

MEETING SUMMARY

of the

AIR AND WATER SUBCOMMITTEE

of the

NATIONAL ENVIRONMENTAL JUSTICE ADVISORY COUNCIL

**May 25, 2000
ATLANTA, GEORGIA**

Meeting Summary Accepted By:



**Alice Walker
Office of Water
U.S. Environmental Protection Agency
Co-Designated Federal Official**



**Wil Wilson
Office of Air and Radiation
U.S. Environmental Protection Agency
Co-Designated Federal Official**



**Michel Gelobter
Chair**

**CHAPTER THREE
SUMMARY OF THE
AIR AND WATER SUBCOMMITTEE**

1.0 INTRODUCTION

The Air and Water Subcommittee of the National Environmental Justice Advisory Council (NEJAC) conducted a one-day meeting on Thursday, May 25, 2000, during a four-day meeting of the NEJAC in Atlanta, Georgia. Dr. Michel Gelobter, Graduate Department of Public Administration, Rutgers University, continues to serve as chair of the subcommittee. Ms. Alice Walker, U.S. Environmental Protection Agency (EPA) Office of Water (OW), and Dr. Wil Wilson EPA Office of Air and Radiation (OAR), continue to serve jointly as the Designated Federal Officials (DFO) for the subcommittee. Exhibit 3-1 presents a list of the members who attended the meeting and identifies those members who were unable to attend.

This chapter, which provides a summary of the deliberations of the Air and Water Subcommittee, is organized into five sections, including this *Introduction*. Section 2.0, *Remarks*, summarizes the opening remarks of the chair of the subcommittee. Section 3.0, *Review of the December 1999 Meeting Summary*, summarizes the comments made by members of the subcommittee on the preliminary draft of the summary of the subcommittee's meeting in December 1999. Section 4.0, *Presentations and Reports*, presents an overview of each presentation and report delivered during the subcommittee meeting, as well as a summary of the questions asked and comments offered by members of the subcommittee. Section 5.0, *Resolution and Significant Action Items*, summarizes the resolution forwarded to the Executive Council of the NEJAC for consideration and the significant action items adopted by the subcommittee.

2.0 REMARKS

Dr. Gelobter began the subcommittee meeting by welcoming the members present and Ms. Walker and Dr. Wilson to the third meeting of the Air and Water Subcommittee. He introduced Ms. Annabelle Jaramillo, Citizens' Representative, Oregon Office of the Governor, as the new vice-chair of the subcommittee. He announced that Ms. Jaramillo would serve as subcommittee chair should it be necessary for him to leave the meeting during the day. Dr. Gelobter then asked the members of the subcommittee and speakers at the meeting table and the representatives of EPA in the audience to

Exhibit 3-1

AIR AND WATER SUBCOMMITTEE

**Members
Who Attended the Meeting
May 25, 2000**

Dr. Michel Gelobter, **Chair**
Ms. Annabelle Jaramillo, **Vice Chair**
Ms. Alice Walker, **co-DFO**
Dr. Wil Wilson, **co-DFO**

Dr. Bunyan Bryant
Ms. Daisy Carter
Ms. Rosa Hilda Ramos
Mr. Leonard Robinson
Mr. George Smalley*
Mr. Damon Whitehead
Ms. Marianne Yamaguchi

**Members
Who Were Unable to Attend**

Dr. Elaine Barron
Ms. Clydia Cuykendall
Dr. Daniel Greenbaum

* *Mr. George Smalley served as a proxy for Ms. Clydia Cuykendall*

introduce themselves. Mr. George Smalley, Manager, Constituency and Community Relations, Equiva Services LLC, served as a proxy for Ms. Clydia Cuykendall, JC Penney. Dr. Carlos Padin, School of Environmental Affairs, The Metropolitan University and chair of the Puerto Rico Subcommittee of the NEJAC, a new member of the NEJAC, was observing the various subcommittees. Dr. Gelobter concluded his opening remarks by stating that, although meetings of the subcommittee are not fully open to audience participation, members of the audience would be given the opportunity to ask questions if time permitted and if an issue was pressing.

3.0 REVIEW OF THE DECEMBER 1999 MEETING SUMMARY

Members of the subcommittee began by reviewing the preliminary draft of the summary of the December 1999 meeting of the subcommittee.

To clarify a point of information, Ms. Dana Minerva, Deputy Assistant Administrator, EPA OW, stated that Mr. Will Hall, EPA OW, had made a presentation on concentrated animal feeding operations (CAFO) during the December 1999 meeting of the subcommittee.

Ms. Daisy Carter, Director, Project Awake, asked about the status of EPA's response to her request, cited at the bottom of page 3-8 of the preliminary draft, that called for EPA to develop a time frame for accomplishing its goals under its economic incentive program (EIP), programs state agencies can implement under the Clean Air Act (CAA) to improve air quality. EPA did not provide a response. Ms. Jaramillo asked that Ms. Carter's request be added to the list of action items for the present meeting of the subcommittee.

Dr. Gelobter moved that revisions discussed be incorporated into the draft summary. Ms. Marianne Yamaguchi, Director, Santa Monica Bay Restoration Project, seconded the motion, and the motion passed.

4.0 PRESENTATIONS AND REPORTS

This section summarizes the presentations made and reports submitted to the Air and Water Subcommittee, including discussions that took place during a joint session with the Waste and Facility Siting Subcommittee of the NEJAC on reducing toxic loadings.

4.1 Public Utilities

Members of the subcommittee continued discussions initiated during the December 1999 meeting of the subcommittee about the effects and regulation of public utilities, as related to environmental justice.

Dr. Gelobter stated that Dr. Daniel Greenbaum, Health Effects Institute, is the chair of the subcommittee's Public Utilities Work Group. On behalf of Dr. Greenbaum, Dr. Gelobter then presented an update on the progress of the work group. He summarized the discussion of public utilities that took place during the December 1999 meeting of the subcommittee. He reported that nationwide, 80 percent of the harmful effects on air

quality result from energy use. Dr. Gelobter stated that the primary focus of the work group is to involve the NEJAC in policy decisions associated with the regulation of air emissions from public utilities. He added that a secondary goal of the work group is to examine the local, regional, and national environmental effects of the energy industry on environmental justice communities. Dr. Gelobter reported that Dr. Greenbaum and the Public Utilities Work Group are committed to an aggressive agenda.

Dr. Gelobter then introduced two presentations related to public utilities.

4.1.1 Coal-Fired Power Plants in Georgia

Ms. Felicia Davis Gilmore, Director, Georgia AirKeepers Campaign Director, Ozone Action, and Ms. Connie Tucker, Executive Director, Southern Organizing Committee for Economic and Social Justice and former member of the Waste and Facility Siting Subcommittee of the NEJAC, presented concerns about the health and environmental effects of coal-fired power plants in Georgia.

Ms. Tucker stated that the Southern Organizing Committee for Economic and Social Justice represents communities that have environmental justice concerns in Georgia that are affected by dirty power plants. She said that the organization felt compelled to become involved in the national clean air campaign because asthma is an epidemic among African Americans and Latino Americans. She reported that Atlanta is in noncompliance with the requirements of the CAA. She stated that, on certain days, local citizens actually can smell the ozone in the air. She then introduced Ms. Gilmore, a long-time community-based activist, to make a presentation on the effects of public utilities on the health of environmental justice communities in Georgia.

Ms. Gilmore stated that the right to breathe clean air is among the fundamental rights of humans. She stated that the citizens of Georgia are primarily concerned about cars and their contributions to air pollution; there is little concern about the effects of power plants on air pollution, she pointed out. She reported that coal-burning power plants in Georgia play a significant role in the state's "smog crisis."

Ms. Gilmore discussed the current levels and health effects of pollution from coal-fired power plants, citing the following statistics: 23 percent of nitrogen oxides that form smog, 82 percent of sulfur dioxide that form particulate pollution and acid rain, 42

percent of the greenhouse gas carbon dioxide, and approximately one-third of toxic mercury emissions in Georgia are generated by coal-fired power plants. She reported that Georgia derives 64 percent of its electricity from 11 coal-fired power plants in the state. Nuclear power (30 percent), hydroelectric power (5 percent), natural gas (0.4 percent), and oil (0.3 percent) make up the remaining power sources in Georgia.

Ms. Gilmore said that coal-fired power plants pollute at rates up to nine times higher than the CAA allows for new power plants. She explained that, when the CAA was being revised, industry lobbyists convinced members of Congress that power plants in existence before 1980 were to be phased out soon and replaced with more efficient systems. She stated that the industry lobbied for exemption from requirements for the installation of the best available technology, which consisted of selective catalytic reduction systems for nitrogen oxides and scrubbers for sulfur dioxide. However, she reported, all 11 coal-fired power plants in Georgia are still in operation more than 20 years later. She estimated that, if Georgia's existing coal-fired power plants were to meet the same standards imposed upon new coal-fired power plants, emissions of nitrogen oxide and sulfur dioxide would be reduced by 68 percent and 78 percent, respectively. She stated that those reductions in emissions were equivalent to the reductions that would be achieved by removing 4.8 million cars from the road.

Ms. Gilmore then discussed a comparison of the cost of cleaning up the existing coal-fired power plants in Georgia with the cost associated with maintenance of the status quo. Acknowledging that the way a company chooses to spend its money is rooted in its priorities, she described Southern Company, owner or co-owner of the 11 coal-fired power plants in Georgia. The company, she said, has spent over \$3.4 billion dollars on investment outside its traditional southeast service area and asked the Public Service Commission to raise its rates so that the company could spend up to \$4 billion more. Ms. Gilmore explained that the Public Service Commission regulates the rates that customers pay for utilities. She stated that the money could have been invested in statewide cleanup. Ms. Gilmore then reported that clean air specialists had estimated a conservative cost for bringing Georgia's 11 coal-fired power plants up to modern-day standards of approximately \$156 million per year for 15 years for nitrogen oxide controls and \$222 million per year for 15 years for sulfur dioxide controls. She added that, in 1999, Southern Company reported a revenue of \$11.4 billion and a net income of \$977 million.

Ms. Gilmore then reported on the estimated cost to society if the existing coal-fired power plants are not cleaned up. According to Research Atlanta, an independent public policy group, the cost of nonattainment of Federal air quality standards for ozone and particulates in the Atlanta area will be higher than the cost of cleanup. She then cited several reasons to support that finding, such as poor air quality makes Georgia less attractive to new businesses and limits the state's prospects for economic development. The economy also suffers when the benefits of new technology, such as renewable energy are ignored, she continued. She stated that the decrease in agricultural productivity as a result of high levels of ozone in Georgia is estimated to be draining \$250 million from Georgia's economy each year, adding that health costs also are high. It is estimated, she pointed out, that billions of dollars included in the nation's annual health costs are associated with outdoor air pollution. Ms. Gilmore added that other health costs associated with air pollution include increases in health-care insurance premiums because of the increasing number of visits to emergency rooms and doctors' offices and more widespread use of asthma medications.

Ms. Gilmore stated that the solution to such problems must be arrived at on the Federal level. She reported that the proposed Clean Smokestacks Act of 1999 is the most comprehensive bill so far that addresses the air emissions problems related to coal-fired power plants. She explained that the act mandates that 30-year-old power plants meet the standards under the CAA that govern new power plants. It also sets standards for mercury and carbon dioxide, which currently are unregulated under the CAA, she said. She stated that Representatives John Lewis (D-Ga.) and Cynthia McKinney (D-Ga.) are co-sponsors of the bill. She asked that members of the subcommittee and the audience also urge their representatives to support the legislation.

Ms. Gilmore also discussed the need for a public education campaign to inform lower-income and minority communities about the effects of coal-fired power plants in Georgia. She urged the subcommittee to pass a resolution to support such a campaign. She explained that many families are unaware of the health effects because they cannot actually see the pollution.

Ms. Rosa Hilda Ramos, Community Leader, Community of Cataño Against Pollution, asked whether the proposed Clean Smokestacks Act applies to oil-fired power plants. Ms. Gilmore

explained that the bill pertains exclusively to coal-fired power plants.

Ms. Eileen Gauna, Professor of Law, Southwestern University of Law, asked how many of the 11 coal-fired power plants in Georgia are located in or near low-income communities of color. She also asked which kind of air pollution – including nitrogen oxide, sulfur oxide, and carbon dioxide pollution – have localized effects. Third, Ms. Gauna asked whether power plants continue operating by identifying process changes as maintenance and repair, rather than modifications.

In response to Ms. Gauna's first question, Ms. Gilmore stated that her organization had been examining the demographics of communities in the vicinity of the power plants. She stated that, to date, the results of the examination had shown no disparate effect of air pollution from the coal-fired power plants on environmental justice communities. She said that the entire population seems to be affected equally by the pollution. That fact, she noted, is a "wonderful twist to the environmental justice opportunity" because it brings together traditional environmental groups and environmental justice groups. Ms. Gilmore did acknowledge a disparity in rates of asthma in minority communities because such groups generally experience a higher incidence of respiratory problems than higher-income groups.

Mr. John Seitz, Director, EPA OAR at Research Triangle Park, explained that the existing power plants have grandfathered rights and therefore are not required to meet many current standards under the CAA. He pointed out that EPA does not have the authority to shut down power plants. However, he noted, EPA can mandate the use of best available technologies to mitigate air pollution.

Ms. Yamaguchi stated that, in Los Angeles, smog reports are issued like weather reports. She asked Ms. Gilmore about the reporting of air pollution in Atlanta. Ms. Gilmore said that similar advisories are issued in Atlanta, but that knowledge in the lower-income communities about the health problems associated with those advisories is insufficient. She added that more affluent residents relocate away from the city or are sufficiently aware of the problem to stay indoors when such advisories are issued. Families in lower-income communities, on the other hand, often are not able to relocate to an area where the air is cleaner or are unaware of the health problems air pollution causes, she said. Ms. Gilmore reemphasized her organization's position that lower-income communities must be educated about the health problems associated with air pollution.

Dr. Gelobter suggested to Ms. Gilmore that Georgia Air Keepers participate in the subcommittee's Public Utilities Work Group. Ms. Gilmore agreed. Dr. Gelobter then stated that a public education campaign on coal-fired power plants should be on the work group's agenda. Mr. Damon Whitehead, Earth Conservation Corps, referred to a mercury study by the National Academy of Sciences (NAS) that Mr. Tom Goldtooth, Indigenous Environmental Network and chair of the Indigenous Peoples Subcommittee of the NEJAC, had discussed during the meeting of the Executive Council of the NEJAC on the previous day. Mr. Whitehead requested that the Public Utilities Work Group obtain a report on that study. Dr. Bunyan Bryant, Professor, School of Natural Resources and Environment, University of Michigan, requested a copy of the Clean Smokestacks Act of 1999 that Ms. Gilmore had discussed.

4.1.2 Regulation of Mercury Emissions from Coal-Fired Power Plants

Ms. Ellen Brown, EPA OAR, asked the members of the subcommittee for their views on whether EPA should regulate mercury emissions from coal-fired power plants. She reported that EPA is required to make a finding no later than December 15, 2000, on whether it is appropriate and necessary to regulate hazardous air pollutants (HAP), including mercury, from coal-fired power plants. She stated that, if EPA decides to regulate, the Agency faces a deadline under law to propose a regulation by December 2003. She added that a final regulation would be issued in December 2004 and implemented fully by the end of 2007.

Ms. Brown presented some background information about the issue of whether mercury emissions from coal-fired power plants should be regulated. In February 1998, she reported, EPA published a report to Congress on HAPs generated by electric power plants. In the report, EPA identified mercury emissions from coal-fired power plants as the HAP of greatest concern as a public health issue. Continuing, Ms. Brown stated that coal-fired power plants are the largest source category of mercury emissions in the United States, accounting for one third of anthropogenic emissions to the air. Mercury emissions are transported through the air and deposited to water and land, she explained. Once mercury enters the water, either through air deposition, run-off from the land, or directly, it can bioaccumulate in fish and animal tissue as methyl mercury, a highly toxic form of mercury, she said. Ms. Brown reported that human exposure to mercury occurs primarily through consumption of contaminated fish. Exposure to high levels of

mercury has been associated with serious neurological and developmental effects in humans, she pointed out, noting that EPA disseminates information about mercury to the public primarily through fish consumption advisories.

Ms. Brown stated that, beginning in 2000, EPA is requiring electric utilities to report their mercury emissions to the Toxics Release Inventory (TRI). She explained that, in the past, few such facilities have reported mercury releases to the TRI because the reporting threshold was too high to capture releases from many facilities.

Ms. Brown stated that, because the decision that EPA must make this year will not require a regulation, there was to be no public comment period. However, she asked that the subcommittee provide comments to assist EPA in making the decision. In clarification, Dr. Gelobter stated that EPA merely wants a simple “yes” or “no” recommendation from the subcommittee. Mr. Seitz added that the members of the subcommittee have an opportunity to share their knowledge about mercury and share their views with EPA as part of the Agency’s data collection process. Dr. Bryant observed that EPA already has the data it needs, stating that he did not understand why EPA needs help in making the decision.

Ms. Carter asked why, if mercury emissions are not a problem, EPA is alarming citizens about mercury. She added that, if mercury does pose a threat of detrimental effects on the health of citizens, EPA should not require a commitment on the part of the subcommittee for the need to regulate mercury emissions. Mr. Seitz responded that EPA must consider science and listen to all views. He emphasized that there are numerous stakeholders who have different views about whether mercury emissions are a problem. Ms. Carter added that, at one time, dioxin was not regarded as a problem, but now it is regarded as highly toxic. She expressed anticipation that a similar change in views will occur in relation to the issue of mercury emissions.

Ms. Jaramillo stated her understanding that the impetus for EPA is not to determine whether mercury is a problem. Instead, she said, EPA wants to hear about the health effects of mercury on people around the country. Ms. Jaramillo noted that the mercury issue is “already on the table.”

Ms. Minerva stated that the effects of mercury emissions are disproportionate because certain populations eat more fish than other groups. Dr. Gelobter agreed. He then stated that, while the

locations of mercury emission sources do not cause disproportionate effects, the health effects are disproportionate as a result of higher fish consumption levels among certain groups.

Mr. Whitehead moved that the subcommittee adopt a resolution to support EPA’s regulation of mercury emissions from coal-fired power plants, adding that the decision whether to regulate mercury was “a no-brainer.” Dr. Gelobter agreed that the subcommittee should adopt Mr. Whitehead’s suggestion. Ms. Yamaguchi also stated that she hoped the subcommittee would adopt a strong resolution supporting EPA’s regulation of mercury emissions. She asked that EPA report to the subcommittee on its decision on the matter at the next meeting of the NEJAC.

Mr. Whitehead agreed to draft the resolution to urge EPA to regulate mercury emissions from coal-fired power plants. Dr. Gelobter told the representatives of EPA that the subcommittee also would like to be involved actively in the process after the determination has been made, including involvement in rulemaking. Mr. Whitehead added that, in addition to urging EPA to make a positive decision to regulate mercury emissions and becoming involved in subsequent rulemaking, the subcommittee would like some assurance that the science (for example, the results of NAS research on mercury) will consider environmental justice issues.

4.1.3 Power Plants in Puerto Rico

Dr. Gelobter reminded the members of the subcommittee about the resolution concerning EPA’s regulation of power plants in Puerto Rico that was approved by the Executive Council at the December 1999 meeting. Ms. Ramos said that states and territories have the alternative to choose which strategy to use in dealing with air pollution in nonattainment areas. She reported that Puerto Rico had chosen a sulfur-free fuel strategy that requires the use of 1.5 percent sulfur fuel. She stated that Puerto Rico had eliminated limitations on emissions that are set forth in the CAA. In the resolution, she reminded the members of the subcommittee, the NEJAC had recommended that EPA review Puerto Rico’s strategy to reduce toxic air emissions. Ms. Ramos expressed her dissatisfaction with the response of EPA Region 2, stating that the Agency had made false statements about the issue. She asked that the NEJAC arrange an urgent meeting with Mr. Seitz; Mr. Robert Brenner, Acting Deputy Assistant Administrator, EPA OAR; and representatives of EPA Region 2, observing that the issue easily could prompt a lawsuit. Ms. Ramos asserted that she and her fellow Puerto Ricans were

ready to file suit but would prefer to resolve the conflict otherwise. She added that she has evidence that EPA Region 2 had misled the citizens of Puerto Rico on the issue. Dr. Gelobter asked that the subcommittee's Public Utilities Work Group help organize the dialogue.

4.2 Concentrated Animal Feeding Operations

The subcommittee heard presentations on the environmental and health effects of CAFOs. The subcommittee submitted to the Executive Council for consideration a proposed resolution, developed jointly with the Enforcement Subcommittee of the NEJAC, that recommends that EPA commit additional resources to the regulation of CAFOs.

4.2.1 U.S. Environmental Protection Agency and the U.S. Department of Agriculture Regulation of Concentrated Animal Feeding Operations

Mr. Louis Eby, Attorney-Advisor, Permits Division, EPA Office of Wastewater Management, provided information about CAFOs, the proposed National Pollutant Discharge Elimination System (NPDES) permitting guidance on the regulation of CAFOs, and the joint EPA and U.S. Department of Agriculture (USDA) unified national strategy for animal feeding operations (AFO).

He explained that under 40 Code of Federal Regulation (CFR) 122.23 and Appendix B, CAFOs include all AFOs having more than 1,000 animal units, as well as all AFOs having more than 300 animal units, if such a facility has an artificial conveyance or discharges directly into water bodies that cross the property. In addition, Mr. Eby stated that a CAFO is exempted if the discharge occurs only during a 25-year, 24-hour storm event. Mr. Eby then explained that the primary problems associated with CAFOs are overenrichment of a water body, pathogens, and contamination of drinking water sources. He reported that some 80 percent of CAFOs are located in just 16 states: Alabama, Arkansas, California, Delaware, Georgia, Indiana, Iowa, Maryland, Minnesota, Mississippi, Nebraska, North Carolina, Oklahoma, Pennsylvania, Texas, and Virginia. He added that, of the more than 375,000 AFO facilities in the United States, almost 13,000 are classified as CAFOs.

Mr. Eby described EPA's NPDES permitting guidance proposed in August 1999, noting that the guidance is expected to be made final by late spring 2000. The guidance states that CAFOs that have a potential to discharge must apply for an NPDES permit that addresses land application of waste at

the facility. The guidance also specifies that CAFOs are to develop comprehensive nutrient management plans (CNMP) that ensure compliance with the requirement for no discharge, except in a 25-year, 24-hour storm.

Mr. Eby also described the EPA-USDA unified national strategy for AFOs, which focuses on protection of water quality. The strategy includes USDA technical guidance on developing CNMPs and revises NPDES permitting rules and effluent limitation guidelines to address CAFOs. Mr. Eby stated that the proposed revised regulations are expected to be made final by December 2000, with final regulations to be issued two years thereafter.

Mr. Eby stated that, to support EPA OW in issuing the NDPEs guidance and implementing the EPA-USDA strategy, it is important to identify where CAFOs are located. He referred to the proposed NEJAC resolution that was to be discussed further and presented some preliminary comments on several provisions of the proposed resolution, as follows:

- With regard to the suggestion of a moratorium on all animal waste lagoons and land application fields, Mr. Eby stated that EPA has no regulatory authority to declare such a moratorium. While EPA is revising its regulations to include more protective standards, it cannot restrict all land applications. He emphasized the distinction between good agricultural practices and discharge practices, stating that it is possible to operate animal waste lagoons in an acceptable manner that incorporates good farming practices.
- In response to the concern expressed that EPA is issuing permits to facilities that are not applying manure properly, Mr. Eby stated that EPA is focusing on facilities that have the potential to discharge.
- With regard to regulation of poultry litter, Mr. Eby said that EPA will include such provisions in its guidance, specifically related to the application of dry poultry litter on land.
- With regard to siting requirements to protect waterways, he explained that EPA generally does not dictate where facilities can be located. However, he said, in its guidance, the Agency will attempt to relate the location of facilities to environmental effects.
- With regard to the expansion of public notice and public comment opportunities in the permit

application process for CAFOs, he stated that EPA included such expanded efforts into the guidance at specific points in the application process.

- Referring to the call for unannounced inspections, Mr. Eby stated that EPA already conducts such inspections.
- With regard to the use of new technologies, he stated that revised regulations to be proposed in December 2000 will encourage the use of new technologies to mitigate the effects on the environment of discharges from CAFOs.
- With regard to new regulations to address new land uses for areas that are phased out of CAFO use, he stated that EPA is examining options to rededicate those lands.
- With regard to the suggestion that new regulations impose stringent penalties for noncompliance, Mr. Eby explained that the current regulations allow states to impose a \$25,000-per-day fine.

4.2.2 Joint Resolution on Concentrated Animal Feeding Operations

Ms. Nan Freeland, Natural Resources Leadership Institute and a proxy member of the Enforcement Subcommittee of the NEJAC, made a presentation on CAFOs located in North Carolina. She also described the latest proposed draft resolution jointly developed by the Enforcement and Air and Water subcommittees, which urges EPA to commit more resources to the regulation of CAFOs.

Ms. Freeland stated that she had noticed a parallel between energy and utility companies and large agricultural companies in North Carolina. She said that those large businesses are wealthy and have easy access to members of Congress. They have a strong voice in Congress, while smaller community groups only have forums like the NEJAC to express their concerns, she noted.

Ms. Freeland referred to the proposed joint resolution on CAFOs prepared by the Air and Water and Enforcement subcommittees. She said that the resolution addresses most of the problems associated with CAFOs. Specifically, she reported, North Carolina has an unprecedented history of large swine operations. She said that those facilities pose the threat of a variety of adverse health effects, ranging from bad odor to groundwater contamination. She stated that most people in North Carolina depend on well water. Therefore, she

pointed out, any amount of contamination in the groundwater would compromise the quality of their drinking water. Ms. Freeland added that most of the CAFOs in North Carolina are located in the eastern part of the state, where the water table is generally high and the wells therefore are not very deep. She explained that any seepage or leaching from the waste lagoons likely would easily enter the groundwater.

Ms. Freeland then introduced Dr. Steve Wing, Department of Epidemiology, University of North Carolina-Chapel Hill, who conducted a study which found that CAFOs generally are located near African American churches and schools. Ms. Freeland explained that, in the south, having a CAFO near a church is tantamount to having one in a backyard, since churches play a significant role in people's lives. The church, she said, is a community center for people who live in rural areas.

Dr. Wing then described the animal waste lagoons and how they are used. The animal waste is flushed into open pits surrounded by dams. Because the pits will overflow during heavy rainfall, farmers must empty the pit when rain is forecast, he continued. In such cases, the raw, untreated waste is applied directly to the fields. The fields usually are not lined because, in North Carolina, many fields were once wetlands that were drained by subsurface pipes, he explained. As a result, moisture from the fields literally is piped to surface water bodies, he said.

Dr. Wing then reported that, in Fall 1999, the North Carolina Department of the Environment and the Department of Natural Resources allowed farmers to apply significant quantities of waste to their fields because of the series of hurricanes that had occurred at the time. Environmental groups brought lawsuits against the state, he continued, but the state allowed the North Carolina Pork Council to mount a defense on its behalf. Dr. Gelobter commented that the situation described by Dr. Wing appeared to be a case of complete negligence on the part of the state. He asked that the CAFO resolution reflect two levels of enforcement, specifically enforcement against negligence by states and enforcement by Federal authorities.

Ms. Freeland commended EPA for its efforts to address the issue, but stated that the guidance should be strengthened. She expressed her opinion that EPA's revised permitting regulations fail to meet the objectives of curbing the water pollution problems associated with CAFOs. She urged EPA to pass permitting guidance that at least requires regular testing of groundwater and surface water. She also urged that monitoring of odor and use of

buffer strips around land application fields to protect the neighboring communities be included in regulations.

Ms. Minerva responded that EPA's enforcement program had been rigorous in meeting its responsibilities. She referred to the efforts of Mr. Samuel Coleman, Director, Compliance Assurance and Enforcement Division, EPA Region 6, in Oklahoma. Mr. Coleman then reported that, two weeks earlier, EPA had performed inspections at five CAFO facilities and one rendering plant in Oklahoma. At all the facilities, he continued, EPA Region 6 had identified various violations, including lagoons that had been built in areas that may have been filled wetlands, exceedences in the amount of liquid waste applied to the land, and animal carcasses that had been disposed of improperly. Mr. Coleman stated that his staff was preparing a cease-and-desist order for the confirmed violations, and that corrective actions would be taken. Mr. Coleman added that many of the facilities inspected were operated by the same owner.

Ms. Minerva stressed that the proposed new NPDES permitting guidance is as strong as current regulations and that EPA is taking as aggressive a position as the law allows. She emphasized that EPA has expanded its view. She reinforced Mr. Eby's statement that EPA does not have the authority to impose a moratorium on animal waste lagoons and land applications, also adding that EPA does not have clear authority to address emissions of odors by CAFOs.

Ms. Yamaguchi asked whether the odor problem associated with CAFOs could be addressed under the CAA. Mr. Seitz stated that EPA does not have authority under the CAA to address the odor problem cited in the proposed resolution. He explained that it generally has been the responsibility of state and local governments to deal with odor issues. However, he stated, EPA's involvement can be triggered if certain constituents in the air, such as ammonia or sulfur, contribute to the odor. He added that EPA also would become involved if particulates in the air are a problem.

Ms. Carter asked whether it is possible to require farmers to locate their farms at least 25 to 50 miles from the nearest residence or neighborhood. She recommended that a statement related to proximity be incorporated into the proposed resolution to protect neighboring communities. Ms. Minerva responded that EPA does not have legal authority to impose a distance requirement. Mr. Gary Grant, Concerned Citizens of Tillery, commented that, in his opinion, it seemed that "justice is just for

corporations." He stressed that, if EPA does not have jurisdiction over siting, people in other parts of the country will suffer as the citizens of North Carolina have. Mr. Grant then stated that siting is an environmental justice issue.

Mr. Whitehead asked that an analysis be performed of EPA OW's legal authority under the Clean Water Act (CWA). He commented that EPA is very conservative about its authority, perhaps rightly so, he noted. He asked, however, whether the subcommittee could receive a simple and broad description of the authority of EPA OW.

Dr. Bryant suggested that EPA develop a geographic information system (GIS) data base of CAFOs to facilitate monitoring. Ms. Minerva stated that, since the facilities obtain permits under the new NPDES permitting guidance, their locations will be known and they can be mapped. Mr. Eby noted that data on the exact locations of CAFOs currently are limited. Dr. Gelobter asked that EPA consider providing the subcommittee with some maps based on the approximate locations of the known CAFOs. He asked that such maps be made available to the subcommittee at the next meeting of the NEJAC. Ms. Freeland recommended that EPA solicit from residents of rural areas information about the locations of CAFOs; those people will know where the facilities are, she observed. Mr. Whitehead asked that demographic information about communities located in the vicinity of CAFOs also be included in the GIS data base. Dr. Padin stated that most states have GIS maps of their jurisdiction that include information about land use. He added that the USDA funds agricultural activities and therefore should have information about the locations of CAFOs. He commented that, since USDA provides funding for such activities, that agency may be a source of financing for the adoption of alternative technologies for use by the facilities to mitigate discharges.

Ms. Freeland and Dr. Gelobter made final revisions in the proposed CAFO resolution after receiving comments from both subcommittees.

4.3 Guidance for Reducing Toxic Loadings

The Air and Water Subcommittee held a joint session with the Waste and Facility Siting Subcommittee to discuss EPA's draft guidance for the efforts of local areas to reduce the levels of toxics.

Mr. Timothy Fields, Jr., Assistant Administrator, EPA Office of Solid Waste and Emergency Response (OSWER), acknowledged the efforts of

Ms. Minerva and Mr. Brenner to reduce toxic loadings in overburdened areas. He introduced a draft guidance proposed by EPA that is intended to provide ideas and incentives to help states and localities reduce the levels of toxics in their communities. He explained that the guidance describes a priority process for approval of state implementation plans (SIP) that include toxic reduction plans, financial support for programs under which environmental justice issues are addressed, and Federal recognition of state and local programs intended to reduce levels of toxic pollutants. He added that the guidance also includes an appendix that describes ways in which state and local governments can work together to reduce pollution in their communities.

Mr. Fields asked members of the two subcommittees for their comments. He asked that they provide their opinions about whether the guidance is adequate and complete and whether the administrative benefits are sufficient to encourage state, local, and tribal governments to participate in achieving reductions in levels of toxics. He also asked for additional incentives that may encourage various sectors to participate. He asked that the subcommittee review the guidance and provide comments to Ms. Jenny Craig, EPA OAR, by June 30, 2000. Mr. Fields added that EPA would then revise the guidance in response to comments received and present the revised version to the subcommittee for the next meeting of the NEJAC.

Ms. Mary Nelson, Bethel New Life, Inc., and member of the Waste and Facility Siting Subcommittee of the NEJAC, commented that the incentives currently listed in the draft guidance "sound wonderful," but stated that she would expect that many governments will not participate. She asked whether there were any regulatory mechanisms that could be used to encourage participation. Mr. Fields responded that the effort must be voluntary, since there currently is no regulatory mandate to participate. He added that EPA therefore must provide good incentives.

Ms. Ramos asked why the guidance covers only hazardous or toxic substances. Ms. Craig explained that each EPA program uses a different definition of hazardous and toxic substances. She stated that, in the guidance, those terms have a general meaning. Ms. Craig added that the definitions of those terms would be stated in the guidance.

Mr. Mervyn Tano, President, International Institute for Indigenous Resource Management and member of the Waste and Facility Siting Subcommittee of the NEJAC, stated that, as EPA reviews risk factors

associated with toxic substances, the successes and failures of reduction efforts can be measured.

Mr. Smalley asked what sources of funding are available to local municipalities for the replacement of diesel buses with buses that run on alternative fuels, an action recommended in the guidance. Ms. Craig responded that EPA currently does not have grant money available for that or other activities described in the guidance. She emphasized that good incentives are the key to making the voluntary program work. Ms. Yamaguchi added that resources are the greatest incentive. She suggested that pilot studies be used to "kickstart" the program, technical assistance training be provided to governments on implementing the program, and that efforts be made in direct outreach to specific communities that are interested in the program. Ms. Nelson asked that EPA consider encouraging the pooling of the resources of various government programs, for example, through Agency partnerships. Mr. Fields agreed that the suggestions made by the members of the subcommittees were valuable.

Ms. Ramos commented that most of the pollution in affected communities likely originates in industries that probably would not participate in such programs. Mr. Seitz responded that he is encouraged by the positive outcome of the 3350 program, which was the precursor of the TRI voluntary reporting program. Mr. Leonard Robinson, TAMCO, expressed agreement with Mr. Seitz.

Referring to local efforts to develop goals and measure progress, Ms. Gauna asked that additional guidance be provided to overburdened areas that may need more aggressive strategies for reducing levels of toxics than other communities. Mr. Fields agreed that areas that are overburdened may require more aggressive plans.

Ms. Patricia Wood, Senior Manager, Federal Regulatory Affairs, Georgia-Pacific Corporation and member of the Waste and Facility Siting Subcommittee of the NEJAC, stated that she understood the objective of examining existing statutes and enforcing environmental justice elements in those statutes. However, she questioned the applicability of the guidance to any particular region; it would be "in the eye of the beholder" or the resident who lives in an area, she said, whether his or her community is overburdened. Ms. Wood added that perhaps EPA should focus the guidance on assessing the relative burden of pollution in the communities.

Ms. Vernice Miller-Travis, Executive Director, Partnership for Sustainable Brownfields Redevelopment and chair of the Waste and Facility Siting Subcommittee of the NEJAC, commented on the retrofitting of diesel engines in New York City. She reported that she had worked with EPA Region 2 and the state of New York to encourage use of alternative fuels by making public funding available. However, she explained, the Metropolitan Transportation Authority (MTA) had blocked their progress. She said that she would like to use regulatory tools to bring representatives of MTA to the table, but does not wish to create incentives to help the agency take an action it had failed in the past to take to comply with the law. Referring to the pilot studies as suggested by Ms. Yamaguchi, Ms. Miller-Travis also acknowledged that it is difficult to find a source of funding, but financial help should not be provided to MTA to take an action that should be required of it. The money should be directed toward implementation of innovative technologies, she suggested.

To clarify the issue, Ms. Craig stated that the guidance and financial support are not intended to help industry comply with existing laws. She said that they are meant to encourage voluntary efforts to “go above and beyond” existing regulations, adding that compliance with existing laws is assumed.

Ms. Veronica Eady, Executive Office of Environmental Affairs, Commonwealth of Massachusetts and member of the Waste and Facility Siting Subcommittee of the NEJAC, said that her state had used provisions of the National Environmental Policy Act (NEPA) to prompt the transit authority to use alternative fuels.

Ms. Minerva addressed the issue of voluntary rather than regulatory programs. She presented the example of EPA OW’s total maximum daily loads (TMDL) program, which asks states to identify water bodies that do not meet water quality standards. Exhibit 3-2 defines TMDLs. She explained that EPA OW envisioned that, as states identified their impaired water bodies, they would take regulatory steps to ensure that the water bodies meet water quality standards and take additional voluntary steps to manage future growth in neighboring communities. She stated that regulatory compliance and voluntary efforts should work together.

Mr. Johnny Wilson, Clark Atlanta University and member of the Waste and Facility Siting Subcommittee of the NEJAC, reported that while EPA laboratory reports may indicate that water quality in an area meets the maximum contaminant level (MCL), he had noticed during his inspections of

Exhibit 3-2

TOTAL MAXIMUM DAILY LOAD

A total maximum daily load (TMDL) is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, accompanied by an allocation of that amount to the sources of the pollutant.

A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The calculation must include a margin of safety to ensure that the waterbody can be used for the purposes the state, tribe, or territory has designated. The calculation also must account for reasonable variation in water quality.

Section 303 of the Clean Water Act establishes water quality standards and TMDL programs.

drinking-water supplies in various Georgia counties that the results are contradictory. He said that he had been told by a technician for a drinking water unit that the water was contaminated, but the concentrations of the contaminants were not high enough to be considered a problem. Yet, an African American woman in that same community drew water from the faucet that bubbled in her glass. Ms. Minerva responded that MCLs and TMDLs fall under different EPA OW programs. She and Mr. Wilson agreed to discuss the issue further after the subcommittee meeting.

Ms. Minerva stated the EPA OW would be interested in helping communities conduct a pilot study. However, she acknowledged that funding is an issue. She added that her office’s incentives primarily would encourage early response to issues. Dr. Gelobter asked about financial help through the NPDES program or state revolving funds. Ms. Minerva responded that EPA had not given extensive consideration to the possible use of those sources.

Mr. Tano noted that there are similarities between the goals of the guidance and those of national and international standard-setting organizations, such as the International Standards Organization (ISO). He suggested that there should be links between the programs of such organizations and Federal procurement policies, through which a local government can become eligible for Federal procurement if it receives a form of “certification.”

4.4 Fish Contamination

Ms. Jaramillo, chair of the subcommittee's Work Group on Fish Consumption, presented the following questions to be addressed by the work group.

- What are the health risks of consuming non commercial fish, that is, the risks of engaging in subsistence fishing?
- Are fish advisories working?
- Are communities responding to fish advisories? If not, why?
- Is there consistency in the responses of state, local, and tribal governments to advisories? If not, why?
- Is EPA using the process of the Interagency Working Group on Environmental Justice to collaborate with other Federal agencies – for example, the U.S. Department of Health and Human Services (HHS), USDA, the U.S. Department of the Interior (DOI), and the U.S. Department of Energy (DOE) – in addressing issues related to subsistence fishing?
- Are EPA OAR and OW integrating their civil rights responsibilities in mitigating the adverse effects of consumption of contaminated fish?
- What and where are the “teeth” in the CWA that can support the effort to address fish consumption?

Ms. Jaramillo presented the work group's plan of action, which included requesting of EPA a presentation on fish consumption focused on effects on public health; soliciting the perspective of the environmental justice community on subsistence fishing; and developing recommendations and resolutions for consideration by the Executive Council of the NEJAC. The work group also was to develop a work plan for the remainder of 2000 and for 2001, she noted.

To achieve the work group's first goal of obtaining information from EPA about fish consumption, Ms. Jaramillo introduced Mr. Thomas Armitage, Standards and Applied Science Division, EPA OW, to discuss EPA's National Fish and Wildlife Contamination Program. Mr. Armitage explained that the program provides technical assistance to state, Federal, and tribal agencies on matters related to health risks associated with exposure to chemical contaminants in fish and wildlife. Activities conducted under the program include the

preparation of national guidance documents and the conduct of outreach; the maintenance of national data bases; sponsorship of national conferences and workshops; provision of grants for sampling and analysis; the conduct of special studies on fish consumption; and the provision of assistance in issuing advisories.

Mr. Armitage described two examples of national guidance documents developed under the program. *The Guidance for Assessing Chemical Contamination Data for Use in Fish Advisories* consists of four volumes that are updated every two years, he said. The guidance takes a risk-based approach, provides advice on population-specific advisories, and presents new default fish consumption rates, he pointed out. *The Guidance for Conducting Fish and Wildlife Consumption Surveys* presents methods of identifying populations that consume large amounts of fish and presents recommendations for determination of the need for advisories on the basis of data on “high-end consumers,” he continued.

Mr. Armitage described three examples of EPA OW's outreach efforts. In a letter to health-care providers targeted through a national mailing to pediatricians, obstetricians and gynecologists, family physicians, and staff of state and tribal health agencies, EPA sought to increase awareness of contaminants in sport and subsistence-caught fish. EPA also has produced brochures in English, Spanish, and Vietnamese on reducing health risks from fish consumption, he continued. The brochures are distributed nationally to health care providers and state and tribal health agencies, among other recipients, he noted. EPA also has designed a tool kit for health-care providers that is intended to increase awareness among nurses, nurse practitioners, and midwives of health issues related to fish consumption. The tool kit was featured at a meeting of the American College of Nurse-Midwives in May 2000.

Mr. Armitage introduced to the subcommittee a data base that provides a national-level list of fish and wildlife advisories that is updated annually. The data base is available on the Internet at <www.epa.gov/ost/fish> and includes all state, tribal, and Federal advisories in the U.S. and Canada. EPA also has developed a national mercury tissue data base, said Mr. Armitage.

Continuing, Mr. Armitage reported that EPA has hosted several national conferences and work groups on fish consumption. The National Forum on Contaminants in Fish, sponsored by EPA through the American Fisheries Society, is an annual

meeting conducted to discuss national issues related to contaminants in fish. The forum includes participants representing all 50 states and as many as 35 tribes, he said. In 1997 and 1999, EPA hosted work groups on the development of advisories for 35 tribal representatives. A 2000 work group is planned, he added. EPA also has hosted national technical conferences on polychlorinated biphenyls (PCB), mercury, and bioaccumulation, Mr. Armitage said.

Mr. Armitage described several special studies related to the issue, including a subsistence study conducted in Cook Inlet, Alaska; a study conducted along the Columbia River; a national study of chemical residues in fish; a comparative dietary risk project; and an evaluation of the effectiveness and awareness of advisories, specifically focusing on mercury.

In terms of grants for sampling and analysis to support advisories, EPA has solicited proposals to support state and tribal advisory programs. The selection criteria included areas of suspected subsistence activities. Mr. Armitage stated that EPA had issued four grants, to California, Delaware, Virginia, and Texas. Three grants are planned for fiscal year 2000.

Mr. Armitage requested that members of the subcommittee provide their views on the following areas: (1) identifying organizations that represent high-risk groups and individuals to help conduct a National Risk Communication Workshop; (2) reviewing the National Report on State Consistency as it is pertinent to fish consumption issues; and (3) making recommendations about how EPA can work with states to achieve consistent protection of high-risk groups.

Ms. Jaramillo commented that, in sampling efforts to support fish advisories, random sampling generally is used. She expressed her concern that random sampling may miss clusters of affected populations, including environmental justice communities. She suggested that EPA consider incorporating targeted sampling or subsampling into its methodology.

Dr. Bryant commended Mr. Armitage on a very thorough presentation. He stated that it was obvious that much research was being undertaken. He asked how EPA evaluates whether communities are complying with the advisories. Mr. Armitage stated that the data available was insufficient to provide an answer to that question. He referred to a special study that specifically targeted the issue noting that the study should be completed in 2001. The results of the study will be available to all the states, he said.

He added that the National Risk Communication Workshop can serve as a means of reaching out to various affected groups. Dr. Bryant stated that, while advisories may be successful in reaching communities, affected groups may not respond adequately. He urged EPA to do the best research possible to determine whether citizens are responding; if not, a new strategy must be developed, he said. Dr. Bryant also urged that EPA focus on the people and the effectiveness of the message.

Ms. Yamaguchi stated that, in the Los Angeles area, her organization had been working closely with the American Petroleum Institute on the fish consumption issue, primarily on contamination resulting from Superfund activities. She reported that state fish consumption advisories issued since 1990 have worked well in English-speaking communities, but not as well in English-as-a-second language (ESL) communities such as Cambodian, Vietnamese, and Chinese communities. Ms. Yamaguchi noted that reaching out to those specific communities and communicating with them in their own language had proven beneficial. Ms. Yamaguchi stated that providing funding for communities to educate themselves also has proven successful, since it is the community itself that determines the best form of outreach.

Ms. Ramos stated that, through discussions with community members in Oakland, California, she received the recommendation that such universal languages as signs be used when fish consumption advisories are posted. She asked that EPA explore that form of outreach. Ms. Ramos then stated that she recently had learned that contaminated fish have been found in some areas in Puerto Rico. Mr. Armitage said that Puerto Rico had not been included in the studies he had discussed. Ms. Jaramillo asked that it be noted that EPA may find it necessary to consider doing so.

4.5 Urban Air Initiatives

The subcommittee heard presentations and provided comment on urban air initiatives around the country.

4.5.1 U.S. Environmental Protection Agency Diesel Retrofit Program

Mr. Gregory Green, Director of the Office of Transportation and Air Quality, EPA OAR, described EPA's voluntary diesel retrofit program, which is being implemented to boost the efforts of existing regulatory air programs. He explained that diesel engines are high emitters of air pollution, especially in urban areas. He reported that diesel emissions

constitute 49 percent and 24 percent of the nation's nitrogen oxide and particulate matter inventories, respectively. Mr. Green added that a study conducted by the South Coast Air Quality Management Division in California attributes 70 percent of all cancer deaths in the area from exposure to air toxics of diesel particulate matter emissions.

Mr. Green stated that a voluntary program to retrofit diesel engines will provide immediate reductions in air pollution. He said that the program will address emissions from existing fleets, establish a process for new technology verification, and provide incentives to obtain credits for SIPs under EPA's Voluntary Measures Program. He presented several examples of retrofitting a diesel engine, including using a catalyst or filter; conducting an engine upgrade; early replacement of the engine; using a cleaner fuel or additive; or implementing a combination of the above-mentioned examples.

According to Mr. Green, EPA's goal for this year is to retrofit 10,000 diesel engines. He clarified that success will be measured by obtaining at least commitments to retrofit, not necessarily actual retrofits. Mr. Green stressed that the voluntary program will establish strong, positive partnerships between EPA, state and local agencies, industry (including engine manufacturers and users), environmental organizations, and the members of the public.

Mr. Green directed the subcommittee to the following web site for additional information on EPA's voluntary measures program at <http://epa.gov/oms/transp/traqvdm.htm>

Mr. Whitehead asked about the emissions trading component of the voluntary measures program. Mr. Green responded that EPA has not yet decided on how exactly to implement that component. Mr. Smalley recommended that for short-term results, public transportation should be well-maintained so that diesel emissions are minimized and Mr. Green agreed.

Dr. Gelobter asked how much of the diesel emissions in New York City result from trucks and construction vehicles. He also asked if EPA is taking steps to phase out diesel gasoline. Mr. Green reported that about 60 to 65 percent and about 40 percent of diesel emissions in New York City come from trucks and construction vehicles, respectively. He stated that until a replacement fuel for diesel is developed or found, it would be difficult to phase out the fuel. He explained that about 10 million pieces of equipment in the United States currently require

diesel. He reported that EPA is working with a forum on diesel fuel to develop a much cleaner fuel.

4.5.2 U.S. Environmental Protection Agency Tier 2 Strategy

Mr. William Harnett, Acting Director, EPA OAR, provided an update on EPA's Tier 2 strategy and a status report on two issues that the subcommittee had requested EPA investigate at the December 1999 meeting, (1) measurement of disparate effects and (2) analysis of the locations of all facilities that pollute the air.

Mr. Harnett reported that under the Tier 2 strategy, EPA has begun compiling the locations of every refinery in the United States and their emissions (including nitrogen and sulfur oxides). He stated that a national emissions inventory is being developed and soon will be available. He said that EPA also is developing a brochure for the general public on each refinery (about 115) that will describe the Tier 2 program and the changes that will be made to refineries to meet EPA's regulations. Mr. Harnett ensured the members of the subcommittee that he will solicit their comments on the first drafts of each brochure.

Mr. Harnett stated that EPA also is preparing a document that will identify steps that a refinery can take to reduce its nitrogen and sulfur oxide emissions. He acknowledged that while EPA does not have the authority to enforce those steps, the Agency can strongly encourage each refinery to cooperate. He stated that the likelihood of a faster and smoother permitting process can be an effective incentive.

Ms. Gauna commented that to assess disparate effects, it would be helpful to examine the proximity of the refineries to environmental justice communities. She asked if it might be possible for multiple facilities to collectively increase emissions in an area to harmful levels, but not enough of an increase to prompt a new source review of the individual facilities. Mr. Harnett responded that while EPA is compiling many pieces of information, the Agency currently is not conducting a comprehensive analysis to make that determination. He stated that EPA is examining regions on a county level with a focus on the southern region and other areas where refineries are concentrated.

Mr. Smalley asked for a clarification on whether the public is being involved in the regulation of sulfur dioxide under the Tier 2 strategy. Mr. Harnett responded that because sulfur currently is being removed from fuels, permits involving sulfur

emissions go through the public comment period. He added that two public comment periods may be necessary if the permit is reviewed under the Tier 2 strategy and for sulfur dioxide provisions separately.

4.5.3 Environmental Justice Concerns in Southern California Related to Air Pollution

Ms. Rachel Morello-Frosch, Post-Doctoral Researcher, School of Public Health, University of California at Berkeley, presented information on the distribution of air toxics and associated cancer risks among various communities in southern California. She reviewed traditional approaches that have been used in environmental justice research on air pollution, including (1) evaluating the location of emission sources relative to environmental justice communities; (2) assessing emissions loadings from those sources (for example, by examining data from the TRI); and (3) evaluating the distribution of ambient concentrations of criteria pollutants, including nitrogen and sulfur oxides; particulate matter; ozone; carbon monoxide; and lead. She stated that there has been little research conducted on the 188 air toxics listed under the CAA because of the lack of consistent monitoring.

Ms. Morello-Frosch discussed new opportunities to assess environmental justice concerns through examination of data collected under EPA's Cumulative Exposure Project (CEP). She said that the data can allow modeling of long-term ambient concentrations of the 148 HAPs, which are estimated for all 2,600 census tracts in southern California. She added that the data includes mobile and non-mobile emission sources. She explained that the CEP focuses on southern California because that region constitutes some of the most challenging air pollution problems in the country, including adverse health effects.

Ms. Morello-Frosch reviewed how cancer risk estimates based on inhalation unit risk for individual pollutants are calculated. She reported that the estimated lifetime cancer risk in southern California ranges from 6.9 to 591 per 100,000 people and has a mean of 59 per 100,000. She added that nearly 8,000 excess cancer cases are estimated in the region, with the following five pollutants accounting for about 80 percent of the excess, polycyclic organic matter; 1,3-butadiene; formaldehyde; benzene; and chromium.

Ms. Morello-Frosch then reported that 25 percent (3.5 million) of the population resides in census tracts with the highest risk of cancer. She stated that 68 percent of the population are people of color,

while 32 percent of the population are Anglos. She added that the probability of a person of color living in the high risk tract is one in three rather than one in seven for an Anglo resident.

Ms. Morello-Frosch stated that race and ethnicity play a persistent explanatory role in the distribution of estimated cancer risks associated with outdoor HAPs while controlling for economics, land use, and other factors. She said that the bulk of cancer risks in the region are attributable to transportation and small area source emissions. She added that cancer risks from HAPs overall exceed the CAA goal of one in a million by at least one to three orders of magnitude. Ms. Morello-Frosch ended by presenting several policy implications of the findings. She said that emission source allocation results raises challenges for developing effective emission reduction strategies. She stated that area sources are smaller and widely dispersed with diverse production characteristics, making uniform approaches difficult. She reported that proliferation of mobile sources continues to steadily erode the gains made from emission reduction efforts. She recommended that future environmental justice research approaches emphasize how changing land use patterns, suburbanization, and transportation development affect pollution streams and the distribution of risks among diverse communities and the poor.

Ms. Gauna noted that formaldehyde was one of the five chemicals that Ms. Morello-Frosch had identified as a pollutant of concern. She asked whether formaldehyde has a strong synergistic effect with the other chemicals. Ms. Laura McKelvey, EPA OAR, responded that formaldehyde is one of the pollutants that EPA is examining that may transform into other harmful products. She stated that the transformation and synergy among chemicals is an area identified by EPA as requiring additional research to understand the cumulative effects of multiple pollutants.

4.5.4 Partnership for Clean Air Communities

Mr. T.J. Roskelley, Northeast States for Coordinated Air Use Management (NESCAUM), presented information on NESCAUM's Partnerships for Clean Air Communities project, which is exploring the use of emissions trading to curb air pollution in urban communities. He reported that emissions trading has saved billions of dollars in environmental compliance costs. However, he stated that major policy issues must be addressed if emissions trading is to remain a viable policy tool. Specifically, he explained that (1) EPA must close loopholes by regulating every polluter; (2) cost-savings must result

in environmental benefits either through more stringent regulation or through mechanisms that redirect the savings into environmental investments; and (3) environmental equity concerns must be adequately addressed through policies and initiatives that focus on discrete communities instead of the aggregate pollution.

Mr. Roskelley explained that the Partnerships for Clean Air Communities project focuses on the third point, which explores whether emissions trading can be used to the advantage of urban communities. He presented the following key objectives of the project:

- Build a diverse coalition to reduce urban air pollution with a focus on participation by local community groups.
- Implement discrete clean air strategies to reduce local urban air pollution.
- Develop a framework for using emissions trading to enhance urban air quality.
- Develop long-term, sustainable models for funding clean air initiatives.
- Create a policy model that will be easily transferable to any urban area.

Mr. Roskelley reported that ConEd will provide the initial funding for the project, which will focus on maximizing the environmental health benefits in the New York City area. Upcoming activities for the project include public outreach and an initial press announcement in May 2000 through mid-summer; development of criteria and a process for selecting projects by late Summer 2000; and announcement of a request for proposal (RFP) and the full launch of the program in Fall 2000.

Mr. Roskelley called upon the subcommittee to help in developing criteria for the project. He stated that NESCAUM's ultimate goal is to apply the project nationally. He announced a meeting in New York City this summer for those interested in collaborating on the project.

Dr. Gelobter stated that he is on the steering committee for the project. He observed that one of the problems that environmental justice communities face is a lack of resources to purchase credits. He stated that the RFP process will involve creating a two-step process to purchase credits and coordinating with various parties to secure funding sources. He stated that he would like the NEJAC, particularly the Air and Water Subcommittee, to consider how communities of color can purchase

credits and what kinds of credits they could purchase.

4.5.5 U.S. Environmental Protection Agency Urban Air Toxics Strategy

Ms. McKelvey provided an update on EPA's urban air toxics strategy and the national air toxics assessment. She reviewed the purpose of an EPA OAR working group on urban air toxics that has been formed to determine how state, local, and tribal governments can reduce health risks from urban pollution in their jurisdictions. She mentioned that Dr. Bryant, Dr. Ellen Barron, Paso Del Norte Air Quality Task Force, and Dr. Greenbaum have attended and participated in previous meetings of the working group. She stated that the next working group meeting will be held June 14 and 15, 2000 in Washington, D.C., followed by another meeting in August 2000 to finalize the group's plan of action.

Ms. McKelvey reported that, as part of EPA's National Air Toxics Assessment (NATA) program, additional data will be collected on loadings of specific pollutants in local areas. Exhibit 3-3 describes the NATA program. She explained that the assessment aims to lay out a more effective approach to monitoring air toxics, based on results of four pilot cities around the country. She stated

Exhibit 3-3

U.S. ENVIRONMENTAL PROTECTION AGENCY'S NATIONAL AIR TOXICS ASSESSMENT PROGRAM

The National Air Toxics Assessment (NATA) program, one of four components identified in the U.S. Environmental Protection Agency's (EPA) Office of Air and Radiation (OAR) Integrated Urban Air Toxics Strategy to reduce air toxics. The NATA program will help EPA identify areas of concern, characterize risks, and track progress in achieving the Agency's overall goals for the air toxics programs. Activities under NATA include expanding of air toxics monitoring, improving and periodically updating emissions inventories, national- and local-scale air quality, multi-media and exposure modeling, continued research on health effects and exposures to both ambient exposure and assessment tools. The activities will provide EPA with improved characterizations of risk posed by air toxics and risk reductions that result from the imposition of emissions control standards and the adoption of initiatives for stationary and mobile source programs.

that the pilot projects are helping EPA to understand the spatial distributions of air pollution sources in urban areas. She reported that EPA hopes to have ambient concentrations collected and available for public review by late June 2000. She stated that in addition to ambient air modeling, EPA is expanding the project by plugging data into an exposure model and conducting a risk characterization. Ms. McKelvey projected that the results of the modeling and risk characterization will be available for peer review in late August, with finalization of the report targeted for December 2000.

Ms. Yamaguchi commented that there appears to be opportunities for community-based monitoring activities as part of the national air toxics assessment. She stated that a good incentive to encourage communities to attend public meetings on the issue is to promise training on how to conduct air monitoring. Dr. Bryant emphasized the importance of developing a manual on public participation and research.

5.0 RESOLUTION AND SIGNIFICANT ACTION ITEMS

This section summarizes the resolution forwarded to the Executive Council of the NEJAC for consideration and the significant action items adopted by the Air and Water Subcommittee.

The members discussed a resolution in which the NEJAC requests that EPA regulate mercury emissions from coal-fired power plants.

The members also adopted the following significant action items:

- ✓ Recommend that the NEJAC establish under joint sponsorship of the Air and Water and Waste and Facility Siting subcommittees a work group to (1) review and comment by June 30, 2000, on the Draft Guidance to Reduce Toxic Levels issued by EPA OSWER (2) to continue dialogue on reductions in levels of toxics.
- ✓ Recommend that the Executive Council of the NEJAC establish under joint sponsorship of the Air and Water and Indigenous subcommittees a work group to examine issues related to fish consumption.
- ✓ Recommend that the Executive Council of the NEJAC organize an urgent meeting between representatives of EPA OAR and EPA Region 2 to discuss air pollution from power plants in Puerto Rico to follow up the resolution on the issue approved at the December 1999 meeting of the NEJAC.
- ✓ Agree to review EPA OW's National Report on State Consistency, which addresses issues related to fish consumption.

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