lead to adverse effects.

Notably, Mr. Gonzalez continued, the framework includes socioeconomic factor stressors, making it an important milestone that lays the basis for a dialogue about comprehensive risk in impacted communities or tribes.

Mr. Gonzalez then stated that the concept of vulnerability goes to the heart of environmental justice. Furthermore, he explained, vulnerability recognizes that disadvantaged, underserved, and overburdened communities come to the table with pre-existing deficits of both a physical and social nature. As such, he noted, the concept of vulnerability fundamentally differentiates such communities from healthy and sustainable communities. To further clarify the concept, he cited the example of pregnancy, during which both the mother and child are more susceptible and sensitive to certain impacts.

Mr. Gonzalez then explained several terms that help to better define vulnerability. He stated that differential ability to recover, takes into account the length of exposure, amount of exposure, source of exposure, preparedness of the individual in terms of physical condition, and vaccinations. Social, economic, and cultural factors can play a role with respect to differential exposures, he added, citing the example of a study conducted by Professor Manuel Pastor, University of California, and his colleagues, who found a strong correlation between the periods of greatest community demographic change and the introduction of noxious land uses. He said that they surmised that during this period, social capital in a community in terms of stable leadership, networks, and institutions is perhaps the lowest, he added. Such a phenomenon was described as ethnic churning by Professor Pastor, Mr. Gonzalez noted. Referring to the term social factors, Mr. Gonzalez explained that it referred to income, employment status, access to insurance, discrimination in the health care system, language ability, and the existence of social capital, all of which affect the ability to prevent, withstand, or recover from environmental insults. Health disparities, another important term associated with understanding vulnerability, is both an outcome of and a contributor to vulnerability, he added. As an example, he noted that children who are exposed to lead and live in communities lacking wastewater treatment often suffer from diarrhoea. The diarrhoea causes chronic anemia, which in turn worsens the effects of lead exposure and causes a decline in general health.

Explaining the concept of CBPR, Mr. Gonzalez noted that this was the most important community contribution to the environmental justice process. This kind of research, he noted, was what people in the community lived on a day-to-day basis. This process, he continued, fosters co-learning, ensures that projects are community-driven, disseminates results in ways that communities can understand and identify with, ensures that research and intervention strategies are culturally appropriate, and defines the community as a unit of identity.

Members of the NEJAC work group then supplemented Mr. Gonzalez's explanations of the key concepts.

Dr. Fields further explained the concept of stressors. He stated that stressor is any physical, biological, or chemical entity that may be adversely impacting a community. He offered the example of a chemical manufacturing plant down the street from a community; a hazardous waste facility two miles away; the warehouses in Laredo, Texas; the presence of asthma in a community; or lack of adequate clinics or health care facilities in a community.

Dr. Fields continued to explain that multiple stressors are regulated by different environmental statutes such as the CAA, the CWA, Superfund, and RCRA, which traditionally have been implemented on a statewide basis. He stated that each regulatory agency has dealt with those stressors under its own authorities in different ways and often in an uncoordinated manner. This led the NEJAC work group to recognize the urgent need for greater partnership in terms of how these stressors and their cumulative

effects are dealt with, Dr. Fields said. The work group has developed recommendations about how these stressors can be dealt with in a coordinated way to achieve public health, environmental protection, and the betterment of communities across the country, he concluded.

Elaborating on the concept of vulnerability, Ms. Hynes stated that she would use two examples to explain the social, economic, and cultural factors that contribute to ill health and compound disproportionate exposures to environmental toxins in communities.

The first example, she noted, was the rate of asthma and lead poisoning in children. It is no coincidence, she emphasized, that the highest rates of childhood asthma and childhood lead poisoning are seen among poor children and children of color, particularly African-American children. Their environment is only part of the reason, she said. Ms. Hynes noted that poor children live in poor housing and that poor, urban children live in older housing with lead paint. The parents cannot afford to de-lead the homes or maintain them, and the situation is worsened by poor nutrition, she added.

Ms. Hynes noted that the same points are true for asthma. Furthermore, she explained, the environmental exposures, particularly for poor, urban children, include poor housing and exposure to vehicular pollutants, especially near bus depots or similar facilities that are differentially located in their communities.

An additional burden in this situation is the stress of being poor, Ms. Hynes said, which increases vulnerability. In addition to poverty itself, income inequality plays a role, she said. She explained that income inequality measures the difference between the upper 10 to 30 percent income and the lowest, 10 to 30 percent income. The wider that gap, the worse the health of the poor people, because of poor distribution of resources, she added. She further noted that among industrial countries, the United States has the greatest gap in income and thus the highest rates of child poverty and homicide. Another contributing factor to vulnerability is weaker social cohesion, she continued, wherein people give up when they feel that they have reached a dead end. Citing the example of children in public housing in Boston, Massachusetts, whom she works with, Ms. Hynes explained that their parents have no jobs or survive on minimum wage jobs and that the school system is very poor, which cause the parents and children to give up. This weak social cohesion translates into poor health, she added.

Race is also a contributing factor to vulnerability, Ms. Hynes continued. She stated that many studies have indicated that in a racist society, the stress of not being the right color can increase vulnerability. She described some studies that showed that African-American children have three and a half times the rate of elevated blood lead poisoning compared to the U.S. average. In other studies of asthma in Boston, Massachusetts; Harlem, New York; and many other inner cities, minority children always have higher rates of asthma, she noted, resulting in multiple health impacts and early mortality. All the factors described earlier, Ms. Hynes said, can be described as social inequalities.

Touching on the issue of health disparities, Ms. Hynes stated that in Boston, Massachusetts, African-Americans had poorer health outcomes for 15 of the 20 health indicators studied. She described a recent report by the U.S. Department of Health and Human Services (DHHS) that examines health disparities on a nationwide level. DHHS reports severe health disparities among all minority groups compared to whites and among the poor compared to financially secure communities. Ms. Hynes then quoted from the DHHS report:

" The use of physical restraints in nursing homes is higher among Hispanics and Asian-Pacific Islanders compared to non-Hispanic Whites. Minorities are more likely to be diagnosed with late stage breast cancer and colorectal cancer compared to Whites. Blacks and poor patients have higher rates of avoidable hospital admissions.

- " Racial and ethnic minorities are less likely to report health insurance compared with Whites. Lower income persons are also less likely to report health insurance compared with higher income people.
- " Many racial and ethnic minorities and persons of lower socioeconomic position are less likely to receive childhood immunizations.

Finally, Ms. Hynes stated that these impacts demonstrate synergistic or additive health impacts. The challenge, she claimed, would be to address all these impacts simultaneously. She also noted several ways to measure vulnerability that are available at EPA, such as indices. For example, the Gini index for income and equality measures income distribution on a scale of zero to one, with zero being equity and one representing inequality, and the dissimilarity index measures racial segregation. The vulnerability data, she concluded, would be helpful in the identification of communities across the country that are most severely burdened with health impacts. These sites should be the places where immediate action takes place, she said. Concluding her remarks, Ms. Hynes addressed EPA, noting that to reduce vulnerability, cleanup of environmental contamination would be effective only when combined with reduction of inequality.

Elaborating on the concept of CBPR, Ms. Tucker noted that at present there is a great deal of dissatisfaction among communities on the issue of research. The communities feel that the research is inconclusive by design and that research agendas are flawed and lack input from community members, she added. She continued to say that it is wrong of researchers to arrogantly assume that without contributions from the community, they can come up with research questions that are relevant to the concerns of the community. And all too often, she noted, research is driven by the funding dollar or by the wish of the research institution to build its capacity.

Communities face issues such as increased incidence of learning disabilities in their children and rare diseases and conditions, and hence they express the need for research that takes social factors into consideration, Ms. Tucker said. CBPR provides an opportunity for equitable partnerships in which all the research is formed at the community level, she added. This kind of research, explained Ms. Tucker, involves dialogue sessions and discussions with community members to bring out their primary concerns and observations and with other stakeholders. She noted that this kind of research is not a threat to existing research and would contribute to the existing knowledge about a community. CBPR, she said, is a tool designed to allow communities to work with scientists and other stakeholders.

Finally, Ms. Tucker noted that if CBPR had existed 10 years ago, the understanding of cumulative risks and impacts would be far more advanced than it is today.

Ms. Briggum expanded on the concepts of qualitative analysis and proportional response. Qualitative analysis, she said, recognizes that any analysis that is solely quantitative would be inadequate to explain all aspects of cumulative risks and impacts, especially in terms of stress and vulnerability. This is the case because some stressors can be easily measured, such as the amount of a pollutant in a water body or the toxicity of a chemical, she said. However, she added, some stressors such as racial disparities and social discrimination cannot be quantified, and certain impacts such as species loss are still not very well understood. She stated that CEQ has published guidance for analysis of cumulative risks and impacts that embraces the qualitative approach.

Regarding proportional response, Ms. Briggum stressed two aspects. First, she noted, that the more severe the impact that a community is experiencing, the more immediate and serious the response has to be. Thus, she explained, prioritization is the key, and the communities that are the most burdened, the most vulnerable, and subject to the most sources of environmental pollution and other stressors need to receive the priority attention of the government and the highest attention of business and industry.

The second aspect, Ms. Briggum added, is accountability in the community, which means that the expected response of industry, business, or another source of impacts should be proportional to its contribution to the cumulative impacts in the community. She noted that the sources of pollution with the largest potential negative impacts will be expected to provide the largest and most immediate responses to the situation, and smaller sources of pollution will be expected to be accountable on some level, albeit smaller.

Mr. Gonzalez then addressed the last key concept in the cumulative risk report, unifying the fields of public health and environmental protection. This complex process would involve forging partnerships with utilities, housing owners, solid waste management facilities, and other entities to create a comprehensive approach to better community health, he noted. This process would also involve building social capital, he added, and would involve not only EPA but other agencies, Federal, state and local, and the communities themselves.

Beginning a discussion and dialogue about the key concepts presented before the NEJAC, Mr. Lee noted some of the significant points of the presentation. He noted the importance of the term vulnerability, which forms the basis of understanding cumulative risks and impacts, cumulative risk analysis, and environmental justice. Addressing the term disproportionate impact, Mr. Lee noted that although it would be discussed at length during the discussion of OIG report, it was important to understand that different types of communities with different types of backgrounds and deficits would face different impacts.

Mr. Robert Harris, Pacific Gas and Electric Company and member of the Waste and Facility Siting Subcommittee of the NEJAC, noted that in the process of bringing all stakeholders together for a healthy discussion of a sensitive situation in a community, the regulator plays a central role. This is the case because the regulator not only deals with the polluter regarding this particular issue but regarding numerous other issues, he added. So, he said, there is an incentive for the polluter to come to the table and participate if the regulator acts as the facilitator and assumes that role very forcefully. It is important for the regulator to be honest and unbiased, Mr. Harris added.

Dr. Fields, agreeing with Mr. Harris, responded by saying that it is important for the regulator to be a facilitator for effective action. He cited an example in EPA Region 4 where this approach had been successful. In Spartanburg, South Carolina, Dr. Fields said, dialogue has been ongoing for three years between the community and a company, and the one reason that the dialogue continues to this day is the involvement of EPA at every meeting and its working with the community and industry to reach a solution. A regulator's commitment, powers of persuasion, and resolve can play a constructive role not only in the overall context of pollution reduction but also in addressing cumulative risks and impacts, Dr. Fields added.

Ms. Henneke thanked Mr. Harris for raising the regulator issue. She noted that this role was not just for EPA to fill, but also for state regulators.

Ms. Harris responded to the discussion, stating that from EPA's point of view, it is critical to share knowledge and abilities with state and local governments in order to refrain from undermining the work of state governments and also to allow them to act as facilitators between communities and industry.

Joining in the discussion, Mr. Williams added that irrespective of which agency plays the lead facilitator role, the agency must have a clear idea of what that leadership role is going to entail, especially because cumulative impacts can cross broad jurisdictions. He stressed the importance of making decisions based on current knowledge instead of waiting and facing the prospect of higher costs to resolve the same issue in the future. He also noted that although the CEQ guidance referred to earlier was important to understanding the basis of cumulative risks and impacts, that guidance was based on the state of knowledge nearly 10 years ago when the guidance was published. Hence, he said, it is important to keep up with new information and studies as they are published because modeling and risk assessment methods have vastly improved the ability to project future cumulative risks and impacts.

Mr. Lee thanked Mr. Williams for his suggestion and requested that he provide the NEJAC work group with a list of any new references to be included in the cumulative risk report.

Ms. Tucker commented that the key to achieving results is a well-organized community because regulators respond better to communities that are well organized. She cited the example of Spartanburg, South Carolina, in EPA Region 4 as one such community. She also noted that the ADR method will be useful in getting the polluter to do the right thing, which will also ensure that the communities get their fair shares. To illustrate this point, she cited the example of Anniston, Alabama, where Monsanto agreed to pay nearly \$117 million, but most of this money did not reach the people impacted by Monsanto. Instead, she stated, much of this money was used to pay attorneys, while the rest was shared among the communities, leaving them with amounts that are far from fair compensation for their years of suffering and social impacts. Mr. Lee provided further details on the settlement in Anniston. He said that an article in the *Washington Post* revealed that the average settlement amount that the plaintiffs received was between \$500 and \$7,000, while the attorneys walked away with amounts ranging between \$4 million and \$34 million.

Ms. Eady added that if a polluter is not required to obtain the services of a law firm, as would be the case with ADR, the polluter would have more funds available to invest in the community.

Dr. Ramirez-Toro expressed satisfaction that the topic of fragmentation had been addressed in the cumulative risk report. Referring to Puerto Rico, she stated that the topography of the island is such that even communities that are only two miles away from each other are in fact worlds apart. But they face similar stressors and need similar attention, she added. Hence, it is not possible to choose between such communities based on their racial make-up; instead, she suggested that these communities be discussed in terms of their burden as a class. This process would allow issues of cumulative risks and impacts to be addressed on a national level and would prevent fragmentation of the issue based on superficial divisions.

Ms. Henneke said that as a state regulator, she thought that it was important that the policy or method adopted by EPA to resolve this issue be easily implemented at the state level.

Referring to earlier statements made by Mr. Harris and Dr. Fields, Ms. Briggum stressed the importance of training within the EPA and state regulator community to ensure that each regulator understands the importance of being an honest broker when facilitating discussions between the community and polluter.

Responding to Ms. Briggum, Ms. Tucker concluded the discussion by noting that the regulator must be biased toward the law and protection of the environment and public health.

3.7 Discussion of Overarching Recommendation Themes in the Cumulative Risk Report

Mr. Lee began the discussion of the overarching recommendation themes in the cumulative risk report (see Exhibit 1-4) by providing an overview of the key concepts discussed earlier. The NEJAC work group's goal was to unequivocally and unapologetically bring about a paradigm change in order to bring about a new process of thinking about risk comprehensively and cumulatively, he stated. He also noted that the foundation for the cumulative risk report was provided by EPA's May 2003 *Framework for Cumulative Risk Assessment*. Introducing the next series of discussions, Mr. Lee explained that the eight overarching recommendation themes proposed in the cumulative risk report are fundamentally interdependent and that the most important step is the translation of these themes into action items.

Ms. Espinosa and Ms. Briggum, the co-chairs of the NEJAC work group, presented an overview of the overarching recommendation themes proposed in the cumulative risk report. Ms. Espinosa began with Theme 1, To institutionalize a bias for action within EPA through widespread utilization of an Environmental Justice Collaborative Problem-Solving Model. She stated that this theme expressed a clear and urgent need to address the needs of disadvantaged and environmentally overburdened

communities and tribes. She added that many legal, scientific, and programmatic tools exist to address risk in the short term and that significant opportunities exist for partnerships with state, local, tribal, business and industry, academic, civic, and community-based organizations. The environmental justice Collaborative Problem-Solving Model makes it possible to integrate these tools and resources, she said.

Dr. Fields added to Ms. Espinosas explanation, stating that Theme 1 is the critical element in the overall agenda that has been presented to EPA. This agenda, he noted, emphasizes that although EPA has been excellent over the years at studying, investigating, and conducting research, the need to really take action for the future is critical. In order to do this, the NEJAC work group has suggested that EPA conduct pilot activities in each of the 10 regions, focusing on underserved and disadvantaged communities with urgent needs.

Ms. Briggum expanded on Theme 2, To fully utilize existing statutory authorities, which she said was necessary to institute a bias for action. The existing statutory authorities that consider multiple and cumulative impacts have been outlined by EPA's General Counsel in a memorandum titled *Implementing Environmental Justice Through the Use of Existing Statutory Authority*, she explained. A guidance is necessary to show how these authorities can be used in permitting and enforcement contexts so that community needs can be addressed under existing statutes, Ms. Briggum noted. She added that a second guidance would also be required to help communities inventory cumulative impacts, both those currently regulated and those that are insufficiently regulated. In this context, she noted that RCRA has been construed as providing an overall authority to protect human health and the environment.

Exhibit 1-4

OVERARCHING RECOMMENDATION THEMES IN THE CUMULATIVE RISK DRAFT REPORT

Theme 1: To institutionalize a bias for action within EPA through widespread utilization of an environmental justice Collaborative Problem-Solving Model

Theme 2: To fully utilize existing statutory authorities

Theme 3: To address and overcome programmatic and regulatory fragmentation within the nation's environmental protection regime

Theme 4: To fully incorporate the concept of vulnerability, especially its social and cultural aspects, into EPA's strategic plans and research agendas

Theme 5: To promote a paradigm shift to community-based approaches, particularly CBPR and intervention

Theme 6: To incorporate social, economic, cultural, and community health factors, particularly those involving vulnerability, in EPA decision-making

Theme 7: To develop and implement efficient screening, targeting, and prioritization methods and tools to identify communities needing immediate intervention

Theme 8: To address capacity and resource issues (human, organizational, technical, and financial) within EPA and the states, within impacted communities and tribes, and among all relevant stakeholders

Continuing with Theme 3, To address and overcome programmatic and regulatory fragmentation within the nation's environmental protection regime, Ms. Briggum stated that this theme assumes that Theme 2 will reveal a number of gaps and shortcomings with respect to existing statutory authorities. Although each statute has its own jurisdiction in terms of addressing different facilities and different media, environmental statutes as a whole fail to work in unison, she said. These holes and gaps, Ms. Briggum stated, should be not just acknowledged but identified and analyzed. She noted that certain solutions have been proposed in the cumulative risk report. These solutions include multimedia, community-based initiatives involving several offices and implementing a wide range of approaches, including comparative risk assessment, collaborative planning and scoping, partnerships, and interagency coordination. Adding to Ms. Briggum's presentation, Ms. Subra noted that other agencies contribute to the fragmentation within EPA. These agencies include the Department of Agriculture (DOA), which regulates the application of pesticides and fertilizers; oil and gas conservation agencies that operate at the state level and deal with waste issues on a secondary level; public health agencies that provide primary health care but frequently not environmental care; and state audit programs that reveal expired permits and lack of oversight.

Theme 4, To fully incorporate the concept of vulnerability, especially its social and cultural aspects, into EPA's strategic plans and research agendas, was addressed by Ms. Espinosa. She noted that EPA's *Cumulative Risk Assessment Framework* acknowledges the concept of social vulnerability, which is an important milestone. Vulnerability should be made an integral part of cumulative risk assessment using qualitative as well as quantitative evaluations, she added. Incorporation of vulnerability into EPA's research agendas would require a comprehensive, community-based approach, Ms. Espinosa concluded. Mr. Gonzalez added that ATSDR and NIH both have existing models that incorporate vulnerability as the foundation for environmental exposure.

Ms. Briggum expanded on Theme 5, To promote a paradigm shift to community-based approaches, particularly CBPR and intervention. The term intervention once again stresses the bias for action, she said. CBPR is a term that explains what communities have been doing already for many years, she explained. Elaborating, Ms. Tucker said that the CBPR process provides an opportunity for a community to work with researchers in order to ask questions through quantitative as well as other methods. She added that the cumulative risk report should include a diagram that outlines the CBPR process.

Ms. Espinosa explained that Themes 6 and 7, To incorporate social, economic, cultural, and community health factors, particularly those involving vulnerability, in EPA decision-making and To develop and implement efficient screening, targeting, and prioritization methods and tools to identify communities needing immediate intervention, are essentially tools that EPA can use to understand how available information can be applied to identify cumulative impacts in a community as well as to prioritize the communities that are most burdened. Ms. Hynes added that the existence of different types of knowledge, such as technical knowledge; scientifically based knowledge, including environmental knowledge; legal and social knowledge; social science knowledge; and public health knowledge, gives rise to a hierarchy. This hierarchy must be expanded to include knowledge that communities contribute, she said. Focus groups in communities are important tools for eliciting key insights, information, and data. Mr. Shankar Prasad, Air Resources Board, elaborated on Theme 7, stating that a bias for action cannot be efficiently implemented without an adequate set of tools. The most important tool, he said, is a comprehensive screening tool that goes beyond the current concept of the quantitative risk assessment based on a single pollutant and a single source.

Theme 8, To address capacity and resources (human, organizational, technical, and financial) within EPA and the states, within impacted communities and tribes, and among all relevant stakeholders, recognizes that although resources are available, capacity needs to be built, Ms. Espinosa continued. This theme accounts for the need for training, such as the environmental justice training that would train regulators to negotiate skillfully and would encourage business and industry to participate as partners in the process, she added. This theme also takes into account the research arm of EPA, which can set a long-term research agenda for vulnerability issues, she concluded.

Commenting on the overarching recommendation themes, Mr. Starfield added that it would not be practical for EPA alone to implement these themes and that the NEJAC should consider an important role for the states and other Federal agencies in the process. He suggested that members of the NEJAC along with OEJ adopt a broad outreach strategy to present these themes in forums such as the Environmental Council of the States (ECOS), to DOA, to the Department of Energy (DOE), and to others in order to generate awareness of the cumulative risk report and its expectations.

Responding to Mr. Starfield, Mr. Voltaggio stated that as a Federal regulator in a regional office, he is conscious of the constraints faced by EPA in introducing and staffing a new project and ensuring that it meets the needs of the community. Hence, he noted that Mr. Starfield's point that more responsibilities should be delegated to the states as well as local governments is an important one. In fact, he stated, local government organizations such as county and municipal governments, local planning associations, zoning associations, and zoning boards deal with many permitting and zoning issues that the state and Federal governments cannot keep track of, and their participation in the environmental justice process could prove invaluable.

Next, responding to Dr. Fields's comments, Mr. Voltaggio informed the NEJAC that EPA regional offices have been asked to put together regional strategic plans that reflect priorities in the regional offices that may be different from national priorities. These plans could include funding for environmental justice projects. Although the plans for fiscal year (FY) 2005 are almost complete and preliminary planning for FY 2006 has begun, Mr. Voltaggio said, there is still time for revisions.

At this point, Ms. Espinosa stated that the ongoing discussion underlined the need for members of the NEJAC to outline a strategy for an outreach process to highlight the issues of cumulative risks and impacts for the regulators, polluters, and the impacted communities. In response, Mr. Lee noted that the NEJAC is primarily an advisory body and can help by developing recommendations for EPA and OEJ to disseminate, communicate, and promote the strategies outlined in the cumulative risk report. Individual members of the NEJAC are encouraged to reach out to the different stakeholders on their own, he stated. Ms. Tucker added that although she agrees that EPA has to bear most of the responsibility for implementation of the recommendations, the NEJAC should consider developing a strategy for outreach to the states, including outreach at EPA regional meetings. Ms. Hynes suggested that the implementation strategy also include the risk assessment community. Continuing the discussion, Ms. Henneke pointed out that although most state plans and budgets depend on what EPA instructs the states to do, it is important that the recommendations be relatively simple to comprehend. She also suggested formulating incentives for state governments to participate in the process.

Referring to the recommendation themes in the cumulative risk report, Dr. Sawyers stated that although they are comprehensive, the action items associated with the themes would have to be prioritized and would have to include a robust implementation plan. Referring to Ms. Hynes's earlier presentation, Dr. Sawyers added that the most important concept in the report is that of social capital, and the report needs to address this concept more effectively.

Mr. Williams joined in the discussion with some remarks from a tribal perspective. He suggested that EPA (1) formally recognize tribal and customary law, which may have to take the form of statutory authority; (2) incorporate traditional knowledge while considering capacity and social science issues; (3) include tribes as co-lead or cooperating agencies in the collaborative problem-solving model; and (4) include a recovery or restoration plan for lost tribal resources, such as important species and plants in the implementation plan.

Dr. Ramirez-Toro presented her comments in writing to the NEJAC work group. Some of the highlights of her written comments are as follows. With respect to Puerto Rico, which is neither a sovereign nation (like the tribes) nor a state but is designated as a U.S. commonwealth territory, primacy agreements that define power-sharing and distribution of resources should incorporate interagency and intergovernmental approaches to address issues of cumulative impacts in impacted communities in Puerto Rico. In response, Dr. Sawyers noted that several states, including Maryland, are renegotiating their performance agreements and in some cases their environmental partnership agreements. He stated that this would be an opportunity to integrate some of the issues being discussed into these agreements.

Ms. Nelson suggested several improvements for the cumulative risk report. Referring to the concept of vulnerability, Ms. Nelson expressed concern that the matrices developed to study the cumulative risk and impact issues in communities portray the communities as vulnerable, deficient places, which could discourage communities from taking action. She suggested including positive comments on community capacity in the matrices and identifying opportunities that can be used as a basis for community development. Next, addressing the issue of contracts with universities, Ms. Nelson suggested the incorporation of environmental justice requirements into the grant fulfillment criteria. Third, regarding use of community-based research, she stated that the high volume of information makes it challenging to efficiently convey the information to communities. Hence, she pointed out that there is a need for a better graphical representation of the community as it progresses toward sustainability. Finally, referring to implementation of the recommendations, Ms. Nelson suggested that the NEJAC members make specific commitments for implementation of the recommendations within their respective frameworks.

Mr. Kenneth Warren, Wolf, Block, Schorr, and Solis-Cohen and acting chair of the Enforcement Subcommittee of the NEJAC, noted that the themes and language of the cumulative risk report set an excellent tone for marketing the ideas to the various stakeholder groups. As a lawyer, he said, he would be interested in knowing what types of regulatory changes would be required to adopt this new paradigm. Suggesting a model adopted by the Delaware River Basin Commission (DRBC), which manages the water resources of the Delaware River, he stated that multi-stakeholder processes contribute significantly to building regulatory as well as planning capacity. Providing examples to illustrate his point, Mr. Warren noted that DRBC recently formulated a Total Maximum Daily Load (TMDL) for polychlorinated biphenyls (PCB) that would indicate the sum of the allowable loads of PCBs from all contributing point and nonpoint sources established under Section 303 of the CWA. The TMDL development process, he said, involved a technical advisory committee with representatives from various stakeholder groups as well as from the various states represented on the DRBC. A similar model, he concluded, would be useful for setting up a regulatory process to implement the recommendations in the cumulative risk report. With respect to multimedia concerns, which are important in studying cumulative impacts, he suggested that work already being done in the agency on multimedia approaches, such as the use of facility-wide permits, be used as a foundation for a strategy to address multimedia concerns. Finally, addressing the bias for action, Mr. Warren stated that it was important to make a distinction between whether the administrative agency would be taking the action, which would require the establishment of rules and regulations and a public comment process, or whether the administrative agency would motivate others to participate in a voluntary process, which would then require a cultural change.

Finally, Ms. Kaplan added that from the perspective of a state regulator, it would be invaluable if EPA were to put together a better guidance document on the existing tools that may be used to implement the bias for action. Better guidance would also encourage consistency from state to state and from region to region.

3.8 Discussions and Dialogue Between the Executive Council Members on the Action Items Proposed in the Cumulative Risk Report

On April 14, 2004, the NEJAC deliberated on the development of an implementation framework for the action items under each of the eight overarching recommendation themes in the cumulative risk report. Mr. Lee suggested that during the deliberations, the NEJAC prioritize each action item with respect to implementability; available resources; urgency; and time required, such as short-term (one year, before the end of FY 2005), intermediate (two to three years, FY 2006 and FY 2007), or long-term (five years or more, FY 2008 and beyond).

Dr. Fields facilitated the discussion. He suggested that the discussion should proceed by considering action items under each theme and their implementation time frames. Dr. Ramirez-Toro suggested that a new recommendation theme be added to the existing eight themes; this new theme would involve the designation of a coordinator to ensure collaborative partnerships between the regions and EPA Headquarters.

Discussion of Action Items under Theme 1

Beginning with Theme 1, Dr. Fields discussed the first action item, that EPA initiate multimedia toxic reduction pilot projects in each of the ten EPA regions. Mr. Williams; Dr. Sawyers; and Mr. Charles Collette, Florida Department of Environmental Protection and member of the Enforcement Subcommittee of the NEJAC, all agreed that this could be a short-term initiative. Mr. Williams added that he would like to see more representation in the pilot projects from the 572 tribes in the country instead of at least one tribal community as mentioned in the cumulative risk report. Dr. Sawyers suggested translating the action items into guidance to assist other EPA programs in integrating the bias for action and other themes into their agendas. Ongoing pilot projects in the regions could be illustrative of the application of the themes, Dr. Sawyers noted. Mr. Collette also called for the development of performance measures for these pilot projects.

Dr. Fields responded to Mr. Collette that when EPA and OEJ award the new collaborative problem-solving grants, they would be developing performance measures with the grantees. These measures would document the goals and expectations for the grantees during the partnership effort.

At this point, Mr. Starfield interjected that the NEJAC recommendations should emphasize that it is a priority that EPA develop a program of community-based projects to deal with environmental justice communities with a bias for action and should allow EPA to decide the best method of implementation, and whether that would require pilot projects or not. Dr. Fields respectfully disagreed with Mr. Starfield, stating that although taking action is the priority, pilot projects are only a mechanism for facilitating action. The NEJAC work group suggested pilot projects as a way to ensure that the agency would step up and commit to a specific set of actions, he stated.

Proceeding with the next action item, the designation of at least five underserved, disadvantaged, environmentally overburdened communities in each EPA region, Ms. Subra, Mr. Sanders, and Dr. Sawyers agreed that this effort should be designated as intermediate and should immediately follow the pilot projects. Dr. Sawyers emphasized that states in conjunction with EPA should play a critical role in designating the communities. He also stated that the lessons learned in the pilot projects should be incorporated into the designated communities. Ms. Eady suggested that the first two action items be combined so that the communities chosen become the subjects of the pilot projects. Responding to Ms. Eady, Dr. Fields revealed that EPA Region 4 has in fact designated some communities that are underserved, disadvantaged, and environmentally overburdened as the subjects of the region's pilot projects.

Noting that the preceding discussion led to the next action item, development of criteria for selecting the pilot projects, Dr. Fields referred to Dr. Sawyers's earlier statement expressing the need for a guidance for choosing pilot project candidates. Dr. Fields added that the guidance should describe the general information that would be needed about a community to decide whether that community would be an appropriate candidate. Mr. Lee noted that the basic issue is one of asset building and of looking at communities not just as sets of problems and deficits but in terms of potential assets and opportunities. A similar potential, he noted, exists within EPA. Mr. Weinstock and Dr. Sawyers agreed that the action item should be a short-term initiative. Mr. Weinstock insisted that the existing tools be assessed before new ones are developed. Ms. Henneke suggested that the basic criteria be chosen first and then refined over time after selection of the pilot projects. Mr. Wallace, supported by Ms. Henneke, emphasized an iterative process involving adaptive management, noting that some basic criteria would be needed for selecting the pilot projects but that these criteria would need to be redefined based on lessons learned during the selection process.

Dr. Sawyers, Mr. Gonzalez, and Mr. Collette concurred that the next action item, that EPA should develop a toolkit for early implementable actions, should be an intermediate goal. Mr. Prasad commented that because every action item would rely on the toolkit for guidance, the toolkit should be an ongoing effort—a short-term goal to begin with and modified in conjunction with pilot projects along the way. Ms. Briggum expressed concern that if all action items are designated as short-term, the workload for EPA would be too high and the quality of the final product would not be as good. She suggested that the development of the toolkit be more of an intermediate process, building on the initial pilot projects and lessons learned from them. Ms. Henneke responded that because pilot projects already exist in most regions, an intermediate goal would be more practical. Joining in the discussion, Mr. Juan Parras, De Madres a Madres, Inc., and member of the Enforcement Subcommittee of the NEJAC, stated that although the states and EPA have greater control in selecting the pilot projects, each region should decide which of the 64 action items would be short-term, intermediate, or long-term in nature.

Ms. Subra suggested the consolidation of Theme 1 action items that refer to pilot projects in order to make the recommendations concise and easier to understand. Agreeing with Ms. Subra, Ms. Harris stated that the process should establish more of a framework or guidance on how to implement the pilot projects rather than be too specific or too prescriptive. She said that there should be flexibility to deal with

specific situations. Ms. Nelson suggested building a matrix that would define and consolidate the action items and also distinguish them in terms of change in agency action, change in agency thinking, and change in agency capacity. She also suggested that the NEJAC discuss only those action items that most of the members did not agree on with respect to the implementation time frame instead of each one in detail. Mr. Lee responded that the real value of the discussion was that it would allow each member of the NEJAC to comment on the action items, and hence it was important to go through the process of discussion.

Discussion of Action Items under Theme 2

The first action item under Theme 2 called for utilization of existing statutory authorities and for the Office of General Council to issue a memorandum identifying authority to evaluate and address cumulative risks and impacts in the statutes that it administers and delegates. Although Mr. Collette opposed such an action and asked that the NEJAC reconsider whether to include this action item for legal reasons, Mr. Wallace and Mr. Harris supported the action item, stating that it would be helpful to have such a memorandum. Mr. Wallace added that in the absence of regulatory and statutory authority to implement the recommendations in the cumulative risk report, the OGC memorandum would provide the required legal backup to states and regions; he also stated that this action item should be an intermediate goal. Mr. Harris, however, thought that this could be accomplished within a year, making it a short-term goal. Mr. Collette again cautioned against the idea but recommended that if the NEJAC did insist on going ahead with it, the NEJAC should consider also recommending that EPA provide some direction to the OGC and have a dialogue with the OGC *before* OGC issues the memorandum. Mr. Williams stated that it would also be helpful to involve tribal attorneys in the process because many tribal issues also require clarification.

Moving on to the next action item, that OGC or the EPA program offices provide an inventory that is easily accessible to communities and that describes the procedures by which cumulative risks and impacts can be evaluated based on existing authority, Mr. Parras indicated that this should be accomplished as soon as possible, making it a short-term goal. Ms. Henneke stated that although it was important that the information be available as soon as possible, in reality it could only be accomplished over two to three years, making it an intermediate goal.

The next action item would require that EPA translate the authorities articulated in the OGC memorandum into guidance for the permitting authorities that would advise on how best to incorporate cumulative risks and their reduction into facility permitting processes. Dr. Sawyers indicated that this would be an intermediate goal. Other members of the NEJAC concurred.

The next action item stated that EPA, in completing the materials discussed earlier, should identify the sources of adverse cumulative impacts that it has no or incomplete authority to control and for which state or local regulation has provided inadequate or inconsistent control. Dr. Sawyers responded that this would be a long-term effort because of the complexities involved, and other members of the NEJAC agreed with him.

The next action item would require that EPA's program offices compile a web-based inventory of case studies of communities and regulatory programs where cumulative risks and impacts have been factored into decision making to provide practical guidance on how to use existing laws and procedures. Mr. Harris and Ms. Espinosa agreed that this would be a useful effort but would be more of an intermediate goal. Ms. Kaplan disagreed, saying that this effort would be an ongoing effort that would require timely updates. Mr. Williams noted that many inadequacies come to light with respect to issues of tribal health and well-being, such as gathering resources for subsistence or ceremonial purposes or for medicines. Most of these resources, he stated, are unregulated. Dr. Sawyers concurred with Mr. Williams.

Dr. Fields suggested moving on to the next action item, that EPA create incentive programs to maximize early, voluntary efforts to go beyond compliance in order to reduce cumulative impacts. Ms. Espinosa

suggested that EPA and the NEJAC capitalize on past work in this area, including the *Pollution Prevention Report* that was discussed at the last NEJAC meeting, and not reinvent the wheel, indicating that this would be an intermediate and ongoing effort. Dr. Sawyers stated that while in principle he agreed with Ms. Espinosa but that he would like this to be a short-term effort, especially when states like Maryland are already working on incentive projects or incentive-based approaches for compliance assistance.

Mr. Parras totally opposed the action item, stating that from a community perspective he had not had very good experiences with voluntary programs. He elaborated that although numerous voluntary incentive programs exist in Texas, companies have simply chosen not to take action regardless of incentives. He also pointed out the issues associated with grandfather clauses in Texas state legislation that exempt companies from complying with better air emission standards and give them the option of not participating even if given incentives; he noted that this essentially meant that regulators are paying companies to not comply with regulations. Dr. Sawyers disagreed, stating that he has had good experiences with some voluntary programs. Mr. Parras clarified his point, stating that incentive programs should not give industries a long time (for example, 10 years) to comply, because this would only lengthen the process instead of providing a solution. He insisted that requirements be made mandatory, giving industries a limited period of time such as 30 to 90 days to comply.

In response to Mr. Parras, Mr. Harris and Ms. Briggum agreed that the incentive programs should insist that businesses go beyond compliance. Dr. Fields added that Mr. Parras's concern was well founded, and past issues have highlighted community concerns that incentive programs would cause public health to be compromised. Illustrating his point, Mr. Parras cited the example of a report recently released by the Texas Public Interest Research Group (TexPIRG), a state-wide public interest advocacy group. The report stated that not too many companies joined a voluntary program of responsible care sponsored by the American Chemistry Association. Furthermore, the report stated that even among those companies that had joined the program since 1990, over 7,000 accidental releases or accidents in plants had been reported. Mr. Williams noted a similar experience some years earlier with a national voluntary watershed program, for which strict time frames and minimum standards had to be established in order to ensure adequate resolutions of the issues.

Commenting on the previous discussions, Mr. Prasad expressed concern that the focus was only on pollution prevention, and he noted that options should also include pollution reduction. Ms. Briggum noted that pollution reduction was an important concept and had been addressed in the *Pollution Prevention Report*.

Mr. Weinstock stated that the action item could be divided into short-term and intermediate goal. In the short term, he added, better targeting of EPA's existing voluntary programs that deal with pollution prevention and other initiatives focusing on businesses, would be a starting point. The intermediate effort would involve improvising the program to make it more effective, he concluded.

Dr. Sawyers re-emphasized the need to continue the use of voluntary projects to achieve and go beyond compliance. He cited a successful project in Park Heights, Maryland, in which several hundred auto body shops that were out of compliance were granted immunity for a certain period of time with the full support of the community so that they could achieve compliance.

Referring to Mr. Parras's comments about paying to pollute, Ms. Espinosa suggested that he work with her, Ms. Briggum, and Mr. Lee to revise the language of the cumulative risk report in order to include certain recommendations that would be useful to communities and that would ensure that EPA and the states do not tolerate noncompliance by businesses. Mr. Parras agreed with this suggestion.

The last action item under Theme 2 was revised by Ms. Harris, so Dr. Fields requested that she explain it in her own words. Ms. Harris, speaking from the perspective of enforcement, stated that she modified the action item because it originally did not accurately reflect the work of the enforcement and compliance assurance program. Explaining the revisions, she stated that OECA should investigate ways to target

communities with high cumulative impacts and to employ cumulative risk reduction as a goal for and in the context of injunctive relief and supplemental environmental projects. This effort would be an intermediate one, she explained, because it would require that OECA work closely with states and EPA program offices. The NEJAC work group agreed to incorporate the changes into the cumulative risk report.

Ms. Eady then requested clarification from the NEJAC work group regarding the definition of communities of high cumulative impact. Ms. Briggum responded that the term reflects a comparison with other communities and that it would be beneficial to have a threshold that defines high. Mr. Lee also clarified that cumulative impact refers to multiple impacts. Dr. Fields agreed that Ms. Eady had raised a valid point and stated that appropriate clarifications would be included in the cumulative risk report.

Mr. Sanders requested clarification of the action item that called for EPA to identify sources of adverse cumulative impacts that it has no or incomplete authority to control and for which state and local regulation has provided inadequate or inconsistent control. He stated that including local regulation in the action item would exponentially increase the amount of work to be done. Ms. Briggum responded that although this effort may involve a significant amount of work and would have to be broken out in terms of time frame, it was important to include it in the action item, because communities are often most concerned about local ordinances rather than Federal regulations. These local ordinances are inconsistent, she continued, with respect to the amount of paperwork required to obtain a permit and other similar issues. Dr. Fields added that communities have indicated that it is important for local government and not just the state and EPA to be involved in understanding community issues.

At this point, Ms. Nelson informed the NEJAC that she and Ms. Espinosa, with the concurrence of Ms. Eady and Mr. Lee, had drafted a form for the NEJAC members to fill out. The members were to use the form to state their specific commitments to disseminate and communicate the message of the cumulative risk report.

Ms. Eady then informed the NEJAC about an article published in *The Times-Picayune* that morning about Ms. Matthews, a member of the community impacts panel whose earlier presentation on the cumulative risks and impacts in the Four Corners community was the subject of the article. The article also highlighted the public comment session scheduled for that evening and the NEJAC meeting, Ms. Eady noted.

Ms. Henneke inquired about what kind of concise briefing document on the meeting would be available that could be shared with various managers. Mr. Lee replied that an executive summary of the meeting would be available soon. Ms. Nelson emphasized the need for a graphically interesting, concise executive summary. Dr. Fields thanked Ms. Nelson for raising this matter, pointing out that a fact sheet briefly describing the cumulative risk report would also be a useful communication tool.

Discussion of Action Items under Theme 3

Theme 3 addresses methods to examine and overcome programmatic and regulatory fragmentation within the nation's environmental protection regime.

The first action item under Theme 3 recommended that EPA conduct a systematic examination of issues related to programmatic and regulatory fragmentation that contribute to cumulative impacts, identify environmental protection gaps resulting from programmatic and regulatory fragmentation, and develop strategies to address the pitfalls of such fragmentation. Dr. Sawyers stated that the requirements of the action item were difficult to comprehend and that this would be long-term effort. Dr. Fields and Mr. Williams agreed with Dr. Sawyers. Mr. Williams added that it would be helpful to have a format for Federal, state, tribal, and local authorities that would specify the rules of the road. This format is important because to have a pilot project for a pilot planning area, the participants would need to understand the applicable Federal, state, and local government rules, especially because those rules vary with each jurisdiction. Dr. Fields noted the magnitude of the task, stating that on the Federal level alone,

13 statutes would need to be considered. In addition, the state, local, and tribal laws would have to be addressed.

Ms. Subra suggested consolidating the first four action items under Theme 3 into one stepwise action item that would start off as a short-term effort (with the first half of the first action item) and then continue into a long-term effort with the development of a strategy. A similar suggestion was made by Ms. Tucker, Dr. Fields, and Dr. Sawyers for the second action item, which would require EPA to create an advisory committee to examine issues related to programmatic and regulatory fragmentation. They suggested dividing the action item into two sections, the creation of the advisory committee being a short-term effort and examination of the issues being done over time. Ms. Subra noted that the work for the advisory committee would only follow the first action item and hence it would not be a good idea to set up the committee too early. Dr. Sawyers then asked whether any other agencies, such as the National Advisory Council on Environmental Policy and Technology (NACEPT), could assist with this particular task. Dr. Fields directed the question to Ms. Subra, a member of NACEPT. Ms. Subra agreed to bring the issue before NACEPT for its consideration.

Ms. Briggum suggested that before other agencies such as NACEPT were approached, the NEJAC's role should be better defined because there is well-balanced representation of community groups within the NEJAC that may not exist within NACEPT. Ms. Tucker added that EPA could also use the expertise of the Environmental Law Institute (ELI) to put together a document on environmental justice and existing environmental statutes and to address issues of regulatory fragmentation.

The third action item included multiple tasks for EPA, such as to (1) develop, integrate, and coordinate an approach to unify resources and maximize strategies for current environmental health assessment; (2) provide recommendations or procedures to eliminate the barriers and challenges caused by fragmentation problems in program processes; (3) develop new or revised regulations and programs; and (4) establish an interagency collaborative effort to coordinate and develop an integrated approach to program services and regulatory monitoring. With the concurrence of Mr. Lee, Dr. Fields informed the NEJAC that the multitask effort would involve an interagency environmental justice work group. Ms. Nelson stated that this effort should be started immediately, given the vast amount of work that it would involve. Dr. Fields agreed with her, stating that he recognized that the effort may be a long-term one, but to get it done, it would have to be started as soon as 2005 with targeted completion in 2007 or 2008. Ms. Tucker proposed that item 1 be a short-term effort, item 2 be an intermediate effort, and items 3 and 4 be long-term efforts.

Continuing the discussion of regulatory fragmentation, Mr. Lee shared a report published in 2000 by the National Academy of Public Administrators (NAPA) that discussed fragmentation. He stated that while finalizing the cumulative risk report, the NEJAC work group should keep in mind the key questions that would be raised by communities as well as agencies with respect to issues of cumulative risks and impacts. Dr. Fields agreed that the cumulative risk report would have to be recrafted in order to better distinguish between short-term and long-term goals.

Mr. Weinstock pointed out that in theory it would be possible to start any specific task at this point in time but that it would be impractical to do so because of limited resources. Keeping this in mind, he said, the NEJAC would have to prioritize tasks. In response, Dr. Fields stated that the NEJAC work group would definitely take this point into consideration when it reconvened in May 2004 to further discuss completion of the cumulative risk report and would recommend the tasks that could be reasonably completed in FY 2005, FY 2006, and FY 2007, and beyond. He noted that before this could be done, however, the work group would have to look at the whole picture and assess some new short-term priorities that the work group believes require immediate attention. Ms. Espinosa agreed with Dr. Fields and Mr. Weinstock that the work group should focus on some real priorities to avoid resource conflicts. She encouraged the NEJAC as well as those providing public comments on the cumulative risk report to help the work group decide what the real priorities are.

Dr. Ramirez-Toro noted that different agencies are not completely fragmented in their approach to cumulative risks and impacts and stated that the recommendations should build on what currently exists in EPA in terms of interagency communications. Mr. Sanders noted that it would be useful to organize the action items, as suggested earlier by Ms. Nelson, in terms of change in agency action, change in agency thinking, and change in agency capacity, which would help in prioritizing the action items as short- and long-term efforts. Mr. Walter Handy, Cincinnati Health Department and member of the Health and Research Subcommittee of the NEJAC, wondered whether agency sponsorship and current availability should be considered as variables in the discussion. Mr. Lee stated that the efforts for better understanding of cumulative risks and impacts are being sponsored by numerous agency offices both at the Headquarters and regional levels. Ms. Harris also noted that the EPA Executive Steering Committee consisting of Deputy Regional Administrators and Deputy Assistant Administrators would lend its guidance and expertise to the NEJAC work group in terms of the various offices that would be able to participate in the process. Dr. Fields agreed that this topic could be discussed at the next Executive Steering Committee meeting.

Discussion of Action Items under Theme 4

Theme 4 concerned full incorporation of the concept of vulnerability, especially its social and cultural aspects, into EPA's strategic plans and research agendas.

The first action item stated that EPA should make it clear that although quantitative evaluation of vulnerability is precluded in almost all cases by the scarcity of scientific knowledge and understanding of the subject, this is not an excuse to ignore vulnerability. Vulnerability should be an integral part of cumulative risk assessment even if it must be analyzed using qualitative measures. Dr. Sawyers commented that in the context of the cumulative risk report, it is absolutely necessary that this action item be addressed in the short term because it is a fundamental part of the report. If this is not done, he stated, the report will lose some of its momentum.

Ms. Henneke noted that this effort would involve assessment of vulnerability from a different point of view and was different from previous efforts because it emphasized social and cultural aspects. Hence, she although while it could be started in the short term, it would have to continue for a longer period of time. In response to Dr. Fields's request for clarification, she stated that some states and even some programs in EPA) would not receive this concept very well and that it would require a great deal of outreach to ECOS and other organizations in order to clearly communicate this issue. Mr. Warren pointed out that this action item does not provide adequate guidance to the decision-maker on what to do with information when it is received, how to evaluate it, and specifically how to define vulnerability in a cumulative risk assessment. Dr. Fields agreed with Mr. Warren that there are serious implementation issues associated with this action item and stated that increasing its specificity with respect to definitions of terminology as well as widespread outreach would allow the concepts to gain acceptance.

The next action item would require EPA to direct all its offices to develop strategic environmental justice action plans for incorporating the concept of vulnerability into their operational paradigm. Dr. Fields noted that this item could also be applicable to the regional strategic plans referred to earlier by Mr. Voltaggio. Dr. Sawyers expressed full agreement with earlier comments by Ms. Henneke and Mr. Warren and noted that this action item would be a short-term exercise but would depend on further explanation of other concepts. Ms. Tucker informed the NEJAC that EPA only recently finalized its five-year strategic plan and inquired about other opportunities to incorporate the concepts beyond environmental justice action plans. Mr. Lee responded that other opportunities would include EPA's Human Health Research Strategy, which focuses on populations; a framework for cumulative risk assessment that is being developed by the Cumulative Risk Technical Review Panel; a series of workshops; issue papers; and, pilot projects. Ms. Harris noted that EPA's five-year strategic plan is being developed for FY 2005 to FY 2007 and hence could include those action items that are intermediate efforts. Also, she noted that because the action items would require a significant amount of resources, a specific budget for it should be allocated in the FY 2007 budget.

Ms. Tucker suggested revising the action item to include the other opportunities mentioned by Mr. Lee. Ms. Nelson added that the meaning of social and cultural with regard to environmental justice would have to be clearly defined and better explained using examples. Ms. Tucker further suggested revising the theme statement by not including social and cultural, and instead including these concepts in the description. Ms. Henneke supported this suggestion but added that because these concepts go to the heart of vulnerability, providing examples would be useful to clarify the terms in the context of cumulative risks and impacts. Ms. Kaplan agreed with Ms. Tucker and Ms. Henneke and stated that although she had no language suggestions at the moment, it was important to educate the states on the significance of the issues being discussed. Mr. Handy also recommended that states look beyond physical sciences and train their staff in the social sciences as well, noting that newly trained staff would provide support in the implementation of the recommendations suggested in the cumulative risk report. In response, Dr. Fields noted that a series of recommendations in the report suggest hiring of staff members that possess capability and expertise in the social sciences as part of the resource pool. Mr. Williams reiterated Ms. Tucker's sentiment that the statement of the theme could be misleading, especially from the tribal perspective.

Mr. Lee responded that Theme 4 was perhaps the most important one in the cumulative risk report, because it was a major paradigm shift and addressed a fundamental concept. He noted four main challenges in the implementation of this theme. The first challenge is to find the right language to convey the point, which would require a series of discussions, dialogue with communities and other stakeholders, scientific symposia, stakeholder forums, and advisory panels that would clarify how this concept is being understood and integrated. He further stated that at the Coalition for Environmental and Economic Balance in California, in which he participated along with Ms. Tucker, Ms. Briggum, and Mr. Prasad, social issues were discussed. The second challenge concerned the third action item, which called for EPA to incorporate the concept of vulnerability into its definition of disproportionately high human health or environmental impacts. Mr. Lee pointed out that social and cultural issues are not addressed in the existing environmental statutes and that this fact presents a challenge to the integration of the social and cultural concepts within the context of regulatory statutes. Third, he pointed out that although pilot projects are important to the understanding of fundamental concepts, it is a challenge to effectively design pilot projects that will provide lessons with respect to these concepts. Fourth, he noted that, as Ms. Hynes had pointed out, social science and public health literature is beginning to lay the foundation for a future course of action.

Dr. Fields then asked Mr. Lee when he believed that EPA could reasonably incorporate the concept of vulnerability into the definition of disproportionately high human health or environmental effects. Mr. Lee responded that EPA is on the verge of doing this conceptually and would require an intermediate effort to translate the concepts into the tools required to provide robust and predictive indicators. He stated that at the current NEJAC meeting, the Enforcement Subcommittee would be discussing targeting tools being developed by OECA that incorporate disproportionate human health and environmental effects. Ms. Harris added that the project that Mr. Lee was referring to has taken about a year, within OECA and that a hands-on tool for inspectors who handle cases was yet to be established. The next step would be to encourage other EPA offices and the regions to learn from OECA's experience and continue the effort instead of starting over.

Ms. Espinosa stated that the current list of recommendations were drafted with the thought of provoking a discussion, not only within the NEJAC but outside as well. She also pointed out that like the tribal communities, the Hispanic community faces issues with regard to the cultural aspects. Mr. Gonzalez added that the initial work on this issue was started with the publication of EPA's *Framework for Cumulative Risk Assessment*, which has to be taken into account before other tasks are initiated. Some suggestions that are new and not part of the framework, such as developing a scientific agenda taking the concepts discussed at the NEJAC meeting into consideration and developing indicators for vulnerability assessments, would have to be addressed as well, he noted.

Dr. Fields then began a discussion of the action item that would require EPA to convene and promote community dialogues, scientific symposia, expert panels, stakeholder forums, and advisory panels in order to fully discuss the concept of vulnerability and obtain input on how to incorporate vulnerability into its operational practices and research agendas. Ms. Nelson responded that this would be a good step and would require collaboration with the health community and others. Ms. Espinosa added that the action item was ongoing at EPA but that it would have to continue and advance the effort. Mr. Lee noted that EPA's *Human Health Research Strategy* had defined vulnerability and susceptibility only from the biological point of view. Hence, a great deal of education would be required to communicate the meaning of these concepts in order to continue and advance EPA's efforts, he concluded.

Ms. Tucker noted that with respect to the fifth action item, which would require EPA to integrate measures of vulnerability into existing as well as new screening tools, EPA should first develop the measures. She also suggested that indicators be used instead of measures. Dr. Fields noted that the fourth and fifth action items which required EPA to issue explicit guidance on the meaning of vulnerability, are tougher issues that would be clarified over time. Mr. Prasad pointed out that although this effort would occur over the long term, it was important to remember that the whole reason for the bias for action was not to wait too long before initiating action. Hence, he said, the effort should commence in the next two to five years and should incorporate ongoing research into the risk assessment protocol down the line.

Discussion of Action Items under Theme 5

Theme 5 called for promoting a paradigm shift to community-based approaches, particularly CBPR and intervention. The first action item recommended that EPA institutionalize a paradigm shift to community-based approaches, building upon and expanding the use of the CBPR model. Ms. Espinosa emphasized that the NEJAC work group wanted EPA to build upon and expand ongoing efforts at the agency. She suggested adding another category, ongoing, to the time frame classification of the action items. Ms. Nelson stated that many of the points under Theme 5 were in fact mind sets or ways of thinking and not action items and that the work group would have to distinguish between them. She added that the first action item was a mind set. Dr. Fields agreed with Ms. Nelson's comments, stating that the work group would have to reformulate some of these points into specific action items.

Mr. Williams noted that with respect to the community-based approaches, in areas involving multiple communities, the Federal role of EPA and the fiduciary role of tribes should not be overlooked. He said that where tribes are in a minority, they could be outnumbered by the surrounding communities in the decision-making process. To ensure that local communities do not influence the direction of a decision to suit their particular needs, Federal protection provided either by trust or by law, would be necessary, Mr. Williams said.

Ms. Kaplan then stated that it would be incorrect to refer to the community-based approach as a paradigm shift because such work is ongoing at EPA. Ms. Espinosa clarified that the paradigm shift refers to the entire agency as opposed to individual offices. Ms. Tucker pointed out that CBPR was not being done; hence, this would be a new element. Mr. Prasad noted that this issue was a challenge in his agency too, and although the agency had included the concept in its policy statements and had identified specific action items, they were found to be ineffective over the last two years. He suggested addressing the issue of community-based versus community-directed, as what an agency might think of as a research focus may not correspond with community needs. In response, Ms. Tucker remarked that one of the criteria for CBPR in the cumulative risk report is that it be community driven. Although it is not reflected in the action item, community-driven is referred to in the report, so the action item should be rephrased accordingly, she said.

Regarding the second action item, that EPA should adopt and expand the use of CBPR and intervention in its training, outreach, and education programs, Ms. Tucker noted that this would be a short-term effort and would then continue as an ongoing process. She stated that although a significant part of the training would occur at the local level, training at the community and tribal levels is also important. She suggested

that for regulatory agencies, there ought to be an ongoing training program. Ms. Nelson reiterated the need for consolidation of action items two, three (formulating and implementing a clear plan to utilize CBPR), and four (requiring use of CBPR in guidelines) into one concise action item. Clarifying her remark regarding action item three, she stated that CBPR should be part of the ten proposed multimedia and cumulative risk pilot projects that would be initiated in the short term.

Ms. Harris noted that the current discussion of CBPR should be integrated into the recommendations for the environmental justice Collaborative Problem-Solving Model. The action item, she stated, would work as a stand-alone as well as when integrated as part of an overall agenda, given the opportunity to develop training and learn from the pilot projects. Ms. Tucker stated that she had made a similar recommendation earlier; CBPR should be the first step toward the collaborative partnership process, which at the local level would allow the community to identify local partners, and local experts whom they want to be involved in the research agenda. Dr. Sawyers suggested studying complementary efforts in other agencies like the National Institute for Environmental Health Sciences (NIEHS) and CDC that engage in CBPR; the recent grant commitments at NIEHS were of special interest. Ms. Tucker responded that CDC was one of the founders of CBPR.

Mr. Weinstock expressed concern about the requirement that a community-based project should always have CBPR. He stated that this contradicted the bias for action theme. He cited an example in Cleveland, Ohio, where a successful air toxics action-oriented project was implemented in two different communities with little or no research agenda. Ms. Tucker responded that action is innate to CBPR and that research does not have to be complete in order to initiate action. Secondly, she noted that the CBPR process also identifies existing research data. It is for the community to determine whether the research data is already in place. Dr. Fields clarified that the research that Ms. Tucker referred to was not the classical research that is normal within EPA but the collection of data by the community, such as the number of people who have developed different types of cancer in a community, how many have died, and where hazardous materials may have been deposited. Ms. Tucker stated that in addition to community knowledge, CBPR included traditional and quantitative research data. She noted that if CBPR had been available ten years ago, the current understanding of cumulative risks and impacts in communities would have been far advanced.

Ms. Harris stressed the need for a common understanding of the terms and concepts in the cumulative risk report, stating that EPA offices need to be re-educated and given an opportunity to re-process terms such as CBPR and environmental justice. This approach would also be cost-effective in terms of the bias for action, because it would provide lessons learned as well as existing data, she added.

Mr. Lee joined in the discussion, stating that the situation varies for each community and that CBPR should be incorporated to the extent practicable or needed. This determination would depend on multi stakeholder processes such as planning and problem formulation selection of the methods to be used for assessment. Mr. Gonzalez commented that CBPR ensures that the community is an equal partner in the whole process. Mr. Handy suggested that the NEJAC work group expand on the definition of research.

The last action item states that EPA should provide education to state and local governments, business and industry, academia, and other institutional entities about CBPR. Dr. Sawyers stated that although he advocated CBPR, in some cases research is not necessary and communities demand only intervention and mitigation efforts. In response, Ms. Nelson emphasized that the major thrust of the action item is a community-based approach, especially with regard to community-driven research. Mr. Williams agreed with Ms. Nelson that CBPR is really about data collection. He also stated that some communities resist having research done because a great deal of information is already available on issues that the communities are not concerned about. Rather, communities are always interested in research that addresses the future of their children.

Discussion of Action Items under Theme 6

Theme 6 recommends that EPA incorporate social, economic, cultural, and community health factors, particular those involving vulnerability, in EPA decision-making.

The first action item states that EPA should develop a commitment to incorporate social, economic, cultural, and community health factors in the EPA decision-making process, including decision-making regarding risk assessments. Ms. Eady suggested clarifying that the action is to incorporate and not develop a commitment. Ms. Nelson suggested consolidating the first and second action items stating that the effort would be of an intermediate nature.

Mr. Handy suggested a change in the format of the discussion. He suggested that the NEJAC discuss the last three themes and related action items only enough to get an understanding of what they mean and not try to decipher whether they would be short-term, intermediate, or long-term. He further suggested that they all be classified as toward the end of the discussion high-, medium-, or low-priority items. Ms. Subra noted that the social and cultural issues were also raised under the topic of vulnerability and that it would help to consolidate the two action items. She also suggested putting all the action items in one list to avoid repetition. Mr. Williams suggested incorporating traditional knowledge verbiage throughout the recommendations.

The next action item stated that EPA should integrate social, economic, cultural, and community health factors into its environmental justice training program. Mr. Lee stated that this is beginning to be done at EPA in terms of examining disproportionate impacts.

The next action item would require EPA to conduct a systematic review of the research literature in order to identify and assess environmental health factors related to income, race, and ethnicity as a first step in development of usable indicators. This action item would be patterned after EPA's recent development of environmental health measures for children. Ms. Nelson and Ms. Subra reiterated the need to reduce the redundancy in the action items.

Dr. Fields added that the action items could be consolidated to state that EPA should strengthen its capacity for building bias for action by recruiting community health, environmental health, and social scientists into the workforce; supporting community-based organizations and researchers; and undertaking community-based pilot projects in all the regions. This could perhaps be achieved by changing hiring patterns in the agency, he stated.

Mr. Weinstock stated that Dr. Fields's suggestion could be broadened by specifying the skills required instead of specific credentials. Mr. Weinstock added that although EPA does need more social scientists, it also needs more people who are trained or skilled in interacting with communities. Dr. Ramirez-Toro concurred, stating that by clearly defining what capacity must be built, it will be easier to predict the resources needed. Dr. Sawyers also agreed with Mr. Weinstock, emphasizing the need for the nontechnical expertise to effectively communicate with impacted communities. Mr. Sanders requested that the NEJAC work group make a more precise recommendation to the agency regarding the workforce development initiative that is going on within the agency. Mr. Handy stated that the focus should also be on developing strategic partnerships with state and local agencies in building capacity. Ms. Tucker cautioned the work group against the use of language such as goal of action and social change, stating that if EPA and other regulatory agencies do what they are supposed to do, they would not have to bring about social change.

Mr. Williams suggested that a group of experts within EPA form a short-term think tank and focus on what the agency should do to generate further action. Dr. Fields replied that an earlier recommendation called for an external advisory committee to be set up to generate similar results. Mr. Williams further explained his point, stating that in dealing with the Pacific Sailing Commission, the tribes hired one person to focus on contacting experts and gathering information. This person's efforts were one factor in the development of a treaty between the United States and Canada.

Discussion of Action Items under Theme 7

Theme 7 concerns the development and implementation of efficient screening, targeting, and prioritization methods and tools to identify communities needing immediate attention.

The first action item recommended that EPA identify, inventory, and review existing screening, targeting, and prioritization methods and tools to ascertain the following: (1) strengths and weaknesses of existing tools; (2) ways that these tools can be improved; and (3) steps to move forward, including guidance regarding minimum criteria for selection and use of a particular tool. Dr. Sawyers observed that because most of the tools are already available, the effort should be concentrated on methods to evaluate their strengths, their weaknesses, and ways to improve them in the short term. He pointed out that some of the tools, such as the environmental justice assessment framework, were included in the meeting materials.

Mr. Prasad noted that each of the action items under Theme 7 would require an intermediate effort, as agreed by members of the NEJAC during the discussion of Theme 1. He recalled the discussion in which it was decided that to make this item a short-term goal would interfere with bias for action, and hence, to be consistent with the earlier decision, this action item should also be considered an intermediate effort. Ms. Nelson stated that Appendix H of the cumulative risk report describes indices and tools that could be used in this effort, making the use of existing tools a short-term effort. Identifying the strengths and weaknesses of the existing tools and the ways that they can be improved would involve an intermediate effort, she said.

Mr. Warren led the discussion to the next action item three, which called for EPA to incorporate indicators into screening and targeting tools in the long term. He pointed out that, as discussed previously, some indicators are already incorporated into existing tools, including indicators of health status such as mortality and morbidity data and indicators of cultural factors in the Native American communities. He suggested deleting the phrase in the long term and suggested that EPA identify the indicator factors that already exist and then consider adaptive management techniques consistent with the bias for action whereby these indicators can be re-evaluated, refined, and modified over time. Dr. Fields supported the suggestion that the action item be divided into activities that can be accomplished in the short term and those that require intermediate effort. Ms. Nelson proposed that an ongoing category be added to the three time frame categories in order to reflect the iterative process.

The next action item stated that EPA should focus on training its staff to ensure effective, widespread utilization of the screening and targeting tools as well as outreach and education for stakeholders. These efforts would ensure that this becomes a common framework among the scientific community, regulators, the regulated community and impacted communities. Ms. Nelson again noted the redundancy and emphasized that similar action items should be consolidated throughout the cumulative risk report. Dr. Ramirez-Toro pointed out that the action item clarifies the concept of capacity-building within EPA because training is a major capacity-building exercise.

The last action item under Theme 7 would require EPA to convene a series of multi stakeholder seminars, workshops, and panels, including sessions of a peer review nature, in order to address existing screening, targeting, and prioritization methods and tools in terms of cumulative risks and impacts. Mr. Weinstock expressed the need to change the title of this action item because it is not clear whether the focus is on identifying communities or on more effective work in communities.

In response, Mr. Lee noted that the action item raised a complex issue. He explained that the concept was first raised by Mr. Prasad in his capacity as a regulator and involved how to justify the picking of certain targeted communities using screening methods. The issue is further complicated, Mr. Lee said, by trying to identify what tools exist and what other tools need to be developed over time and by addressing the need for training while remaining focused on the bias for action. Mr. Lee noted that another complexity of this issue involved enlisting the participation and support of partners such as states, local governments, business and industry, and impacted communities. He cited the example of the

environmental justice geographic assessment tool, which was based on the assumptions that communities, government, and business and industry would eventually use the same set of parameters and indicators. Ms. Eady concurred with Mr. Lee but also encouraged the rewording of the action item title for clarity.

Discussion of Action Items under Theme 8

Theme 8 encouraged EPA to address capacity and resource issues within the agency, states, affected communities, tribes, stakeholders, and local governments. Dr. Fields suggested including the private sector in this effort.

The action items under Theme 8 included recommendations that EPA ensure that (1) adequate resources are available to support meaningful community-based efforts to address cumulative risks and impacts as part of a paradigm shift to community-based approaches and (2) environmental justice action plans have adequate resource commitments to fully accomplish the set of actions.

At this point, Mr. Lee summarized the previous discussions, stating that all the action items could be consolidated into ten action items spanning the eight interrelated themes. He recommended that the original action items be consolidated into the following recommendations:

1. Initiate pilot projects to implement all 8 themes
2. Develop tools and capacity, especially in terms of use of statutory authorities, assessment tools, policy tools, and others
3. Build consensus and develop a dialogue among stakeholders using stakeholder discussions, scientific symposia, advisory panels, and think tanks, to ensure that there is a common understanding of the process involved
4. Focus on the issue of vulnerability and its research and policy implications relevant literature reviews, and the relationship of vulnerability to social and cultural factors and assessment indicators
5. Training for EPA staff communities, business and industry, and other stakeholders
6. Develop capacity through personnel development; targeted recruiting; and enhancement of skills, social science capacity, expertise in dealing with communities, and understanding of traditional knowledge
7. Develop strategic partnerships, which is related to some of the other action items
8. Encourage community-based approaches and CBPR to involve residents in decisions regarding their communities
9. Develop targeting and prioritization methods and tools to identify communities that require immediate intervention
10. Develop ways to structure these action items into EPA action plans and allocate budgets for plan implementation

Dr. Fields thanked Mr. Lee for the consolidation of the action items and stated that the NEJAC work group would focus on consolidating the action items before presenting them to the EPA. Ms. Espinosa proposed that the work group put together one two-page matrix for each of the eight themes and incorporate the action items based on Mr. Lee's recommendations. She suggested cross-listing the action items with the eight themes for ready reference. She also recommended that to draw attention to the action items, the work group should consider including them in a separate chapter in the cumulative risk report. Dr. Fields supported Ms. Espinosa's suggestions and stated that having all the action items in one chapter would avoid redundancy and would lend focus to the report.

Mr. Lee then highlighted the next steps for the NEJAC work group, noting that so far the work group had completed about two-thirds of its work. He elaborated that for the next three to four months, the work group would work on finalizing the cumulative risk report by September, taking into consideration the discussions, deliberations, and public comments provided at the NEJAC meeting. The final report would

then be presented to the Executive Council of the NEJAC for deliberation and action, he added. He announced that for a period of 30 days following the NEJAC meeting, the work group would continue to accept written public comments on the report. Mr. Lee also stated that the work group would continue to discuss the issues as well as comments received during the monthly conference calls until the publication of the final report. He thanked Ms. Harris, Mr. Sanders, Mr. Weinstock, Mr. Starfield, and Mr. Voltaggio for providing a valuable EPA perspective to the discussion.

Mr. Handy expressed his appreciation for the efforts of the NEJAC work group, complimenting the group members for putting together the cumulative risk report that led to this discussion. Ms. Harris also commended the work group, noting that the discussion over the past two days had been very productive, and she encouraged the work group to organize the action items using a matrix, as suggested by Ms. Espinosa, in order to provide guidance to EPA regarding the action items of the highest priority. She stated that it would be practical to consolidate the action items into no more than five priorities that could be implemented in the 2005 time frame. Mr. Weinstock echoed Ms. Harris's comments, congratulating the work group for putting together a seminal piece of work that will hugely impact the understanding of issues related to cumulative risks and impacts. Mr. Sanders commended the work group and also thanked Mr. Lee for his consolidation of the original action items, noting that a matrix format would be very useful in promoting a clear understanding of EPA's responsibilities.

Ms. Nelson described the process of producing the cumulative risk report as a journey for the NEJAC work group that had been modified and enriched by the discussions at the meeting. She noted that the recommendations in the report are very different from prior NEJAC work because they are not just a set of recommendations to the EPA Administrator but potential changes in the way of working at EPA. Dr. Sawyers appreciated the structural work accomplished by the report, preparing the foundation for the new way of doing business. He also thanked Ms. Tucker for demonstrating continued commitment toward community participation over the years. Mr. Parras also thanked the work group for its efforts.

Mr. Lee then asked each member of the work group to reflect on the discussions of the cumulative risk report.

Ms. Henneke expressed satisfaction that the discussions over the past two days had revolved around the style of the cumulative risk report and not the substance of its recommendations. Ms. Tucker appreciated the support of other members of the NEJAC work group during the entire process. She stated that she would be happy to share the credit with all the communities across the country, especially communities of color and lower-income people who are suffering from cumulative risks and impacts. She also expressed satisfaction that the report would scientifically address the issues of cumulative risks and impacts that have been overlooked for a long time. Mr. Prasad noted that it had been a privilege and a gratifying experience to be part of the work group. Ms. Subra thanked Mr. Lee for putting together a work group that supported diverse ideas and that possessed diverse opinions and experiences. She believed that the final report would do more than improve the quality of life and the health of community members, and although it would probably not be appreciated in the short term, in the long term it would be looked upon as a turning point in dealing with environmental issues. Mr. Gonzalez praised the group members for their expertise and teamwork and for realizing the significance of the task beyond their respective professional agendas. He also thanked EPA for taking charge of the issue and for soliciting the support and partnership of other Federal, state, and local agencies.

Ms. Espinosa appreciated the opportunity to co-chair the NEJAC work group. She also thanked Ms. Briggum for her experience, her ability to involve business and industry representatives in the process, and her continued outreach efforts to bring attention to the issue at seminars and workshops. Ms. Espinosa also recognized Ms. Tucker for her experience in working with communities and their issues for many years. Finally, Ms. Espinosa thanked EPA for participating in the discussions and providing valuable feedback and suggestions.

Dr. Fields thanked the NEJAC Executive Council for providing helpful comments during the discussions and expressed confidence that the final cumulative risk report would be of very high quality in terms of content and usefulness. He thanked EPA officials for their participation in the discussions and especially Mr. Starfield and EPA Region 6 for hosting the NEJAC meeting. Dr. Fields also expressed gratitude to Mr. Lee for putting together an effective work group under the leadership of Ms. Espinosa and Ms. Briggum.

4.0 PRESENTATIONS AND REPORTS

This section summarizes the presentations made and reports submitted before the members of the Executive Council on April 16, 2004.

4.1 Update on the *Pollution Prevention Report* by the EPA Office of Prevention, Pesticides, and Toxic Substances

Mr. Hank Topper, EPA Office of Prevention, Pesticides, and Toxic Substances (OPPTS), provided an update on the *Pollution Prevention Report*, a draft of which had been discussed at the NEJAC meeting in Baltimore, Maryland, in December 2002. Mr. Topper noted that following the presentation of the draft report to the NEJAC in 2002, the final report was completed. It includes a promising collaborative problem-solving model that could be adopted by other programs and offices in EPA, he said.

First, Mr. Topper focused on some key elements in the *Pollution Prevention Report* and the progress that has been made of EPA in response to that report. In particular, he elaborated on the four key aspects of the report, including the themes being developed based on the collaborative problem-solving model, enhancing the ability to understand risks and priorities, working in communities and using pilot projects, and using pollution prevention (P2) to reduce community risk.

Mr. Topper specified the developments regarding the collaborative problem-solving model since the publication of the *Pollution Prevention Report*. He pointed out EPA Administrator Mark Levitt's belief in the EnLibra Doctrine; EnLibra means move toward balance and the doctrine is based on the dual concepts of balance and stewardship and is built upon principles of flexibility, innovation, partnership, and collaboration. He noted the possibility of synergy and cooperation with EPA leadership on the issue of collaboration. He announced that the environmental justice Collaborative Problem-Solving Grant Program is now in operation and is making significant contributions to developing the collaborative problem-solving model emphasized in the report.

Mr. Topper stated that the collaborative model has been adopted in community projects run by EPA's Air Program throughout the country, including the Urban Air Toxic Strategy, which calls for local assessments of air quality based on the collaborative model. He elaborated on ongoing training efforts within EPA and stated that OPPTS had planned a training panel on the collaborative problem-solving model for the EPA community involvement staff at the Denver National Community Involvement Conference. He also noted that the model had been incorporated as a key component of the *Community Air Screening How-To Manual*.

Mr. Topper then focused on the need for communities to get a better understanding of risk and to have access to screening assessment tools that enable them to understand and prioritize risk in a more effective manner. He listed some screening tools that have been developed by OPPTS, such as the Rainy Model; the Risk Screening Environmental Indicators Model; a toxic release inventory (TRI)-based screening model that focuses on air quality; and the environmental justice Geographic Assessment Tool, which would help communities set clear priorities. He further mentioned that OPPTS would shortly publish the *Community Air Screening How-To Manual*, a key tool that will enable communities to understand local air quality. Mr. Topper also highlighted the comparative risk study conducted in Chelsea, Missouri, which involved CBPR in the process of prioritizing risks.

Mr. Topper said that the *Pollution Prevention Report* emphasized the importance of conducting pilot projects, working in communities, learning the use of P2 methods, and using a collaborative problem-solving P2 approach in communities. He mentioned several ongoing projects in communities in Cleveland, Ohio; St. Louis, Missouri; and West Oakland, California, that address air quality issues in particular. He also mentioned a multimedia toxic risk reduction project in south Phoenix, Arizona, and a P2 project involving auto body shops and auto refinishing business(es) in Park Heights, Baltimore, Maryland. He described the Clean Bus Program; the Diesel Retrofit Program and other EPA initiatives to address risks to communities from diesel particulates. The CARE program, he said, would put together a resource kit to bring together different initiatives within the agency and to address multimedia toxics and cumulative risk issues at the community level. These projects provide a perspective on the new initiatives under the Environmental Results Program of OECA, he said.

Next, Mr. Topper described EPA's initiatives to make P2 resources more accessible to communities. He noted that existing P2 resources focus on industry and small business, but the agency is beginning to take steps to make those resources and tools available to communities. He also stated that OAR would soon publish a series of community fact sheets on P2 for communities to enable them to identify potential polluters such as auto refinishing businesses, understand ways to reduce exposures, and obtain available P2 resources. The fact sheets would also include information for businesses to help them reduce pollution.

Finally, Mr. Topper noted that as the *Pollution Prevention Report* is released, there is tremendous enthusiasm and commitment for the new approach within the agency. Furthermore, he said that the agency has taken real steps toward bringing good science and bias for action together at the community level. However, he observed that this was only a start, and the real challenge and opportunity lie ahead.

Ms. Subra thanked Mr. Topper for the update. She explained to new Executive Council members that the *Pollution Prevention Report* had been presented at the last NEJAC meeting in 2002 and that it was important to get updates in order to better understand how NEJAC recommendations are applied within the agency.

Ms. Nelson asked Mr. Topper how the scope of the *Pollution Prevention Report* can be expanded. Mr. Topper replied that the cumulative risks report being discussed at the current meeting was an expansion of the recommendations included in the *Pollution Prevention Report*. He added that the forthcoming CARE initiative would also be an important step toward scope expansion. Ms. Henneke thanked Mr. Topper for the presentation.

4.2 OEJ's Response to the OIG Report on Environmental Justice

Mr. Hill made a presentation about OEJ's response to the *Report on Environmental Justice*, which was issued by OIG in March 2004. Mr. Hill's presentation addressed the following matters:

- The history of environmental justice
- Executive Order (EO) 12898 and the formation of the NEJAC
- EPA's activities over the past few years that focus on issues related to environmental justice
- Various opinions among academicians, community organizers, and others about achieving environmental justice through legal mechanisms such as the Civil Rights Act of 1964 and other environmental laws

Mr. Hill began by telling the audience that while talking about the OIG report, he would like to do a little bit of preaching and, hopefully, a little bit of teaching and talk about civil rights law, environmental law, executive orders (EO), and the history of environmental justice.

He stated that his theme for the day was Separate but equal has no place in American society. Separate is inherently unequal. He explained that he was referring not just to differential treatment in society but to the use of EOs with respect to environmental laws and the application of different policies depending on who lives in particular communities. Walls of discrimination have come tumbling down, he noted, in public housing and accommodations, employment, economic development, and many other aspects of American life. But these walls have not been completely eliminated, he added. Similar discrimination exists in dealing with environmental law, Mr. Hill noted.

He stated that the facts that he would be presenting could be easily researched. He began by stating that OIG was misinterpreting a 10-year-old document (EO 12898) that three people on OEJ's current staff had a hand in reviewing and discussing. These three people were Mr. Robert Knox, Mr. Lee, and himself, he stated. He then proceeded to describe the credentials of each of the three people involved. He revealed that Mr. Knox has worked for EPA for almost 40 years and was involved with EO 12898 as it was being drafted 10 years ago, which meant that at this point he has had 10 years of experience with the document. Mr. Lee, he noted, is the architect of the environmental justice movement, has been working with environmental justice issues since 1987, and was also involved in the drafting of EO 12898. Mr. Hill stated that he too has been working with this document for the past 10 years, thus leading to 30 years of combined experience among the three of them. He expressed indignation that the OIG report was published after only one year of review and that it directed OEJ in the interpretation of a document that OEJ has been working with for 10 years.

Second, he said that OIG refused to discuss its mistaken interpretation of EO 12898 with a third party or to allow EPA to obtain an independent opinion of OIG's draft report. Third, he revealed that OIG refused to get directly involved in the process in spite of a request from former EPA Assistant Administrator J.P. Suarez. Mr. Suarez felt that the vastly different interpretations of EO 12898 by OIG and OEJ served no useful purpose and that the situation would improve if OIG stepped in. Next, Mr. Hill stated that Ms. Harris suggested that OEJ meet with OIG before the exit conference to see whether there was any way they could agree on a common interpretation of EO 12898. OIG refused this meeting, he added. Mr. Hill also stated that he along with several others had been inaccurately quoted. He added that decisions on major environmental justice initiatives in the agency are made on a consensus basis by the Executive Steering Committee, composed of Deputy Regional Administrators and Deputy Assistant Administrators. This process is important because OEJ does not issue permits or advisories. The process is left to the discretion of the regions and offices, he noted, and was not followed in the publication of the OIG report.

Continuing, Mr. Hill stated that the real issue on hand is whether the agency's strategy for incorporating environmental justice considerations into decision-making process should be based on environmental laws or on an EO. Further examining this issue, he stated that just like every movement, the environmental justice movement had a chief theoretician, Professor Robert Bullard. He quoted Professor Bullard, who said "The solution to unequal protection lies in the realm of environmental justice for all Americans. No community, rich or poor, black or white, should be allowed to become a sacrifice zone.... There is a need for a Federal fair environmental protection act that would transform protection from a privilege to a right." Mr. Hill noted that if the environmental justice movement was created because there was environmental injustice in communities, it makes sense that environmental justice would ensure that these communities have clean land, air, and water. Thus, he stated, the work being done within OEJ is consistent with what the chief theoretician of the environmental justice movement had envisioned. Professor Bullard also insisted, Mr. Hill continued, that there be a law to provide greater assurance that the rights and privileges of the communities would be protected. Explaining further, Mr. Hill made a distinction between a privilege and a right, stating that "a right belongs to you as a member of this society and as a citizen of this country, in contrast to a privilege that can be taken away from someone."

Mr. Hill then described the five principles of environmental justice taken from the First National People of Color Environmental Leadership Summit held in 1991 in Washington, DC. He quoted the five principles as follows:

1. Environmental justice calls for universal protection from nuclear testing and the extraction, production, and disposal of toxic/hazardous waste and poisons that threaten the fundamental right to clean air, water, and food.
2. Environmental justice affirms a fundamental right to political, economic, cultural and environmental self-determination for all peoples.
3. Environmental justice demands the right to participate as equal partners at every level of decision-making, including needs assessment, planning, implementation, enforcement, and evaluation.
4. Environmental justice affirms the right of all workers to a safe and healthy work environment, without being forced to choose between unsafe livelihood and unemployment. It also affirms the right of those who work at home to be free from environmental hazards.
5. Environmental justice protects the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care.

In each of the five principles, Mr. Hill noted the use of the word *right* as opposed to *privilege*. Next, he questioned whether the rights can be protected, secured, or ensured using an EO or environmental laws. He explained that an EO is simply a policy statement made by the President for his administration and can be changed by either that President or any subsequent administration. So it would be improper to base critical environmental justice decisions on an EO, he added.

Mr. Hill noted that Section 6-609 of EO 12898 states that *This order is intended only to improve the internal management of the Executive Branch and is not intended to, nor does it create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity by a party against the United States, its agencies, its officers, or any person* (emphasis added). Furthermore, he quoted Section 1-101 of EO 12898 as follows: *To the greatest extent practicable and permitted by law...each Federal Agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations....* (emphasis added).

Continuing, Mr. Hill stated that a presidential memorandum further explained the language in EO 12898 as follows: Environmental and civil rights statutes provide many opportunities to address environmental hazards in minority communities and low-income communities. Application of these existing statutory provisions is an important part of this administration's efforts to prevent those minority and low-income communities from being subject to disproportionately high and adverse environmental effects. He further commented that the EPA Administrator's memorandum of August 9, 2001, presented a similar view as follows: Environmental statutes provide many opportunities to address environmental risks and hazards in minority communities and/or low-income communities. Application of these existing statutory provisions is an important part of this Agency's effort to prevent those communities from being subject to disproportionately high and adverse impacts, and environmental effects. Mr. Hill stated that he was responsible for drafting both of these statements.

OEJ has carried out a number of activities over the past few years to put the words in EO 12898 and the presidential memorandum into effect, Mr. Hill said. He listed some of OEJ's activities as follows:

In December 2000, Mr. Gary Guzy, OGC, issued a General Counsel Memorandum titled *EPA Statutory and Regulatory Authorities Under Which Environmental Justice Issues May Be Addressed in Permitting* to EPA employees in order to identify laws that could be used to address the concerns of minority and low-income communities.

In November 2001, ELI issued *Opportunities for Advancing Environmental Justice: An Analysis of U.S. EPA Statutory Authorities* at the behest of OEJ.

In June 2002, OEJ asked ELI to issue *A Citizen's Guide to Using Federal Environmental Laws to Secure Environmental Justice* in order to enable communities to better understand provisions of various environmental laws related to environmental justice.

In October 2003, ELI, in partnership with the United Church of Christ and the Southwest Network for Economic and Environmental Justice, published a DVD titled *Communities and Environmental Laws*.

In April 2004, the *Environmental Justice Toolkit* was released and Appendix B of the toolkit contained all the statutory provisions that could be useful in addressing environmental justice issues.

Finally, OEJ has enlisted ELI, in partnership with the Southwest Network for Economic and Environmental Justice, the Southeast Community Research Center, and ADR Associates, to conduct training on environmental laws and ADR every year starting in September 2004 and continuing in 2005 and 2006.

Mr. Hill noted that these OEJ-directed activities were in complete contradiction to OIG's claim that OEJ lacked the strategy and determination to implement environmental justice in all communities.

Mr. Hill went on to explain the difference between the use of civil rights laws and environmental laws, also noting the overlap between Title VI of the 1964 Civil Rights Act (Title VI) and environmental law. Title VI states that Federal funds cannot be used to discriminate on the basis of race, color, or national origin, whereas environmental law protects the rights of all Americans, including minority and low-income communities, he added. Furthermore, civil rights law creates a suspect class based on race and ethnicity (not income) for whose protection that law was created, whereas environmental law does not require a suspect class because it ensures justice for all without regard to race, ethnicity, culture, income, or education, Mr. Hill continued. He concluded that trying to fit a civil rights paradigm into an environmental law paradigm is like trying to fit a round object into a square hole. He then referred to an article that he had published in June 2002 titled *Lemons into Lemonade*, which appeared in *The Environmental Forum*. The article expressed his indignation at certain parties encouraging communities to use civil rights laws to address issues of environmental justice. The article also explained why the Title VI approach would not work for impacted communities but why environmental law, with a twist, would address environmental justice concerns.

Mr. Hill then quoted Mr. Vernon E. Jordan, Jr., Lazard Freres Co., whose keynote address on February 26, 2004, was titled *The Legacy of Brown v. Board of Education: Reflections on the Last Fifty Years (1954-2004)*. Mr. Jordan said *The case presented by Thurgood Marshall and his team was legally and morally irrefutable. Brown exposed the widening gap between State and local laws and long-neglected constitutional rights....Brown is a milestone in America's continuing battle to reconcile the letter of the law with the spirit of the American dream of life, liberty and the pursuit of happiness for all.* Mr. Hill then explained that the civil rights movement taught an important lesson that separate policies, separate standards, and separate EOs cannot be used for one group of people and different laws for everyone else.

This lesson is clearly understood within OEJ, Mr. Hill noted. He summarized the five sequential steps used by OEJ to integrate environmental justice as follows: (1) advice and recommendations through the NEJAC reports; (2) analysis by NAPA; (3) training using the environmental justice 101 workshops in all the EPA regions; (4) conduct an implementation phase using the EPA Administrator's memorandum, environmental justice steering committee, and the OEJ toolkit; and (5) conduct an evaluation involving the OIG review and management accountability and responsibility.

Mr. Hill emphasized that the mission of OEJ is to assist the agency in integrating environmental justice. To accomplish this mission, he stated, OEJ is involved in myriad activities such as:

Training - EJ basic training, EJ media-specific training for permit writers, ADR community training, and inspector training
Stakeholder Communication - EJ regional listening sessions, Federal interagency working group (IWG) revitalization projects, the NEJAC public policy meeting, EJ communication strategies, EJ

community dialogues (conference calls), indigenous community outreach, and the OEJ web site portal

Tool Making - OGC and ELI statutory reviews, regional and Headquarters EJ action plans, the EJ toolkit, *Citizens Guide to Environmental Law*, EJ mapper, and the EJ/GIS work group

Support - the Environmental Careers Organization (ECO) Intern Program and the small grants program

Studies and Preparation of Reports - the NAPA report (Phase I: Federal; Phase II: state; and Phase III: local/municipal), industry best practices report, and NEJAC reports (advice and recommendations)

Finally, Mr. Hill read from the eulogy for Mr. Thurgood Marshall (the attorney who represented Brown in Brown v. Board of Education in 1954) delivered by Mr. Jordan in 1993:

To those of my generation growing up in the segregated south, Thurgood Marshall was more than a crusader for justice. More than a torch bearer of liberty. More than a wise and learned man of the law. He was a teacher who taught us to believe in the shield of justice and the sword of truth. A role model whose career made us dream large dreams and work to secure them. An agent of change who transformed the way an entire generation thought of itself, of its place in our society, and of the law itself. Picture, if you will, the inescapable power of the beacon light Thurgood Marshall beamed into our cramped and constricted community, a community in which the law ordained that we could only attend segregated inferior schools, a community in which the law ordained that our parents be denied the right to vote, a community in which the law ordained segregation in the courtroom and exclusion of our parents from the jury box. It was Thurgood Marshall's mission to turn these laws against themselves. To cleanse our tattered Constitution and our besmirched legal system of the filth of oppressive racism. To restore to all Americans a Constitution and a legal system newly alive to the requirements of justice. By demonstrating that the law could be an instrument of liberation, he recruited a new generation of lawyers who had been brought up to think of the law as an instrument of oppression. Those of us who grew up under the heel of Jim Crow were inspired to set our sights on the law as a career to try to follow him on his journey of justice and equality.

Mr. Hill concluded his presentation by stating that OEJ firmly believes that environmental law can be used as an instrument for change in communities that are exposed to disproportionate environmental risks. He encouraged EPA staff to continue to move forward, continue to address community concerns, and not be demoralized by the OIG report.

Mr. Collette acknowledged that as a new member of the Executive Council, he was not aware of all the history but had nonetheless been offended by the OIG report. He offered his support to Mr. Hill and noted that 60 years before Brown v. Board of Education, the U.S. Supreme Court wrote in Yick Wo v. Hopkins (1886) that the Constitution is color-blind. This, he stated, clearly suggested equal rights for all. He further noted that if the methodology of the OIG report were to be adopted, it would eviscerate the idea of effectively addressing cumulative risks and impacts. He encouraged the NEJAC to unanimously reaffirm the position of the agency and the position of OEJ in response to the OIG report.

Mr. Hill thanked Mr. Collette for his words of support and agreed that this was a watershed event with respect to environmental justice programs in the agency. Mr. Hill indicated that he refused to agree with the flawed notion expressed in the OIG report, both on the personal and professional levels.

Mr. Philip Hillman, Polaroid Corporation and acting chair of the International Subcommittee, thanked Mr. Hill for the tutorial and inquired about the availability of his presentation for distribution to a larger audience. Mr. Hill responded that it would be available both electronically and on hard copy, to anyone who wants it.

Mr. Williams stated that having been selected as a representative for the Tulalip Tribes early on allowed him to have an early involvement with the NEJAC. He wholeheartedly supported Mr. Hill and made a commitment to elicit support from tribal communities for OEJ's efforts.

Mr. Parras agreed with Mr. Hill about the misinterpretation of environmental justice in the OIG report. He expressed concern that OIG refused to discuss its mistaken interpretation with other parties or to allow anyone outside EPA to review the report. He criticized the lack of community awareness of or input in the drafting of the OIG report, which in fact touched upon several community-related issues. He suggested that the draft letter prepared by the chair of the Executive Council in response to the OIG report not be delivered to EPA Administrator just yet. He suggested that the letter be delayed to allow communities to provide input and support for OEJ's work.

Ms. Kingfisher thought that there was some truth in the OIG report because sponsoring agencies such as ORD and OPPTS still have difficulties in understanding environmental justice communities, indicators for environmental justice communities, and how to effectively resolve environmental justice issues. She said that indigenous people still look to EO 12898 in addition to the environmental laws to achieve environmental justice. She declared that she had more questions regarding the signing of the draft letter now than before the presentation.

Mr. Lee joined the discussion to present another perspective on Mr. Hill's presentation in the context of the OIG report. He noted that the issues being discussed are fundamental in nature. He added that most people agree in principle with the OIG report because superficially it would seem that the report was well motivated. However, certain issues that are not apparent in the report have to be teased out, he added. First, he noted that this is a watershed moment.

Second, Mr. Lee pointed out that environmental justice is a complex topic because it addresses issues such as race, class, equality, and justice in society not just in the present but over an extended period of time, as in the case of cumulative risk and impact issues. These issues, if not addressed and understood accurately, would end up being marginalized.

Third, Mr. Lee explained that although the issues of environmental justice have been around for hundreds of years, the concept of environmental justice in a systematic way has only existed since the 1980s. So the understanding of the environmental justice concept is still an evolving issue, and there is a learning curve for all those involved with it, he continued. He pointed to a text box on page eight of the OIG report that quoted Section 1-101 of EO 12898 with added emphasis on certain phrases of the section that OIG wished to highlight. However, the most important point is that OIG did not emphasize the phrases to the greatest extent practicable and permitted by law and disproportionately high and adverse human health or environmental effects, Mr. Lee stated. He continued that this omission indicates that OIG is imposing civil rights concepts on an environmental law paradigm. The civil rights laws afford certain rights and measures of protection to a protected class, whereas environmental law is intended to provide equal rights for everyone, he continued. This misinterpretation limits the effectiveness of the environmental justice movement by limiting the communities that can be helped, said Mr. Lee.

Mr. Lee then related a conversation with former EPA Administrator Bill Riley in 1992, when EPA was about to announce the establishment of the Office of Environmental Equity, the precursor to OEJ. Mr. Riley was asked how EPA would ensure that the Office of Environmental Equity did not become marginalized like the Civil Rights Office did. The answer to that question lies in the fact that although civil rights laws and environmental laws are both important, they each have their own place, he concluded.

Mr. Ken Manaster, Santa Clara University School of Law and acting chair of the Air and Water Subcommittee of the NEJAC, noted that the controversy with respect to the OIG report lies in definition-related problems such as the difficulty in coming up with the precise definitions of important concepts like disproportionate effects, disproportionate impact, and an environmental justice community, among others. He pointed out that it would be illegal for the agency to provide definitions for these terms based

on the EO alone. The other problem that Mr. Manaster described was the term environmental justice itself, which had two different usages. One is the general usage, as in Dr. Bullard's statement that environmental justice is for everyone, which cannot be disagreed with, he continued. The second usage refers to the focus on the problem of disproportionate, unfair, inequitable effects on certain vulnerable populations that the EO addresses, added Mr. Manaster. He suggested that the agency's response to the OIG report clear away all doubts regarding the definition of environmental justice and emphasize that the agency's commitment to environmental justice lies in addressing the concerns of the vulnerable populations that the EO refers to.

Mr. Lee agreed with Mr. Manaster's comments, stating that the letter drafted by Ms. Eady to respond to the OIG report adequately addresses the issues. He also elaborated on the two most important issues related to environmental justice: (1) the idea that low-income and tribal communities and people of color are in need of justice and equality and (2) the question of adopting an effective implementation strategy for this agenda within the agency and integrating it in the decision-making process within the agency.

Ms. Henneke thanked Mr. Hill for his presentation and suggested making the draft letter to the EPA Administrator more relevant to the earlier discussions of the OIG report, including Mr. Lee's comments on the text box on page eight of the OIG report. She also expressed concern that the OIG is concentrating on identifying minority and low-income populations geographically and spatially, which is not in accordance with the EO and should be part of the response letter. She also stated that the letter should specifically mention the cumulative risk report discussed at the current NEJAC meeting, which discusses disproportionality and the social and health sciences associated with that concept. She referred to the spatial segregation of impacted communities in the OIG report as environmental racism and not environmental justice.

Dr. Ramirez-Toro agreed with Ms. Henneke and revealed that her first reaction to the OIG report was that it reflects a backward trend. She explained that in 1952, Puerto Rico adopted a liberal constitution that included the right to a safe environment for all people regardless of race or their ethnicity. But social disparities that exist to this day were not addressed in that constitution, she said. She expressed the need for a better Federal law that would ensure environmental justice for all in Puerto Rico, especially in the dual system of governance.

Dr. Sawyers revealed that in his three and a half years as the environmental justice Coordinator for the State of Maryland, no discussion was based on using the EO; rather, communities always wanted to know which environmental law could apply. The EO is used only as a guidance, he said. He suggested that the response to the OIG report be treated as a platform and an opportunity to clearly define the controversial terms mentioned earlier by Mr. Manaster.

Ms. Nelson expressed an interest in the next steps that the NEJAC planned to take in ensuring a timely response to the OIG report. She suggested including the cumulative risk report with the letter to the EPA Administrator.

Ms. Eady responded to Ms. Nelson by saying that the NEJAC did not yet have a consensus and that the comments of Ms. Kingfisher and Mr. Parras would need to be addressed before the letter is sent to the EPA Administrator.

Mr. Handy emphasized that the letter to the EPA Administrator should highlight the theme of the discussion and should focus on the advantages of EO 12898 in addition to environmental law. He added that the EO was an early step in the process of focusing attention on the issue of environmental justice and with limited resources, it was important to have that focus.

Mr. Parras indicated that he supported the NEJAC and its agenda. However, he was concerned that communities were being excluded from the process. He recommended writing a generic letter stating all the facts from a community perspective and then obtaining the signatures of community members. This

action would provide much-needed community support for the NEJAC and for the agency's position on the issue.

Ms. Kingfisher thanked Mr. Manaster for his earlier clarification of the issue of the EO and environmental law. She added that it would be helpful to prepare a cover letter to accompany the OIG report when it goes out to the communities in order to help them better understand the background and history of the environmental justice process.

Mr. Lee noted that the NEJAC needs to be cognizant of some important process issues that need to be addressed. He continued that the first question is whether the NEJAC as an advisory committee would like to issue a quick response or a perfect response, noting that a perfect response would require a longer time frame. Second, as members of different communities, the members of the NEJAC would have to decide what other community outreach steps they would like to pursue in an individual capacity, Mr. Lee added. This task should be separate from the formal response of the advisory body, he clarified. Third, Mr. Lee addressed the matter of encouraging communities to think about the issues. This process is supported by OEJ and the NEJAC, he continued, and OEJ would be willing to help educate communities about these issues.

Ms. Espinosa stated that it is important to send the letter to the EPA Administrator after reaching a consensus and redrafting the letter based on comments from the NEJAC members. She also supported Mr. Parras's request for a letter from the communities. This would be an important method of educating the communities and obtaining their support for environmental justice work, she added. Finally, Ms. Espinosa noted that a simple fact sheet explaining the highlights of the OIG report would be useful for the communities.

Mr. Lee asked the NEJAC members to study the draft letter to the EPA Administrator providing OEJ's response to the OIG report and to submit comments and suggestions for improvement to communicate a complex message effectively. Ms. Nelson replied that the current response letter is too complicated and should be condensed to address not more than three critical issues. Ms. Espinosa agreed with Ms. Nelson about identifying the three issues of concern and asked Mr. Hill about the deadline for the submittal of the response. Mr. Hill stated that the agency has to respond to the final OIG report by June 1, 2004, and would base its response on the draft letter handed out earlier to the NEJAC members. He assured the members that the official response would not deviate from the existing format.

Mr. Collette once again emphasized that the response should stress that if the recommendations in the OIG report are implemented, environmental justice issues would be marginalized and minimized in this country forever. Finally, Mr. Lee asked the NEJAC members to provide their input on the definition of environmental justice communities and encouraged them to continue to think about this issue even after the end of the meeting.

4.3 Presentation by the Federal Facilities Work Group of the Waste and Facility Siting Subcommittee of the NEJAC

Mr. Lee introduced the draft report titled *Environmental Justice and Federal Facilities: Recommendations for Improving Stakeholder Relations between Federal Facilities and Environmental Justice Communities*, which was submitted to the Executive Council by the Federal Facilities Work Group of the Waste and Facility Siting Subcommittee of the NEJAC. He explained that this draft report was a result of an issue raised at the NEJAC meeting in 2000 regarding Federal facilities and environmental justice. The work group was chaired by Dr. Mildred McClain, Harambee House Inc., and was supported by the EPA Federal Facilities Reuse and Restoration Office (FFRRO), which is part of the Office of Solid Waste and Emergency Response (OSWER), Mr. Lee continued. He thanked Ms. Trina Martynowicz, EPA OSWER, for her service as DFO of the work group and for her commitment and dedication to the effort.

Dr. McClain and Mr. James Woolford, Director, EPA Federal Facilities Restoration and Reuse Office, presented findings and recommendations from the draft report.

Dr. McClain began by thanking Mr. Kent Benjamin, OSWER and DFO for the Waste and Facility Siting Subcommittee of the NEJAC; Ms. Martynowicz; and Dr. Sawyers for their support to the Federal Facilities Work Group. She stated that ever since the inception of the NEJAC, communities across the country that have been impacted by Federal facilities have looked to the NEJAC for guidance, support, and help in improving relations between the communities and the authorities in charge of the facilities. Dr. McClain noted that the draft report is historical in nature and is the first substantive document on Federal facilities and the complex issues existing around these facilities.

Dr. McClain then outlined the recommendations in the draft report. She explained that all the recommendations reflect the needs of five communities in close proximity to five Federal facilities: Kelly AFB, Fort Wingate Army Depot, DOE Hanford site, the Memphis Depot site (a former Department of Defense [DoD] facility), and the DOE Savannah River site. The first recommendation addresses enhanced community assessments and communication methods needed to improve cultural sensitivity for environmental justice, she said. Dr. McClain stated that the second recommendation concerns community access to adequate health services and the third recommendation reflects the need for additional resources for capacity-building. She hoped that these recommendations would enable the communities impacted by the Federal facilities to substantively participate in the decision-making processes for these sites. The fourth recommendation focuses on the need for improved and effective communication between the facilities the regulators, and in environmental justice communities, and the final recommendation expresses the need for new and consistent opportunities to help members of environmental justice communities influence decisions that impact their daily lives.

Dr. McClain added that although the recommendations are not radical in themselves, they are important to the communities because they may improve community living conditions. She then placed three considerations before the Executive Council for deliberation: (1) establishing a work group specifically tasked to review Federal facilities in Alaska, as budget constraints did not allow case studies for Alaska to be included in the draft report; (2) designating a seat for Federal facilities on the Executive Council of the NEJAC; and (3) setting up a Federal advisory committee to examine all issues related to Federal facilities.

Mr. Woolford encouraged the NEJAC to provide a critical review of comments on the draft report. He thanked Dr. McClain for her dedication in addressing critical environmental justice issues at Federal facilities. He recalled his first meeting with Dr. McClain at a session of another FACA group 10 years ago, the Federal Facilities Environmental Restoration Dialogue Committee, which made several critical recommendations about improving community involvement and public participation in Federal facilities. He pointed out that the draft report clearly indicates that there is still room for improvement. He thanked Mr. Benjamin and Ms. Martynowicz for representing EPA in the effort.

Ms. Nelson commended the Federal Facilities Work Group for its effort in bringing out the draft report. She inquired as to how the NEJAC would ensure follow-up on the recommendations and who would be authorized to establish a work group to review Federal facilities in Alaska.

Mr. Lee responded to Ms. Nelson, stating that EPA would be required to review the five recommendations in the draft report in addition to the three specific considerations with respect to their implementability. He also said that the NEJAC cannot establish work groups because it is not an independent body but a body established under a charter by the agency. Hence, he stated, the agency would have to establish a new work group. The same is true with respect to a seat dedicated to Federal facilities on the Executive Council, he added. Furthermore, Mr. Lee explained that the creation of a Federal advisory committee would require the agency to establish a charter.

Ms. Nelson further inquired whether the NEJAC would need to endorse the recommendations to the EPA Administrator. Mr. Lee explained that the process requires the Federal Facilities Work Group to formally

transmit the draft report to the Waste and Facility Siting Subcommittee, which after its review would submit it to the Executive Council for comments and deliberations. At this point, it would be the responsibility of the Executive Council to deliberate and vote on the draft report and transmit it to the EPA Administrator.

Ms. Eady inquired whether the process of incorporating comments and revisions would be ongoing during the balloting process, to which Mr. Lee replied in the affirmative.

Dr. Sawyers thanked the Federal Facilities Work Group and the DFO for their hard work during the preparation of the draft report and requested that members of the Executive Council submit additional comments in writing to members of the work group within two weeks following the NEJAC meeting. Mr. Lee agreed to delay the OEJ ballot for two weeks to allow all comments to be addressed, but he reminded the Executive Council members to be cognizant of the resource expenditures involved in extending timelines. Dr. Sawyers concurred with Mr. Lee and noted that the minor deviation from the rules would allow certain concerns about the draft report to be effectively addressed. Ms. Eady clarified that the Executive Council would communicate with the work group and give it an additional two weeks. Dr. Sawyers added that in the formal process, all members of the work group would be notified of the new deadline; comments would be accepted until May 15, 2004, and immediately addressed; and the draft report would be handed over to the Executive Council.

Ms. Nelson pointed out that the NEJAC commended the draft report, and she recommended that the ballot process occur during the two-week comment period to allow timely release of the report. Mr. Woolford indicated that he would prefer to focus the agency's resources on responding to the thrust of the draft report, which includes the five communities referred to in the report and their issues in addition to the five recommendations.

4.4 Presentation by the Meaningful Involvement and Fair Treatment Work Group of the Indigenous Peoples Subcommittee of the NEJAC

Mr. Williams, acting chair of the Indigenous Peoples Subcommittee of the NEJAC, and Mr. Daniel Gogal, EPA OEJ and DFO for the Indigenous Peoples Subcommittee, presented action items from the preliminary working draft report titled *Meaningful Involvement and Fair Treatment by Tribal Environmental Regulatory Programs*, which had been prepared by the Meaningful Involvement and Fair Treatment Work Group of the Indigenous Peoples Subcommittee.

Mr. Gogal began the discussion by stating that the working draft report clearly reflects two fundamental concepts related to environmental justice: meaningful involvement and fair treatment. He noted that this issue has been before the Indigenous Peoples Subcommittee ever since the subcommittee was instituted in 1996. He then introduced Mr. Williams, highlighting his vast experience relative to this issue, including being the first Director of EPA's American Indian Environmental Office (AIEO) and his current role as the Commissioner for Natural Resources for the Tulalip Tribes. He asked Mr. Williams to talk about the evolution of the issue of meaningful involvement and fair treatment for indigenous peoples and his understanding of the importance of the Indigenous Peoples Subcommittee and agency focus on this issue. Mr. Gogal continued that it was important to understand that three sovereign governments exist in the United States: Federal, state, and tribal governments.

Taking over from Mr. Gogal, Mr. Williams stated that Indian country, its jurisdiction, and its sovereignty are under attack, especially over land and resource issues within the boundaries of Indian reservations. He added that Indian country was significantly challenged in the mid-1990s by a State of Washington senator on the issue of non-Indian ownership of lands within reservation boundaries, which are referred to as checkerboard lands between the United States and the tribes. This senator wanted to demonstrate that tribes could not successfully manage and lacked the appropriate jurisdiction to control these checkerboard areas and wished to impose Federal or state law because due process was unavailable to nontribal residents within reservation boundaries, Mr. Williams continued, adding that this attack was based purely

on an economic agenda involving procurement and management of water resources within the boundaries of tribal lands. The tribes countered this challenge in Congress by presenting evidence and succeeded in convincing the committee that the issue was more complex than it was being portrayed, Mr. Williams stated. He continued that the commitments made to Congress at that time, including thorough review of due process in Indian country, are still in the process of being fulfilled. The working draft report is a step in that direction, he noted, and added that it provides an avenue through EPA to demonstrate that a review has been done to address relevant issues and role of the tribes.

Mr. Williams recalled that when AIEO was first opened under EPA Administrator Carol Browner, tribal members wished to address issues of meaningful involvement and due process on Indian lands. At that point, he continued, his response was similar to that of former EPA Administrator Bill Ruckelshouse, who believed that the priority was to secure the governmental role of the tribes and establish their jurisdiction on issues of air, water, and other resources before pursuing meaningful involvement and due process issues. This priority was important, he continued, because many states, including Arizona, Utah, Montana, and Wyoming, challenged tribal jurisdiction over air and water. Eventually the agency and tribes did succeed in securing tribal rights, he added, and it is now time that the issue of meaningful involvement and due process be resolved.

Mr. Williams stated that many tribes are offended that the subject is being reviewed too late, and in his opinion, had meaningful involvement and due process been available to the tribes in 1776, the country would be different both in terms of government and land ownership. He noted that the Bureau of Indian Affairs in the Department of Interior lost billions of dollars on trust resources, leading the courts to rule that the United States has failed the tribes and to call for interment of certain authorities for withholding and destroying evidence.

Mr. Williams said that the Indigenous Peoples Subcommittee discussed the working draft report and received comments on it from tribes across the country, including four presentations from Alaskan Natives; a presentation from the Director of the National Tribal Environmental Council (NTEC), which had representatives from 115 tribes; and a presentation from the representative of the Makah Tribe in the State of Washington. The Director of NTEC told the subcommittee that many members of the tribe could not read beyond the first page of the working draft report because they were offended by the EPA charge to the issue and by its description of Indian country and Indian governance, Mr. Williams stated.

Mr. Williams pointed out that many subtle differences exist in traditional tribal ways. For example, he said, the consensus-based process for decision-making that exists in the Tulalip Tribes, may be different in other tribes trying to accommodate the requirements under NEPA or the Tribal Environmental Policy Acts (TEPA). The working draft report articulates this communication process not only within tribes but also between tribes and nontribal residents on tribal lands and presents models of current tribal practices, he said. He revealed that the members of the subcommittee intended to meet with several tribal organizations to explain the contents of the working draft report.

Furthermore, discussions in the subcommittee meeting revolved around cumulative risk and impact issues and how to incorporate the discussions in the Executive Council meeting as well as the public comments offered on the working draft report, Mr. Williams reported. He outlined the action items that the subcommittee worked on, such as clearly defining cultural and spiritual tribal traditions, procuring comments on the working draft report and setting a timeline for completion of the report, and working with Alaskan Natives to nominate a representative to mediate with the NEJAC and the subcommittee. He stated that Ms. Pemina Yellow Bird, North Dakota Intertribal Retirement Committee, has offered to help refine the definitions in the working draft report.

Mr. Gogal then reported on the deadlines for obtaining comments on the working draft report and on expectations for the report. He stated that an initial letter of intent had been sent to all Federally recognized tribes and the tribal chiefs as well as the environmental directors of the tribes in November 2003. The letter indicated that the subcommittee would focus on the issue of meaningful involvement of

tribes and requested input and suggestions to be included in the working draft report. He also encouraged the NEJAC members to provide their comments to further refine the working draft report. He requested that comments be submitted by June 15, 2004, which would allow time for the subcommittee to incorporate the comments into the working draft report. The final draft report would be submitted to the Executive Council for review, and the final report would be ready in September 2004, he added.

Finally, Mr. Williams thanked Ms. Jeanette Wolfley, tribal attorney, for assisting with the preparation of the working draft report.

Ms. Nelson recommended that the work group consider including an executive summary or graphically highlighting the specific recommendations in the working draft report, and Mr. Williams concurred. Ms. Eady suggested that the recommendations be summarized in the introduction section. She also asked how much time was available for commenting on the working draft report. Mr. Gogal replied that June 15, 2004, is the deadline for comments and that a revised working draft report would be available by July 15, 2004, for submittal to the Executive Council.

Ms. Espinosa thanked Mr. Williams for the working draft report, which defined the relationship between environmental justice, EPA, and the indigenous peoples in this country. She stated that this was an attempt to clearly define environmental justice communities, in contrast to the OIG report finding that such an effort was lacking at OEJ. She also suggested using some of the discussions in the working draft report in the cumulative risks report to further strengthen the section on tribal issues. Mr. Williams agreed to work with Ms. Espinosa on expanding the section on tribes in the cumulative risk report, especially regarding use of collaborative processes in decision-making. He cited the example of the Tulalip Tribes and their collaboration with nontribal residents of the reservation. He stated that within the boundaries of the reservation, the population includes about 3,500 tribal members and over 6,000 nontribal residents. Historically these communities had a poor relationship, especially with respect to land control, Mr. Williams added. As the Tulalip Tribes became more adept at instituting regulatory controls, they invited nontribal residents to participate in the Land Use Planning Committee meeting, which reduced the conflict and won the support of the nontribal residents.

4.5 Presentation by the Air and Water Subcommittee of the NEJAC

Ms. Subra discussed the draft report titled *Guide and Recommendations for Improving the Integration of Environmental Justice into Environmental Permitting*, which was prepared by the Air and Water Subcommittee of the NEJAC. She also presented highlights from the meeting of the subcommittee.

Beginning with the highlights of the Air and Water Subcommittee meeting, Ms. Subra stated that Mr. Weinstock described the CARE program and agreed to consider using the draft permitting guide as a resource for the CARE program. She reported that Mr. Mike Shapiro, Deputy Assistant Administrator, EPA Office of Water, focused his presentation on two ongoing efforts in the Office of Water relating to communities: (1) the establishment of national measurements to improve permitting, including monitoring the status of noncompliance and water discharge permits, and (2) the establishment of a state self-assessment process. Both these efforts are currently undergoing internal review, Ms. Subra noted. She continued by discussing another ongoing effort at the Office of Water, the establishment of a smarter permitting process that sets a goal that 95 percent of the highest-priority permits and 90 percent of all other permits be current. The State of Louisiana, she noted, had a huge backlog because of expired permits, and thousands of new permits are waiting to be reviewed and issued.

Ms. Subra then reported that Ms. Elizabeth Cotsworth, EPA Office of Radiation and Indoor Air, gave a presentation on indoor air triggers, including cockroaches, dust mites, pet dander, and second-hand smoke, for conditions such as asthma in children and other reactionary diseases. Ms. Cotsworth also gave an advance notice of rule-making that would allow 20 permitted RCRA Subtitle C hazardous waste

landfills to accept low-level radioactive waste, which at present only three facilities in the United States are allowed to accept, Ms. Subra stated.

Ms. Subra also reported that Mr. Bob Harnett, EPA Office of Air Quality Planning and Standards, gave a presentation on an air quality index that EPA would use on a national level to electronically notify interested community members and organizations of unhealthy air quality in their area. She then briefly touched on the draft permitting guide effort headed by Mr. Manaster, which would provide recommendations for integration of environmental justice into the environmental permitting process. The subcommittee had identified three main categories for the draft permitting guide, which include siting, public participation, and the permitting process itself, Ms. Subra added. She stated that public participation would be encouraged in the permitting process, including the siting, the actual permitting process, and enforcement and compliance. The draft permitting guide would be completed by June 2004 and would be available to the Executive Council for consideration, review, and comment after a technical review within the agency, Ms. Subra concluded.