



National Advisory Council for Environmental Policy and Technology (NACEPT) Meeting

March 26 - 27, 2012

**EPA East Building
1201 Constitution Ave, NW
Washington, D.C. 20004**

FINAL MEETING SUMMARY

MONDAY, MARCH 26, 2012

Welcome and Introductions

Mark Joyce, U.S. Environmental Protection Agency (EPA), Associate Director of the Office of Federal Advisory Committee Management and Outreach (OFACMO) and Acting Designated Federal Officer (DFO) for the National Advisory Council for Environmental Policy and Technology (NACEPT);

*James H. Johnson, Jr., NACEPT Chair; and
Cynthia Jones-Jackson, EPA, Acting Director, OFACMO*

Mr. Joyce called the meeting to order at 9:15 a.m. and welcomed the Council members.

Ms. Jones-Jackson welcomed the members of the NACEPT and thanked them for the work they have done on behalf of the EPA.

Dr. Johnson welcomed meeting participants and noted that they should ask questions and fully engage in the meeting discussions. He said that the Council represents a diversity of experiences and perspectives. During the meeting, the NACEPT will discuss the advice letters that have been developed and consider a new charge. The new charge focuses on sustainability. The Council has crafted charge questions and they need to be finalized.

Overview and Discussion of NACEPT's Fourth and Final Advice Letter on EPA Workforce Planning: *Strategies to Attract and Retain Superior Executive Leadership Talent*

*Dr. Olufemi Osidele, Senior Research Engineer, Southwest Research Institute, and
Sara Kendall, Vice President of corporate affairs, Sustainability & EHS Weyerhaeuser Company,
NACEPT Leadership Workgroup Members
Craig E. Hooks, Assistant Administrator, EPA Office of Administration and Resources Management*

Dr. Osidele thanked NACEPT members for their attendance. In the advice letter on EPA workforce planning, there are five charge subtasks: (1) scientific and technical competencies to meet tomorrow's challenges; (2) leadership capabilities and culture for "One EPA"; (3) strategies to obtain and retain scientific and technical expertise; (4) strategies to ensure diversity; and (5) strategies to attract and retain superior executive leadership talent.

Regarding leadership development, the NACEPT charge is to identify how best to attract and retain leaders and senior executive service (SES) employees to lead and support an evolving workforce. In the discussion, the NACEPT addressed five aspects of leadership development: (1) organization transformation, (2) leadership competencies, (3) succession planning, (4) external sourcing/recruitment, and (5) mobility. The NACEPT also emphasized the importance of achieving the “One EPA” objective, ensuring diversity and inclusiveness, and promoting effective collaboration within the EPA and with its stakeholders.

An observation in the letter was that the EPA’s five leadership principles identified in its strategic plan provide a solid foundation for leadership development (outcome orientation, shared understanding, collaborative relationships, inclusiveness, ownership). Other observations include: multiple approaches to succession planning throughout the agency do not advance the “One EPA” principle; the EPA needs more focus on succession and transition planning; and the SES mobility program provides benefits in lessening silo mentalities, broadening interdisciplinary thinking, advancing a “One EPA” culture, providing workforce satisfaction and improving diversity.

There were several perspectives mentioned in the advice letter. Periodic review of needed leadership competencies would assist in identifying and filling gaps early. Assessment of the necessary skills for SES staff would enable the EPA to identify and pursue appropriate developmental activities with individual SES candidates. Alignment across the EPA would encourage a shared understanding of succession planning issues and collaborative development of effective solution methods. Innovative, practicable measures are required to identify outstanding leadership talent for SES candidate pools. Finally, diversity and inclusion are essential to achieving the EPA’s mission.

The four NACEPT recommendations are: (1) accelerate organizational transformation; (2) strengthen basic leadership skills in SES candidates and fund the formal SES candidate development process; (3) ensure effective succession planning and external hiring for departments; and (4) enhance career management planning to encourage mobility.

Ms. Kendall mentioned three points that were excluded from the letter. The first was that the EPA has had extensive effort in this area and has attained a strong foundation. The EPA is itself a great source of learning experiences to assist in the forward progression of agency SES planning. A second point was that programs that encourage mobility enhance other EPA objectives (e.g., “One EPA” culture). A final point was that it is imperative for senior management to understand and drive these recommendations. As the EPA demographic ages, it becomes increasingly important for succession planning because although the EPA has an excellent retention rate, many individuals are approaching retirement.

Discussion

Mr. John DeVillars (BlueWave Capital, LLC) supported the concept of mobility and thought that it could be implemented more robustly at the EPA.

Dr. Johnson reminded the Council that the recommendations are independent and that they should not reflect the EPA’s viewpoint solely.

Mr. Hooks commented that the EPA has implemented many recommendations from the first letter. The diversity inclusion work plan has been sent to the Office of Policy and Management (OPM). He conceded that there is concern about the increase in the number of EPA staff retirements and that this needs to be addressed more fully by the agency. A large percentage of SES employees have moved in the past 3 to 4 years. The informal mechanism for this is functional, and there are nearly 100 applications for each SES job advertised in the agency. The application process must be simplified because 75 percent of applicants are being rejected due to an overly complex application system. Work is being done to simplify agency

announcements, and the EPA is collaborating with the U.S. Department of the Interior (DOI) to determine the feasibility of using the DOI web-based system for advertising SES positions.

The EPA OARM is committed to working on succession management options that are successful by examining best practices in the federal government sector. These options will need to be assessed with consideration of fiscal priorities and constraints.

Dr. Johnson commented that Mr. Hooks' statements are highly current and accurate because he interacts directly with EPA Administrator Ms. Lisa Jackson. The Administrator wants the Council members to be open and creative in their recommendations but to recognize that the agency rejects some recommendations because of financial constraints. Mr. Hooks agreed that Administrator Jackson follows the work of the NACEPT closely and wants to see many of the Council's recommendations implemented.

Mr. William Ross (Duke University) questioned the connection of interagency personnel agreements (IPA) to mobility. Mr. Hooks commented that IPAs currently are being examined because difficult budget choices are being made and because the IPAs involve financial decisions.

Ms. Kendall asked for further information on the ability of the EPA to hire external individuals for leadership positions. External people can increase the agency's diversity profile. Mr. Hooks conceded that this continues to be a challenge because the current system was established for the hiring of mid- to senior-level ranks from within the agency. Hiring individuals with talent from outside the EPA will require planning and modifying the EPA job advertisement process.

Mr. DeVillars questioned the extent to which the mobility issue principle is being applied to different areas of the EPA (not merely SES). Mr. Hooks responded that it has been applied at various EPA levels; however, it never has been implemented agency-wide. Ms. Bridgett Luther (Cradle to Cradle Products Innovation Institute) commented that with 60 percent of the EPA workforce eligible to retire in the near future, the agency might face a significant loss of the skill sets necessary for the EPA to function effectively. She thought that focusing on skill sets that are anticipated to be lost through retirement was a manageable way to approach this problem.

Mr. Yalmaz Siddiqui (Office Depot) asked, given the transition to sustainability, how can a bridge be placed between sustainability and leadership issues? Mr. Hooks replied that the agency currently is working on such a bridge. A webinar series might be developed on the topic of sustainability and how to make that concept integral to all EPA programs.

Overview and Discussion of the NACEPT's Final Advice Letter: *Technologies for Environmental Justice (EJ) Communities and Other Vulnerable Populations (VP)*

*Dr. DeWitt John, Distinguished Lecturer in Environmental Studies, Bowdoin College, and
Dr. Mark A. Mitchell, President, Mitchell Environmental Health Associates, NACEPT Vulnerable
Populations Workgroup Co-Chairs*

Lek Kadeli, Acting Assistant Administrator, EPA Office of Research and Development (ORD)

Dr. Fred Hauchman, Director, Office of Science Policy, ORD

Dr. Mitchell explained that multiple advice letters were combined into one final letter. The charge to the NACEPT for this letter was to provide advice on the identification and use of existing or new technologies to better protect VPs and include "game-changing technologies" that can deliver relevant, actionable technology to all parties. Six case-study communities were examined (i.e., Hartford, CT [trash-to-energy incinerator], Rubbertown, KY [chemical corridor], Toledo, OH [brownfields], Graniteville, SC [train wreck], Salish Kootenai College, MT [mold in school and housing], and Lower Passaic River, NJ [contaminated sediments]) in the letter. It includes summaries of the issues in these communities and how technology would help address them.

The three types of technologies that are the most important for vulnerable communities were identified as: (1) detection, monitoring and assessment technologies; (2) communication technologies; and (3) solution technologies (i.e., technological solutions to correct environmental problems). The technologies outlined will require a range of instruments (e.g., portable and real-time sensors to provide information on ambient pollution). This instrument range will allow residents to have information that can be used to protect themselves from localized environmental exposures and will give first responders needed information for handling environmental/hazardous issues. Additionally, less-costly alternatives to cleanup problems, such as brownfields or water contamination, must be identified through further research.

Dr. John reviewed the recommendations proffered in the letter: (1) the ORD should enter into partnerships with EJ/VP communities to develop and deploy these new technologies; (2) the ORD should establish a public-private task force to provide strategic advice and supplement the EPA's technical expertise; (3) the EPA should reach out to other federal agencies; (4) the EPA should provide a biennial update to EJ/VP communities; and (5) the EPA must strengthen its capabilities to support monitoring, reporting and mitigation activities in EJ/VP communities.

Discussion

Dr. Johnson clarified that this advice letter considers both science and technology with regard to VPs. Mr. Kadeli shared with the NACEPT that Administrator Jackson has taken a leadership role in the expanding discussion on environmental and public health issues. In doing this work, EPA officials are considering perspectives that previously were not considered. This coincides with a shift in the EPA's research alignment with the new EPA priorities. The ORD publishes research in scientific peer-reviewed journals, but in addition the ORD is interested in increasing the responsiveness and relevance of its research. To better connect with EJ/VP communities, innovation and "game-changing" technologies are needed to move this field forward. He asked the NACEPT about how the ORD can utilize technologies that already are in place.

Mr. Kadeli explained that the ORD is interested in engaging people to observe environmental exposures. Increased information, transparency and communication are imperative to the agency because the American public must have the information that it requires. He asked for advice on how data should be presented to the public.

Dr. Hauchman thanked the NACEPT for developing the letter. He explained that there are two types of advisory reports received by the ORD. The first type involves an intensive analysis of a problem and the output is a list of recommendations that the ORD can examine to determine what it is and is not implementing currently as well as what should be added or deleted. The second type involves the ORD receiving recommendations to improve programs and implement changes that are significant leaps forward. Dr. Hauchman said that the NACEPT produces the second type of report because their reports do not allow for a simple check list followed by "business as usual." These recommendations are significant changes that are systematic, with special considerations given to EJ communities. The ORD is working to implement recommendations; however, engagement at the state and local levels is required.

Mr. Ross asked about the role of geographic information system (GIS) mapping in these recommendations and Dr. Johnson suggested postponing discussion of this question until later in the day.

Dr. Osidele applauded the EPA's focus on this area and these community groups. The agency is providing them with a meaningful role. Dr. Giovanna Di Chiro (Nuestras Raices, Inc.) said that as a new NACEPT member, she knows that real-time monitoring and inclusion assessment have been undertaken. As a recipient of level one and two EPA Community Action for a Renewed Environment (CARE) grants, Dr. Di Chiro stated that many community members live below the poverty line and what energizes them is being able to be involved proactively, instead of reactively. Instead of monitoring what currently is in existence, she suggested plans and actions to prevent problems. Sustainable "game-changing"

technologies/actions are needed. Dr. Di Chiro also mentioned the traditional environmental knowledge of indigenous peoples concerning agricultural and energy production. This knowledge currently is used in community gardens via cultivar selection and irrigation techniques; however, this knowledge should be more broadly considered and utilized.

Mr. Kadeli agreed that traditional knowledge is based on centuries of observation and insight which makes it useful and necessary. In EPA Region 9, the ORD currently is working to build regional knowledge into one of its models in a pilot program.

Dr. Johnson thanked the EPA participants who were able to attend the NACEPT meeting, if only for a portion of the agenda.

Public Comments

Dr. Johnson called for public comments and none were offered.

Overview of Discussion of NACEPT's Charge and First Draft Advice Letter on Sustainability and the U.S. EPA

Dr. James Johnson, Jr., NACEPT Chair

Robert Olson, Senior Fellow, Institute for Alternative Futures, NACEPT Sustainability Workgroup Member

Bicky Corman, Deputy Assistant Administrator, Office of Policy, EPA

Ramona Trovato, Principal Deputy Assistant, Administrator for Management, ORD, EPA

Matt Bogoshian, Senior Policy Counsel, Office of Chemical Safety and Pollution Prevention, EPA

Ms. Trovato said that examining sustainability from the science and technology perspective is vitally important to the agency. Mr. Bogoshian added that sustainability is not an “either/or” suggestion. Regulatory law requirements are mandatory and a minimum standard must continue to be policed; however, garnering interest in pollution prevention will draw people to a higher level of performance.

Ms. Corman commented that gender equality is noticeably absent from sustainability discussions. Regarding the National Academy of Sciences (NAS) report, *Sustainability and the U.S. EPA* (commonly referred to as “The Green Book” and heretofore referred to as the “NAS report”), she indicated that there has been no movement yet to accomplish its recommendations. Administrator Jackson has provided three messages that must be considered when responding to the NAS report: (1) stakeholder input must be examined prior to the EPA making decisions on how to proceed; (2) while the EPA deliberates, activities that the agency already is engaged in will continue; and (3) the NACEPT should generate a response to the NAS report. During the next 1.5 years, a series of recommendations will be provided to Administrator Jackson; the recommendations will be guided by the appendix from the NACEPT draft letter on sustainability.

Ms. Deoohn Ferris (Sustainable Community Development Group) stressed the need to prioritize low income communities when in environmental health planning because not all communities start in the same state due to varying economic and community factors.

Mr. Olson said that the charge to the NACEPT was to advise the EPA on whether the agency should adopt the NAS recommendation to incorporate sustainability into its decision-making process. The NACEPT agrees that this is a direction that should be taken by the EPA. The benefits to the agency of incorporating sustainability into its decision-making process is three-fold: (1) it will encourage a search for innovative “win-win triple bottom line” approaches; (2) it will build the EPA’s capacity to work with other organizations in dealing with complex, crosscutting problems; and (3) it will reinforce a focus on sustainability among all stakeholders.

The NACEPT charge also includes the question of how the EPA should include sustainability in its vision and mission. Mr. Olson explained that a specific, dedicated vision about sustainability is required, and this vision must be more than a tagline; it must be comprehensive enough to be a part of the future that the EPA is moving towards. Key points for a sustainable vision are: (1) simultaneously promote as much as possible environmental, social and economic goals; (2) protect ecological foundations; (3) ensure that everyone enjoys protection; (4) meet current needs in ways that ensure future generations can meet theirs; and (5) facilitate the transition to environmentally superior technologies. Additionally, a “cradle-to-cradle” approach is needed because the current paradigm is a design failure. The social aspects of sustainability must be emphasized. “Whole system” thinking can occur only when individuals with backgrounds in more than one discipline are hired. Tools must be developed for complex programs and understanding tradeoffs (i.e., a sustainability toolbox). Indicators of progress and periodic reports can serve as a dashboard of progress. Dealing with problems by using foresight is preferable to handling problems when they have become large, complex and cumbersome. Parallel to the recommendations in the NAS report, the EPA needs a whole framework of sustainability thinking.

Discussion

Mr. Ross asked for further detail on how the EPA should move beyond risk management and towards sustainability. Dr. Johnson explained that risk management minimizes harm; however, sustainability maximizes benefit. Mr. Olson added that moving into all aspects of sustainability makes the concept move beyond itself.

Ms. Alison Taylor (Siemens Corporation) requested clarification on the environmental scanning system/process. Mr. Olson explained that 10 years ago, the ORD produced a report called “Beyond the Horizon” that called on the EPA to develop a horizon-scanning system to identify emerging environmental problems. This is a preventative approach.

Ms. Kendall commented that sustainability represents a large amount of innovation by many entities (e.g., local government, business, nongovernmental organizations [NGOs]). The EPA should align with what already is being done. The agency is not required to reinvent the concept of sustainability but instead should build on the foundation that has been established already.

Mr. Siddiqui questioned the scope of the NACEPT sustainability charge and Dr. Johnson clarified that the objective is to enable the agency to be more sustainable.

Ms. Corman said that there is an Executive Order directing agencies to become more sustainable by reducing carbon emissions, among other things. The NAS report addresses how the EPA handles external relationships. The recommendations, therefore, might have a global component and enhance economic competitiveness. Regarding the NACEPT draft advice letter, Ms. Corman thanked the NACEPT members for their hard work. She said that there are ideas presented that will assist the EPA in making the sustainability vision into something more operational. Measuring progress is important and deciding what progress to follow is important. She mentioned that developing a sustainability toolbox and dashboard of progress is complicated, and she suggested that the EPA would benefit from assistance in that area.

Mr. Bogoshian recommended that the NACEPT list examples as the Council forms its recommendations. The examples should be positive and challenging. In systems design, there is an example of *Bacillus thuringiensis* (Bt) being modified to reduce the application of pesticides to plants. That is a systems-design example and the NACEPT should devise similar examples. There is a new effort at the federal level to move towards a holistic view of the manufacturing sector in the United States (<http://www.e3.gov/>). An integrated effort outside the EPA silo is imperative, but challenging. The EPA ENERGY STAR program is an example of a success, as well as the burgeoning Safer Chemical Labeling program.

Ms. Trovato commended the NACEPT on its work and said that the EPA has been coming together across regions and programs to conduct listening sessions and compile listening session materials to assist in considering how best to move forward. The NACEPT letter is vital to observing priorities as the agency moves forward. The ORD focuses on six areas regarding sustainability: air, water, waste, chemicals, homeland security and human health risk assessment. The ORD is interested in working with communities on the concept of sustainability in economic, social, environmental and healthful areas. Many communities do not have resources for environmental issues because schools, police and firemen come first. It will be necessary to provide communities with a toolset so that they can make informed decisions.

Dr. Johnson commented that it is unlikely that the NACEPT will embark on developing a definition for sustainability. Therefore, a working definition should be identified for the Council so that it can move forward.

Ms. Kendall asked if the EPA listening session material will be made available to the NACEPT. Ms. Corman responded that the notes were not intended to be made public and the summary will be the basis of their recommendations. The listening sessions are not yet completed, but they will be formally completed in April or May, 2012, to ensure that the recommendations will be ready for the Administrator by June or July 2012. Ms. Ondrea Barber (National Tribal Air Association) questioned whether there was specific listening sessions with tribal groups. Ms. Corman confirmed that there were such sessions.

Mr. DeVillars asked about the extent to which other models in other states and countries have been examined for use as benchmarks or guidance. Ms. Corman replied that state sustainability studies are being examined; however, international information has not been a focus. Mr. DeVillars pointed out that in some areas of sustainability, other countries have been highly successful and the United States is lagging behind. Mr. Bogoshian replied that the EPA has considered obtaining information on global measures of sustainability but has not regarded governments of other nations, specifically.

Ms. Trovato mentioned that the EPA has been contacting other U.S. agencies regarding their sustainability models. Mr. Bogoshian added that there have been listening sessions focused on the production of “green” products.

Ms. Luther questioned if the EPA has looked “upstream” to determine how certain problems were created initially and how to prevent them in the future. Ms. Corman replied that this is being considered; however, it is difficult to accomplish. Ms. Trovato explained that the agency is trying to take a systemic approach to examine “upstream” conditions and this is being done in small pockets with great success. Ms. Corman added that this can be done with some success by emphasizing volunteer programs and partnerships that are not necessarily regulatory in nature. Experience is being gained in building a more holistic and systemic approach.

Dr. Osidele commented that the EPA is a regulatory agency and that regulations often are seen as punitive. He suggested considering a way in which regulations could be used to incentivize rather than as a punitive tool. Mr. Bogoshian responded that laws and regulations originate in science and are a minimum standard of performance. He said that the United States cannot afford to hover around that standard, but the fundamental concept of a minimal standard should stand. Ms. Corman added that the EPA is open to suggestions on this topic. She noted that regulations can be drivers, but they also can go beyond the punitive and be used to maximize benefit. Ms. Trovato said that the EPA is a regulatory agency, but it also is a science agency with voluntary programs that have been highly successful (e.g., ENERGY STAR).

Mr. Howard Learner (Environmental Law and Policy Center), NACEPT Vice-Chair, asked what the agency is doing to ensure that the Office of General Counsel (OGC) maintains the sustainability mindset.

For example, the Clean Air Act is a public health standard—how can the EPA navigate statutes that are difficult to amend with the flexibility needed for sustainability and law to co-function? Ms. Trovato responded that EPA employees are innovative and creative. They are examining the statutory and regulatory framework to innovate and implement regulations.

Dr. Johnson summarized the EPA’s requirements in the following questions: (1) How can sustainability be made operational? (2) How can progress be measured? (3) How can recommendations be implemented? (4) How can we obtain progress with the tools that are developed? (5) How do we ensure a holistic view and strategy; and (6) How can the agency provide incentives for people to go the “next step” in environmental design?

Ms. Corman commented that it has taken decades to incorporate sustainability into risk assessment and agency procedures. She suggested that the recommendations include a strategic plan for EPA personnel training as well as short-term and long-term accomplishments that should be achieved. Mr. Bogoshian said that the NAS report recommendations support interdisciplinary programs that function in all agencies. This includes both hiring new people with the necessary experience and training individuals already employed.

Mr. Siddiqui questioned the scope of the recommendations that the NACEPT should supply. Dr. Johnson explained that usually the Administrator determines the charge for an advisory committee; however, in the current situation, NACEPT has taken the initiative to develop a charge that would address the agency’s needs. Mr. Joyce elaborated that during the revisions to the first draft advice letter and charge, Council members should be cognizant of the fact that the NACEPT is an advisory committee to the EPA and therefore should develop recommendations that are in the form of actions that can be taken by the agency.

Council Discussion of the NACEPT’s First Draft Advice Letter on Sustainability and the U.S. EPA

Dr. Fernando Abruña (Sustainable Architecture Abruña and Musgrave, Architects) stated that the draft letter mentions a triple bottom line (i.e., environmental quality, social well-being and economic development), and this also has been mentioned in discussions with the U.S. Green Building Council (USGBC). An important issue to consider is the order of those three pillars. Dr. Abruña suggested that they should be ordered as follows: social well-being, environmental quality and economic development. He also mentioned the idea of including the following statement in the letter: “If America builds ‘green,’ everyone wins.”

Mr. DeVillars thought that the bullet point “Remain competitive globally with regulatory standards that acknowledge capital constraints and cycles” is subject to misinterpretation because remaining competitive globally should not come at a cost to the environment. This point implies that if the United States cannot afford to have regulatory standards, a reduction in standards will be acceptable. Ms. Kendall responded that that was not an intended implication of this bullet point. Dr. Johnson clarified that “cycles” means the measurement of economics in a quarterly or cyclical fashion. Due to the implications and lack of clarity, Mr. Learner suggested removing the bullet from the letter. Mr. Robert Kerr (Pure Strategies, Inc.) said that this is the only bullet point in the letter that mentions regulation. He thought there should be more mention of regulation in the letter and any such mention should be in reference to sustainability.

Regarding the sentence in the letter that reads, “Council members believe that this recommendation is fully in line with the EPA’s historical mission to protect human health and the environment in a manner that also supports the nation’s economic and social goals,” a participant said that this is the key sentence of the letter and that the three pillars should be ordered as they are in this sentence. He noted that human health is not carried consistently throughout the document and suggested adding the term “human health” to several bullet points in the letter.

Mr. Kurt Erichsen (Toledo Metropolitan Area Council of Governments) questioned the role of the EPA in cross-cutting measures to improve sustainability.

Mr. Siddiqui commented that the NACEPT should be consistent in word usage throughout the letter and with the NAS report. The different words that are used regarding the concept of sustainability (e.g., well-being, environmentally sound, economically feasible, socially equitable) should be examined and the NACEPT should align with consistent terminology and agreed-upon definitions. Ms. Kendall concurred. Dr. Johnson agreed and added that NAS examined the same wording issues and therefore the NACEPT should use the NAS benchmark and move forward. The terminology and recommendations in the NAS report should be used as a platform to build upon.

Mr. Alan Hecht (EPA) commented that in the introduction to the draft letter, it is stated that “sustainability in this report is both a vision and a process.” This is an excellent way of setting up the content of the report.

Mr. DeVillars was impressed with the outreach that already has been accomplished. He suggested broadening the following bullet point to include groups beyond government agencies: “Coordinate extensively with other government agencies because the goal of sustainable development requires an integration of social, economic and environmental policy.”

Dr. Johnson summarized the discussion by offering the Council the following three options: (1) Mr. Kerr and another NACEPT member will revise the draft letter with the suggested modifications; (2) a workgroup will be formed to revise the draft letter in response to today’s discussion; or (3) the draft letter will be discarded and a new one developed. Dr. Johnson mentioned that adjustments to the appendix of the draft letter will be discussed during the workgroup breakout sessions.

Ms. Kendall suggested that in the following bullet point, the word “ensure” be replaced with “promote” or “facilitate”, otherwise it will be viewed as a regulatory action: “Ensure that everyone enjoys protection from environmental and health hazards.”

Mr. Learner said that the EPA has statutory responsibilities to protect the environment and public health; therefore, the first bullet point in the draft letter should be reworded. The EPA cannot have environmental, economic and social goals on the same level because of the framework within which the agency must function. Dr. Johnson agreed but said that as the EPA shifts toward sustainability, one goal is not prioritized over others and all of them should move the EPA forward positively. Mr. Siddiqui mentioned that this issue is addressed in the NAS report and the NACEPT should follow that logic.

Mr. Siddiqui commented that the EPA should not just ensure, but should promote the continual regeneration of resources for future use. It is not sufficient to make renewable resources available in the future or have sustainable yields; the EPA must manage those resources to promote diversity and ecosystem health. He also mentioned that the NAS report should not be referred to with the colloquial terminology, “the Green Book” because that implies that only environmental issues are discussed, which is not correct.

Ms. Taylor noted the importance of including sustainability in the EPA’s mission and stressed that the agency should be demonstrating this principle. Above all other federal agencies, the EPA should be a beacon and example of the sustainability principle.

Ms. Barber pointed out that tribal governments should be included in the 5th paragraph of the draft letter because they are not equivalent with any of the categories listed.

Ms. Luther noted that the EPA has an opportunity to lead in sustainability, and this should be indicated in the draft letter. The EPA will not be involved merely in sustainability efforts, but will lead the coordination.

Dr. Di Chiro pointed out that sustainability is not a new concept. She expressed interest in understanding the extent to which the NAS report discussed this. The draft letter should mention utilizing traditional knowledge sources for information on management and stewardship. Sustainability is not just a toolbox but it is a way of life.

Dr. Johnson and Mr. Joyce suggested that Mr. Kerr and other Council members convene and revise the draft letter based on the discussions so that the NACEPT members can vote on it during the second day of the meeting. Ms. Kendall and other NACEPT members agreed to make the changes. Mr. Kerr, Ms. Kendall, Mr. Learner and others volunteered to make these editorial adjustments.

Sustainability Workgroups Breakout Session

Dr. Johnson said that previous Council members created the draft letter appendix that identifies specifically the charges to the NACEPT. Current NACEPT members will have the opportunity to examine these charges during the breakout sessions to determine if they are appropriate. Dr. Johnson stated that the NACEPT needs to pursue refining the new charge questions. In the breakout groups, the discussions and ultimate decisions should be representative of the Council's expertise (e.g., academia, government, industry). The first workgroup—the “strengths” workgroup—will discuss the second appendix point (i.e., what strengths can the EPA leverage to deploy successfully the NAS-recommended sustainability strategy across the agency and with key stakeholders? Are there internal or external barriers or gaps that the EPA will need to address, manage or overcome to deploy successfully the sustainability strategy that the NAS has recommended?). The second workgroup—the “3 to 5 years breakthrough objectives” workgroup, will discuss the third appendix point (i.e., Using the EPA's sustainability vision [or the NACEPT's suggested vision] as a starting point and backcasting from that vision, what breakthrough objectives would the NACEPT recommend for the coming 3 to 5 years?). Breakthrough objectives should be bold and ambitious in order to demonstrate the agency's commitment to new ways of operating.

“Strengths” Breakout Workgroup One

Dr. Fernando Abruña, Mr. Derrick Allen, EPA, Ms. Ondrea Barber, Dr. Giovanna Di Chiro, Ms. Deehon Ferris, Dr. Patricia Gallagher, Drexel University, Ms. Alison Taylor, and Dr. Ronald Meissen, Baxter International, Inc

Dr. Di Chiro reiterated the workgroup's question of focus. Ms. Barber asked if the workgroup should work to add more detail to the question or simply answer it. Mr. Joyce clarified that the workgroup first should determine if the charge question is appropriate and beneficial for the NACEPT to consider over the next few months. The workgroup should add any missing concepts to the charge question or remove parts that are not helpful. This charge question will be the initial guidance as the NACEPT begins to develop recommendations for sustainability. Dr. Gallagher added that these questions were drafted by the Council with the assistance of the agency.

Dr. Di Chiro questioned if the NAS report intentionally indicated that the EPA is “behind the curve” regarding sustainability. Mr. Allen explained that the EPA Administrator requested that the NAS undertake the study because she recognized that the EPA is working towards sustainability but is not accomplishing enough in that direction. Administrator Jackson asked for recommendations and a framework that the EPA can utilize to achieve sustainability.

Dr. Abruña said that the EPA must be an example to others, both internal and external to the agency, for guidance on sustainability. The EPA must be an example by using sustainable products and operating in sustainable buildings.

Ms. Barber mentioned a strength of the EPA is the way in which new initiatives are implemented. Methodologies and networks are in place that streamline this process. A workgroup member added that another strength of the EPA is its ability to form meaningful collaborations and partnerships when implementing new initiatives.

Ms. Taylor indicated that an additional strength of the EPA is its reputation in communities. Ms. Ferris pointed out that in some communities, the EPA has built strong relationships, and in other communities, relationship building has been challenging. Each year, more than 7,000 individuals attend the EPA-sponsored National Brownfields conference (<http://www.epa.gov/brownfields/bfconf.htm>). This is an opportunity to build relationships with communities and observe disadvantaged and low-income community issues firsthand.

Mr. Allen suggested that three to four areas of focus be chosen for the EPA strengths. These then should be developed into actionable recommendations for EPA programs. Dr. Di Chiro commented that Brownfields is a sustainability problem and it signifies a lack of sustainability. She cautioned the NACEPT against focusing on Brownfields.

Dr. Gallagher stated that there is a database in her community that allows citizens to mine technical data if they desire and develop optimal strategies for cleanup activities. Ms. Ferris agreed that such data collections and Brownfields should be on a sustainability list.

Ms. Taylor noted that the EPA's large pool of environmental expertise is strength of the agency.

Mr. Allen said that there are interagency groups that focus on sustainability and senior sustainability officers; however, there is not one central workgroup on sustainability, and this is an EPA gap.

Ms. Taylor commented that the EPA has the strength of its authority and that this could be utilized more to assist in regulations or examine statutes. Mr. Allen added that there were no legal experts on the panel that developed the NAS report. To pursue this issue, the NACEPT could meet with lawyers from the OGC.

Another strength identified by Ms. Taylor is the EPA's ability to develop and promote educational programs to reach children and other intended audiences.

“3- to 5-Year Breakthrough Objectives” Breakout Workgroup Two

Dr. Olufemi Osidele, Ms. Bridgett Luther, Mr. Kurt Erichsen, Dr. DeWitt John, Dr. Mark A. Mitchell, Mr. Yalmaz Siddiqui, Dr. Jerome Paulson, Children's National Medical Center, and Ms. Lisa Tomlinson, EPA

When speaking of sustainability, it is important not only to ask the right questions, but also to ensure that 3- to 5-year objectives are considered. The workgroup was asked to consider how progress can be measured and how sustainability can be viewed as a net benefit. It is important to provide helpful information to the agency.

The workgroup focused on the following charge question and its sub-items:

- Using the EPA's sustainability vision (or the NACEPT's suggested vision) as a starting point and backcasting from that vision, what breakthrough objectives should the NACEPT recommend for the coming 3 to 5 years? Breakthrough objectives should be bold and ambitious to demonstrate the agency's commitment to new ways of operating.

- What measurement system or systems would the NACEPT recommend for assessing progress toward these 3- to 5-year objectives and the agency's sustainability system?
- What tools are available to help the agency consider the qualitative and quantitative benefits (e.g., environmental, economic, social)?
- What approaches should the EPA use to share progress with the public?

A workgroup member did not think that 3 to 5 years was appropriate because this timeframe does not match the timeframe of the real world (including the length of presidential administrations). He thought that it would be appropriate to think of 4-year goals, beginning with Inauguration Day 2013. The timeframe of the goals should match the American political calendar. Another member disagreed and stated that a classic method of attempting to shift is to undertake a demonstration effort. At the EPA's operational level, there are differences among how and when states report, which might suggest a method to make big changes (e.g., partnerships with states that excel in performance and have an integrity of vision that is comparable to the EPA's) using a range of timeframes.

Another member thought that interim steps could be taken in advance of an administration change. If the EPA Administrator already is engaged, then she can start high-level leaders on the path toward sustainability. Perhaps a 6- to 9-month goal could be a sustainability conference to inculcate the concepts in "revolutionary bureaucrats" (i.e., those that write policies). When an administration changes, the true window of opportunity for change lies within the first 2 years. If the EPA can identify statutory or regulatory goals prior to the administration change, then the agency will be ready to approach a possible new administration in January 2013. Three to 5 years might be too long, goals at 6 to 9 months and 18 months might be more appropriate.

Another member thought that the context for the goals might be EO 13514, which is a 2020 vision. The items included in the one that has triggered action in terms of sustainability (e.g., 95% sustainable purchasing) should be completed by 2020. This could be a framework for timing and goals. The first-year goal, for example, could be to create scorecards for metrics. In 3 to 4 years, the next goal could be to embed the systems to develop real-time dashboards or to measure and appropriately communicate. Changes in administrations possibly could prompt recalibration of the 3- to 4-year goals. This approach could lead to an 8-year vision, which realistically allows for two administrations and aligns to EO 13514, which is a powerful tool.

A workgroup member thought that the true sustainability endpoint is several generations away and wondered how to break the interim goals down to achieve this. Setting interim goals at shorter intervals can allow the agency to progressively build to what can be accomplished at each stage. These questions are a starting point, but the workgroup can develop more as appropriate. Another member was not concerned with timing the goals to the political calendar because every administration works on three budgets simultaneously and must consider fiscal years; there are too many unpredictable variables. Backcasting, however, is important for determining the vision for sustainability.

One member liked utilizing EO 13514, but another member was concerned that it only applies to the EPA. A third member agreed that the EO focuses on internal operations rather than external. A member explained that some of the objectives that are developed must address the environmental footprint of the EPA as an agency, which would be in line with the EO in terms of reducing the negative impact of federal agencies. He suggested making one objective similar to the U.S. General Services Administration (GSA) objective of a zero environmental footprint by 2020. The difference would be to include clarity on how this will be achieved, measured and reported, which the GSA has not done.

A member thought that the workgroup was supposed to be focusing on sustainability outside the agency via national and global leadership. He thought that the overall objective was to consider how the United States could be made more sustainable in a global context. Another member thought that in achieving

U.S. sustainability, the EPA also must address its own sustainability. The EPA must be a role model for other federal agencies. Another member thought that a zero footprint goal was unrealistic. The EPA could be the driver for positive benefits, which could transcend administrations. The word “net” is an important term within this concept.

One sustainability tool is the Ecological Footprint Analysis, and the NAS report has a list of related indicators (e.g., environmental, social). Can these indicators be used to develop metrics? Should specific measurements in addition to these indicators be considered?

A paradigm shift will occur when entities begin to consider transitioning from “less bad” to “more good” (e.g., “toxics” to “safe, healthy materials;” “reduce carbon” to “100% renewable power;” “polluted water” to “water stewardship”).

The workgroup agreed that in terms of the breakthrough objectives, the EPA’s internal operations related to sustainability (e.g., leadership activities, internal footprint) should be considered in addition to its regulatory and voluntary external sustainability programs. Social and economic issues should be considered in developing the objectives as well as environmental factors. Optimizing the social and economic benefits of environmental protection is important. The environmental pillar will be given the higher priority, but the workgroup will consider the incorporation of economic and social factors.

Another EO established the President’s *Task Force on Environmental Health Risks and Safety Risks to Children*. It is co-chaired by the EPA Administrator and the Secretary of Health and Human Services and is comprised of representatives from each Cabinet agency. This could be used as a model for cross-agency cooperation.

There are three types of goals: those for the EPA, those for other federal agencies and those for the United States (e.g., stakeholders, partners). The following are potential approaches for the workgroup to formulate objectives:

- Incorporate social and economic aspects into environmental objectives.
- Separate environmental, social and economic objectives.
 - Have a very specific environmental objective for the agency as a regulator.
 - Develop objectives that focus on societal well-being enabled by environmental thinking.
- Determine objectives for the EPA’s internal operations and those for the EPA’s interactions with external organizations as a regulator.

The following are the breakthrough objectives brainstormed by the workgroup:

- The EPA internally will have a net positive environmental footprint by 2020.
- There will be a dramatic increase in industries that embrace sustainability.
- One hundred percent of EPA and federal agency purchasing will drive industries toward sustainability (e.g., Sustainable Charter Industries Program).
- No child will die from environmental toxins.
- Hypoxic zones in water bodies will be eliminated.
- Toxins in breast milk will be eliminated.
- Methylmercury in seafood will be eliminated.
- One hundred percent of the United States will be a healthy place to raise a child, including access to natural recreation.
- One hundred percent of U.S. waterways will be fishable, swimmable and healthy for native species, and wetlands will be restored.
- The EPA will establish a sustainability standard /scorecard for federal agencies.
- The EPA will engage in cross-agency cooperation and leadership.

The meeting was recessed for the day following the breakout sessions.

TUESDAY, MARCH 27, 2012

Dr. Johnson welcomed the NACEPT members to the second day of the meeting.

Overview of the EPA's Innovation Program

Dr. Peter W. Preuss, Chief Innovation Officer, EPA ORD

Dr. Preuss said that based on the previous draft letter, it was deemed important for the NACEPT members to gain further information about innovative research at the ORD. Innovation assists in moving toward sustainability.

A combination of sustainability and innovation often is discussed by Administrator Jackson. Sustainability and actions to achieve it require transformational steps instead of incremental steps. Although innovation sometimes can take time to achieve, the functioning of the world has sped up and so has innovation.

Design thinking involves creating new choices and divergent thinking to create new alternatives and solutions to problems. This type of thinking is being applied to many questions we face currently. Measuring innovation can be difficult because sometimes there is substantial failure before success is apparent (e.g., National Aeronautics and Space Administration [NASA] rocket program).

To judge the success of innovations and measure them, the ORD has a multifaceted innovation strategy: (1) support innovation at the bench with incremental solutions; (2) demonstrate the strength of transdisciplinary power by no longer conducting research in isolation; (3) utilize open innovation to broaden the problem-solving network (this process began in industry with companies posting challenges and allowing individuals to present solutions for monetary rewards); and (4) showcase examples of "Path Forward" sustainability. Pathfinder innovation projects (PIP) is a program in which the ORD solicits ideas for the most innovative projects from its researchers, that may not be funded, and the best projects are selected via external peer review. Chosen projects receive partial funding. The first year of the PIP pilot program is ending soon, and it provided funding for a series of projects that included developing nanoparticles to test toxicology assays. The applications submitted in the program's second year likewise are innovative and will yield exciting research.

The ORD also is driving innovation by giving peer-driven awards for innovation (PeerOvations), creating the Federal Environmental Research Network (FERN) to connect researchers across agencies, and utilizing interactive educational tools that are community-driven and mobile.

Open innovation that engages the larger federal and public communities has been a successful tool in the past. One example is the need for a quick, timely and accurate methodology for measuring benzene in air. The results would be sent in real time to stations that allow individuals efficient access to the information, especially in EJ communities. Another example is a design lab that promotes design thinking at the Air Force Research Laboratory (AFRL)/Wright Brothers Institute (WBI). This "big design garage" provides a large space for individuals to "tinker" and collaborate, creating innovative works.

One PIP research area concerns applications and sensors for air pollution (ASAP). Sensors that can determine air and water pollutants and be used by communities in conjunction with medical centers are a driving need. Currently, there are only 500 air pollution monitors in the United States. Connecting researchers and communities to work together on innovations will move this work forward. One example of sensor innovation is *asthmapolis* (<http://asthmapolis.com>). Humans use inhalers daily, and this usage can indicate to researchers where environmental exposures are occurring in real time. If a global positioning system (GPS) beacon were embedded in inhalers, then when people use their inhalers, that

information could be known in real time. Another innovative sensor idea is embedding air pollution sensors in children's backpacks so that information could be made available immediately when children are exposed to air pollutants.

Discussion

Dr. Johnson appreciated the idea of institutionalizing measurements and real-time data. He offered the idea of including social scientists in this innovative work because a social scientist can identify individuals who would and would not be likely to agree to a sensor program.

Dr. Osidele questioned how proprietary ideas are accommodated in an open-innovation setting. Dr. Preuss responded that open-innovation systems have a long history of handling intellectual-property issues. To summarize, Dr. Preuss explained that the ORD has no interest in owning intellectual property. In this regard, such rights remain with the person who had the idea; the greater interest of the ORD is for creative and innovative ideas to be fostered and realized.

Dr. Mitchell asked if air pollution sensors for air toxics are included. Dr. Preuss replied that the ORD is interested in air toxics; although currently sensors for air pollutants exist, but there are none for air toxics. Decisions are being made presently regarding which toxics are most important so that sensor developers can focus on those areas.

Dr. Preuss commented that cellular phone, backpack and inhaler sensors broach privacy issues and that it is vital to maintain privacy. Additionally, making aggregate sensor data available to the individuals who supplied them, as well as the general public, is of interest.

Dr. Mitchell questioned how open innovations are announced. Dr. Preuss replied that many companies announce them individually on their websites and more broad announcements are not made. The ORD is working to learn how to broadcast them more generally.

Mr. DeVillars asked about the flexibility of prioritization for sustainability work. Dr. Preuss responded that there are 40 individuals from across the agency and regions helping to determine open-innovation priorities.

Ms. Luther commented that her company (Cradle to Cradle Products Innovation Institute) understands safe and nontoxic materials. If benzene, for example, is bad, what can be used to replace it? She questioned whether that type of thinking was a target for innovation. Dr. Preuss said that green chemistry has been a major focus that goes beyond developing newer materials and delves into finding the best chemicals that are less toxic.

Mr. Erichsen mentioned that a visual analysis technique to determine near-zone water quality regarding bacteria is needed to test water safety in real time. Dr. Preuss added that the current focus has been on a successful imaging approach for water quality in collaboration with NASA.

Council Discussion and Approval of the NACEPT's First Draft Advice Letter on Sustainability and the U.S. EPA

Dr. Johnson thanked the workgroup team that compiled and incorporated the Council's modifications to the draft advice letter.

Dr. Gallagher expressed concern about how human health is handled in the following bullet point: "Emphasize the 'social' aspect of sustainability to utilize place-based approaches for meeting the needs of underserved communities, reducing disparities and fostering places that are healthy, vibrant and diverse." A NACEPT member suggested changing "to" to "and" after the word sustainability. Dr. Di Chiro

proposed including EJ in the bullet point. Ms. Ferris offered the wording, “Emphasize EJ and the social aspect of sustainability and improve human health by utilizing place-based approaches...” The Council agreed to this wording alteration.

Ms. Taylor commented that it is not important to emphasize who is in charge regarding sustainability but rather that the EPA is beginning the move forward. Dr. Johnson thought that this issue should be discussed in breakout workgroups; however, the draft letter should remain brief and concise.

Mr. Siddiqui suggested that the wording in the third paragraph of the draft letter should mirror that of the NAS report better.

Mr. Learner supported the idea mentioned during the first day of the meeting of putting the word “environmental” before “social” and “economic.” He thought the word “statutory” was problematic. Finally, he said that the current discussion did not track with the NAS report, and NACEPT members should not feel obligated to follow that report exactly. Ms. Kendall commented that it is important to reword sections of the draft letter to maintain consistent language and focus on the EPA’s fundamental issue, which is environmental and public health (with the optimization of social and economic factors). Mr. Siddiqui said that the NACEPT should find a way to express those thoughts in the draft letter; however, the Council members appear to be losing momentum on crystallizing their thoughts. Mr. Learner reminded members that the EPA must function within its statutory framework.

At Dr. Johnson’s impetus, all NACEPT members agreed that the draft letter should be moved forward with the inclusion of the discussed modifications.

Sustainability Workgroups Breakout Session

Dr. Johnson asked the Council members if they approved of the charge questions or if they have suggested modifications to them. Dr. Osidele said that his breakout group agreed with the main focus of question three, but they thought that the sub-questions might need some alterations. Dr. Meissen commented that the workgroups embraced and richly discussed the charge questions. The Council has great flexibility and this enables the members to move forward efficiently.

Dr. Johnson moved to attach the charge questions to the draft letter so that feedback can be attained from Administrator Jackson. Mr. Joyce reminded the Council that it does not need to wait for an official approval from the Administrator. The NACEPT already is empowered to move forward and identify recommendations to the charge questions.

Mr. Siddiqui asked if the timing of the third question (i.e., 3 to 5 years) was an appropriate time frame. Dr. Johnson thought that should be discussed by the workgroup. It is a flexible time frame that does not have to be determined exactly at the present time.

Dr. Meissen questioned whether the main questions and/or sub-items will be included in the draft letter. Mr. Joyce responded that the draft letter can be sent separately from the charge questions, if necessary. Charge questions that are sent with the draft letter would be regarded as a basis for discussion. The charge questions are proffered as guidance for the Council but should not impede members’ ideas. The questions can be expanded and modified over time. Dr. Johnson confirmed that these are draft charge questions and this will be indicated in the advice letter.

Ms. Kendall suggested that the workgroups spend time today discussing and modifying the charge questions as needed, but they should not begin answering them yet. Dr. Meissen agreed, but also said that revisions to the charge questions should be decided quickly. Dr. Johnson stated that workgroups’ output will be expected in July 2012.

Hearing no objections, Dr. Johnson said that the draft letter has been approved with the addition of a sentence that indicates that the charge questions are in draft form.

Mr. Joyce indicated that the next NACEPT meeting will occur in late July or early August 2012. Dr. Johnson concurred and added that a meeting time should be determined soon so that the meeting planners have sufficient time to find meeting space. An email will be distributed that will indicate the optimal meeting days, and the Council members should reply with their meeting day/time preferences. A teleconference within the next 6 weeks might be appropriate. The number of NACEPT members attending will determine whether the teleconference must be open to the public.

Mr. Joyce commented that workgroups must select the workgroup chairs today. He pointed out that the chairs must be willing to devote the time required to keep the workgroups organized and on task.

Dr. Johnson thanked NACEPT members for their hard work and attendance at the meeting.

“Strengths” Breakout Workgroup One

Dr. Fernando Abruña, Ms. Ondrea Barber, Mr. John DeVillars, Dr. Giovanna Di Chiro, Ms. Deehon Ferris, Dr. Patricia Gallagher, Ms. Sara Kendall, Mr. Howard Learner, Dr. Ronald Meissen (Chair) and Ms. Alison Taylor (Co-Chair)

Dr. Abruña questioned whether the workgroup was supposed to spend this session evaluating the charge questions or answering them. Ms. Kendall clarified that the EPA has not provided the Council with charge questions yet (which is the standard operating procedure); therefore the Council has developed its own charge questions. The workgroup must determine if the charge questions that the NACEPT created are appropriate. Dr. Meissen explained that the workgroup has the flexibility to alter the questions now and in the future, as necessary.

Ms. Kendall elaborated that at an EPA sustainability meeting in November 2011, the EPA requested input on how to make the NAS report recommendations operational. The NACEPT responded that an EPA vision must be developed that includes sustainability, and the agency must leverage the programs and activities it has in place already for added strength. The EPA is governed by its statutes, and its mission is defined by the statutes. If people perceive that the EPA is altering its large-scale mission, then this sustainability effort will fail. It is imperative that the Council’s recommendations do not exceed the agency’s legislative mission.

Dr. Meissen agreed to chair the workgroup and Ms. Taylor agreed to serve as the co-chair.

Dr. Meissen suggested that workgroup members examine the charge questions and respond with modifications and comments within the week. Workgroup members agreed. Ms. Kendall concurred but thought the workgroup should discuss the questions and suggested revisions; this will improve the results.

Ms. Ferris suggested that the workgroup use the imperatives in the NAS report as a starting point. Mr. DeVillars and Ms. Kendall agreed, and Ms. Kendall pointed out that the NAS report has numerous recommendations at the end of each chapter. These recommendations form a sustainability strategy. Mr. Learner said that the NAS report should be followed; however, the workgroup does not need to adhere strictly to every point because that could stymie creative and innovative thought. Ms. Kendall added that the NAS report is the foundation of NACEPT discussions but should not constrain the workgroups.

Ms. Ferris thought the charge question should be rephrased, and Mr. Learner suggested “What strengths can the EPA leverage to successfully deploy a sustainability strategy, drawing upon the NAS report recommended strategy, as well as other approaches to sustainability across the agency and with key stakeholders?”

Dr. Meissen pointed out that there has been substantial work on sustainability in the EPA since 1972. This work should be harmonized with that of the global community and drawn upon in NACEPT discussions. He collected workgroup members' contact information to facilitate future communications.

Mr. Learner and Ms. Kendall said that Mr. Joyce, the NACEPT staff and the EPA have been very supportive in supplying the Council the resources that it requires.

Dr. Gallagher commented that she thought that the EPA wanted to implement the NAS report and had charged the NACEPT with developing ideas to do this. She questioned if the Council merely should draw upon the NAS report for guidance or adhere to it, as she originally had thought. Mr. DeVillars said that the EPA is interested in identifying a strategy for sustainability, as well as further its understanding of the agency's strengths and weaknesses. The Council needs to determine the optimal strategy for forward movement.

Dr. Di Chiro mentioned that the workgroup had started to identify existing EPA programs and activities with sustainability embedded in them (e.g., Brownfields) as EPA strengths. Environmental education is another agency strength that does not have sustainability as a key focus but does have sustainability embedded within it.

Ms. Ferris commented that management metrics and performance measurements may be the next topic for the workgroup's focus. Ms. Kendall agreed and said that leadership must be the driving factor in sustainability recommendations. The optimal methods for getting individuals to work with the agency in a transdisciplinary/transboundary fashion should be considered. Logical silos in management must be broken and more innovative thinking fostered.

Dr. Gallagher thought that the EPA should retrofit buildings to become more sustainable and exemplify the sustainability concept. Dr. Meissen agreed and added that the USGBC is a large force, and green, sustainable building can foster increased productivity and health; it can help communities and city organizations.

Ms. Kendall suggested that someone from the OGC should discuss the recommendations with the workgroups as they progress. Mr. Learner agreed and added that this individual could inform and brief the workgroup on pertinent information. Ms. Ferris proposed that the OGC representative also could discuss EPA jurisdiction with the Council.

Mr. Learner reiterated the charge question "What strengths can the EPA leverage to successfully deploy a sustainability strategy, drawing upon the NAS report recommended strategy, as well as other approaches to sustainability across the agency and with key stakeholders?" Ms. Taylor questioned the word "deploy" and Ms. Kendall suggested "deploying their mission." Mr. Learner proposed ending the question with "how can the EPA's deployment also achieve and positively impact other agencies and stakeholders?" Dr. Meissen asked Mr. Learner to distribute the charge question via email to the workgroup. The workgroup members should respond to this new charge question via email.

Ms. Kendall agreed that the charge questions could be finalized via email. If they are to be attached to the draft letter, then they will need to be completed before the week following the meeting. Mr. Joyce reiterated that the charge questions attached to the letter can be in draft form; they almost certainly will develop as the Council continues its work.

With the modified language, the workgroup agreed to adopt the charge question as a draft. Dr. Meissen said that by the end of July 2012, the Council must develop a draft response to this charge question. Mr. Joyce clarified that the charge question is a point of departure for the workgroup's work. It should be

used as initial guidance only. The final recommendations should be as specific and actionable as possible. He stressed that broad statements of opinion are not helpful to the Administrator.

Ms. Kendall suggested that the workgroup examine previous letters to the Administrator (found on the NACEPT website at <http://www.epa.gov/ocem/nacept/index.html>) and use these as guides. The workgroup first can develop an outline to make recommendations, and then fill in the outline over the course of the workgroup's conference calls. Dr. Di Chiro and Ms. Ferris agreed with this methodology because the workgroup has adequate energy and ideas for that format.

Dr. Gallagher suggested that the workgroup question EPA employees concerning their thoughts on the EPA's strengths and weaknesses. Ms. Kendall approved of this suggestion because it would create an unfiltered EPA view. Workgroup members also should begin considering the EPA's strengths and weaknesses from their individual perspectives to help achieve a well-rounded view. An organizational structure for the outline will become apparent when workgroup members begin filling in the strengths and weaknesses. Dr. Meissen agreed and added that the ideas will become refined over time and additional ideas can be retained in the appendix.

“3- to 5-Year Breakthrough Objectives” Breakout Workgroup Two

Dr. Olufemi Osidele (Chair), Ms. Bridgett Luther (Co-Chair), Mr. Kurt Erichsen, Dr. DeWitt John, Dr. Mark A. Mitchell, Mr. Yalmaz Siddiqui, Dr. Jerome Paulson and Ms. Lisa Tomlinson

Rather than develop new objectives, the workgroup thought that the current objectives could be refined. The EPA officials who would be responsible for implementing the changes could speak to this workgroup at a future meeting.

The current strategic plan covers FY 2011 to FY 2015, with an addendum in 2012. It is updated periodically. The process for developing the next plan, covering FY 2015 to 2020, should commence soon. It is important for the workgroup to provide timely inputs early in the strategic plan process. It would help to talk with those at the EPA who are in charge of the process. A participant who had viewed the website noted that there was no timeline for the FY 2015 to FY 2020 strategic plan; the website indicated that the agency's current goals and Administrator Jackson's priorities will be included in the next update.

A participant asked whether the political and fiscal cycles would serve as parameters for establishing long-term goals and examining short-term objectives. The response was that this typically is based on fiscal years, although the political cycle cannot be ignored.

The workgroup's recommendations were to be completed within 15 months from commencement, but this timeline has been extended for a variety of reasons; the schedule was structured to be flexible. It is hoped that a letter of recommendations from the workgroup will be prepared for approval at the next meeting (July 2012), with the workgroup possibly providing advice on additional aspects at the meeting. In this instance, the NACEPT will be working on the issue in real time and would like to receive advice throughout the process. Hopefully, direction will be received from the Administrator by July 2012 regarding how to proceed, and the Council will get some indication of the NACEPT's next phase(s) of work.

The workgroup first looked at the existing charge to determine if it should be refined before including it as an appendix to the first letter. It is unknown how many letters will ensue from these charge questions.

Participants discussed the best time to provide input for preparing the fiscal budget and were informed that the workgroup's work will be to influence the plan rather than the budget. In addition to the objectives described in the charge questions, other dimensions should be considered, such as the EPA's interactions with the external community (e.g., business, industry, private sector). Based on the list of

NACEPT members and some informal conversations, the overall project involves: (1) risk and sustainability; and (2) the private sector and sustainability. Regarding the latter, the goal is to learn about the private sector's perspective and transfer relevant lessons. This might involve learning about the federal fiscal and planning cycles and discovering the best way to consider these as the private sector thinks differently about business cycles. For example, the idea "less bad, more good" focuses on positive things to be achieved rather than risks to be reduced. EPA staff agreed that learning from the private sector is a key element but clarified that the agency's goal is to collaborate with industry to develop safer products. The EPA wants both to learn from the private sector and know what else the agency should do to facilitate the private sector's advancement toward sustainability. Participants agreed that the private sector is seeking such support.

Workgroup members discussed the order in which the charge question describes specific topics. It might be best to start with high-level goals then move into the important issues of metrics and measurements.

Dialogue with the public (the third sub-bullet) should be included in the overall plan, but measurements should be addressed beforehand.

Regarding guidance on how many recommendations to prepare and in what format, there is no mandate; it could be a few, a longer list or a menu of options. The workgroup's discussions should guide this decision. One way to proceed is to review the current strategic plan and determine how sustainability enters into it. It might be easiest to refine what already exists and incorporate sustainability into it.

Yesterday's session was valuable, but methodological adjustments might help. One suggestion was to review the EPA's vision and strategic plan, address the developments that have resulted already from them, and obtain input from those involved with developing the strategic plan.

The workgroup's focus should be on the EPA's work as it affects the United States and the world, particularly as a "change agency"; part of this influence occurs through "leading by example." A follow-on issue is how to make a culture change; the desire to share progress about sustainability with the public is challenged greatly unless everyone in the agency knows what sustainability is and the agency's strategic direction forward. There might be an internal goal of education and communication within the EPA. Many agency staff members have read an abbreviated version of the NAS report. This report provides many recommendations to be implemented. The workgroup could review these recommendations and the strategic plan and help prioritize them. The EPA does not have an official sustainability vision, but one is likely to be developed in this process. The workgroup's first letter will help EPA staff form a sustainability vision and discuss the issues with the Administrator.

There may be an opportunity to advise the EPA on how it can encourage the development of sustainable products. If the marketplace already has sustainable products, the workgroup could advise the EPA further on how it could promote them.

To provide a better segue to the EPA's focus with the private sector, participants discussed adding a sub-bullet after the second sub-bullet that covers the management of sustainability by other organizations and possible lessons learned from those experiences. The EPA might be able to share a paper shortly that describes what people are saying about how to proceed with sustainability and what they have learned from their private sector experiences. The workgroup will discuss this in the future.

Participants discussed the pros and cons of referring to "3 to 5 years" directly in the charge question. Members thought that it did not need to be mentioned twice and agreed to omit the second instance of the phrase. Some participants encouraged complete removal, and others supported the inclusion of a specific timeframe that was less vague than 20 or 100 years. They also discussed using the year 2020 as a timeframe but recognized that this is only 8 years away.

When reviewing the charge question and considering edits to it, members suggested adopting the language used in the President's EO.

Specific edits include:

- In the main paragraph, replace “for the coming 3 to 5 years” with “perhaps for the coming 3 to 5 years as recommended in the NAS report.”
- In the first sub-bullet, replace “3- to 5-year objective” with “breakthrough objective.”
- Include a fourth sub-bullet: “What other approaches might be necessary to implement the breakthrough goals that the NACEPT has identified?”

Members should state their preferences regarding the workgroup on which they would like to serve. Chairs will have the opportunity to review the preferences and recommend members to ensure that each workgroup has an appropriate balance of expertise and diversity.

Dr. Osidele agreed to chair the workgroup, and Ms. Luther volunteered to serve as the co-chair. The workgroup agreed to meet by teleconference on April 24, 2012, at 1:00 p.m. EDT. One suggestion was to set the workgroup meeting day by selecting a specific day of each month (e.g., the first Wednesday) for the workgroup teleconferences. Once the teleconference days are set, specific EPA staff or others could be invited to attend and speak with the workgroup members. The April 2012 call could include EPA employees who are working on the strategic plan, and the May 2012 teleconference could involve external sustainability experts to provide feedback on best practices, private sector visions about sustainability and so forth. The third call could be limited to workgroup members to compile relevant information gathered during the prior calls and prepare recommendations for submission to the NACEPT.

Sustainability Workgroup Report-Outs

Mr. Learner requested the names of the workgroup chairs. Dr. Meissen said that he is the chair for the “Strengths” Workgroup, and Ms. Taylor is the co-chair.

Dr. Meissen said that the “Strengths” Workgroup examined the charge questions and suggested minor modifications. Mr. Learner documented these alterations and will send them to the workgroup for examination. Dr. Meissen reported that the workgroup will begin expanding on suggestions to answer these questions. The workgroup has substantial energy and great ideas for recommendations to be incorporated into the letter. In response to Mr. Joyce's request, Mr. Learner said that he would send the list of the workgroup members to Mr. Joyce.

Ms. Luther said that she will co-chair the “3- to 5- Year Breakthrough Objectives” Workgroup and Dr. Osidele will chair the workgroup. She noted that the workgroup is interested in changing the first sentence of the third charge question to, “What breakthrough objectives would the NACEPT recommend for the coming 3 to 5 years, perhaps as suggested in the NAS report....” The 3 to 5 year objective should be deleted from Part A of that question. She added that to create more opportunity for “outside the box” thinking, Part C of that question should be followed by Part D. Mr. Learner suggested that she should send these suggested changes to Mr. Joyce via email so that the Council members can review the changes in written form.

Ms. Luther said that the “3- to 5-Year Breakthrough Objectives” Workgroup currently is deciding on optimal dates/times for a conference call to discuss the methodology of review and the external face of the EPA. The workgroup discussed the EPA vision and strategic plan so that those ideas could be aligned with the EPA sustainability vision.

Public Comments

Mr. Learner called for public comment and there were none.

Chair's Meeting Summary, Action Items and 2012 Meeting Dates

Mr. Learner asked that each workgroup complete its charge question revisions in the next week or two. By that time, the draft letter to the Administrator will be completed. Dr. Meissen requested that each member of the Council be allowed to examine the final charge questions before they are sent to the Administrator. Mr. Learner agreed.

Mr. Learner thanked the NACEPT members for a successful first meeting. Mr. Joyce then thanked everyone again for their participation and hard work. Ms. Jones-Jackson offered her sincere appreciation for the Council's diligence and work in preparing a first advice letter on sustainability.

Mr. Learner adjourned the meeting at 12:38 p.m. EDT.

Action Items

- ❖ Each workgroup should finish modifying its charge questions in the next week or two.
- ❖ The modified charge questions will be sent to the Council members for review before being sent to the EPA Administrator, Lisa Jackson.
- ❖ Workgroup members should correspond via email and teleconference to continue work on the charge questions and recommendations.
- ❖ The next NACEPT meeting will occur in late July or early August 2012. Mr. Joyce will correspond with NACEPT members to confirm an exact date(s) and time.
- ❖ The following action items were identified for the “Strengths” Workgroup:
 - Mr. Learner will supply Mr. Joyce with the names of the workgroup members.
 - Mr. Learner will compile and apply the workgroup’s modifications to the charge questions(s). He will send the revised question(s) to the workgroup for examination and response.
- ❖ The following action items were identified for the “3- to 5-Year Breakthrough Objectives” Workgroup:
 - The workgroup will meet by teleconference on April 24, 2012, at 1:00 p.m. EDT.
 - Ms. Luther will send the workgroup’s charge question modifications to Mr. Joyce for dissemination to the full NACEPT.

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Certification

I, Mark Joyce, Acting Designated Federal Officer (DFO) of the National Advisory Council for Environmental Policy and Technology (NACEPT) certify the meeting minutes for March 26-27, 2012 are complete and accurately reflect the discussions and decisions of said meeting.

/Signed/

June 25, 2012

Mark Joyce
NACEPT Acting DFO

Date