

June 16, 2005
Breakout session
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Goal: focus on last 3 questions.

Introductions

3. What changes to the current air quality system or its components could you envision that would bring us into better alignment with the vision and principles?

- See EPA focus resources on highest risk environmental problems wrt human risk and ecosystem improvement vs. blindly focusing on statutory deadlines.
- Don't forget the big picture—focus on the problems, not just the same old industries
- Need to make consideration of health effects central to evaluation—exposure? Effects? Both.
- Need to go back to projections and try to measure real progress—did we accomplish what we set out to do?
- Note that modeling projected impacts different exercise than measuring actual impacts. Look at personal exposures. Hard to measure real health benefits though.
- EPA has tried to measure effectiveness on macro level. Still ongoing, but very macro.
- Data showing residual hot spots, urban issues, etc.—let's target to get at this risk. Federal rule creates national incentives re pollution prevention, etc., but in urbanized areas, need to use monitoring data to target and adjust strategies, target risk.
- Re monitoring, don't remove existing urban network to accomplish more dispersed monitoring. Tribal programs, states, already losing monitoring funds.
- In order to assess risk, need to look at populations that aren't the norm. Example, mercury in fishing impacts on tribes.
- Where we have science, or means to collect it, we should do so. Can't fix problems without understanding them or understanding why it failed. Ongoing evaluation is essential. Example, EPA doesn't have time, external resources, or funding to do that step.
- Design data evaluation needs upfront in developing programs.
- Hard to overcome disincentives to monitor. One size fits all doesn't always work.
- Overall—target for risk and evaluate for progress.
- Be aware of need for independence of evaluation to avoid conflicts. But if these evaluators aren't knowledgeable enough, they can't conduct a good evaluation. Ex: OMB doesn't understand air program. Answer: informed evaluator?
- Goal of evaluation—not necessarily did the rule do what we said it would, but better ask “what did we accomplish?”
- Past history of independent evaluations (GAO) too often have incentive to make EPA look bad.
- But upfront planning can lead to identification of the data that will answer the question of progress/improvement. Key: evaluation PLAN
- Goal to measure health effects or ecosystem effects. Not just tons. But effect is hard (e.g., latency).

--Where is the effect is a good question too. Benefits not always where you expect. Models don't always work—need monitoring as a backup.

Multi-pollutant Issues?

--At local level, toxics is a problem along with other pollutant exposures.

--Boiler MACT in face of NSPS that isn't coordinated/consistent is an example of a failure to do good multi-pollutant planning.

--EPA should focus on the problems that are the most serious and give partners flexibility to do so. E.g., super SIP.

--Issue: NAAQS less stringent scientifically than HAP—makes it hard to measure significance of the problem. Have to be able to compare across pollutant types. Gets harder with multi-media

--Role of EPA can slip deadlines on lower priorities, give flexibility

--Concern about doublehitting of sources with this more openended approach. Important to look at risk drivers to focus on risk factors.

--Need to deal with the “other” category—undercontrolled and uncontrolled sources (airports, marine, off-road diesel, etc.). Lead you to use of innovative approaches.

System needs to provide tools, trust to let them use it.

John's wheel: Goal setting needs to be added. Analysis of problem before you set the goal needed too.

--Pilot projects a good tool.

Other components:

--Monitor smarter

--better understanding of emissions components—inventories, emission factors

--use health/environmental data—ex. Future hospital respiratory visits as ozone goes down? But hard to isolate factors and influence.

--What about incentives beyond federal sectors to get the monitoring for these issues?

Control Strategies:

--Improve involvement of stakeholders in developing SIPs, multipollutant strategies. Be aware that tribes in particular have a lot of case-by-case situations. May be similar for areas with residual nonattainment issues.

--What level (national, regional, local) are we dealing with? Could also be sector-level. Depends on issue: air quality endpoint, sources, urban issues.

--EPA voluntary programs a good starting point. Need to evaluate other possibilities for this approach.

--If residual areas really are the problems, make this where EPA focuses. Same for hot spots.

--Assessment side should be multi-pollutant in more holistic way.

--CAPs and HAPs (not just urban 33) good focus

--Tribes are already collecting good assessment data because this is part of the process of getting their funding. Sometimes, they are reluctant to share data though.

--Assessments build control strategy design.

--Erika's presentation included some good potential nontraditional tools to address these problems. E.g., using taxes, other incentives. Also, have to look at suppliers. Fees.
--Presumption that mix in different areas is very different leads to assessment approach. Otherwise, a more common approach may work. Not a case of all areas alike or different—may be a mix.
--Let problem guide the design—national rule, innovative approach at the local level, etc. Different role for EPA—tech support vs. just rule development.

SIP process:

--Weight of evidence: balance monitoring vs. modeling? Less reliance on modeling, more on weight of evidence. EPA is incorporating this concept into guidance. Can always be taken further though.
--Need to develop model rule to allow quicker adjustments to SIPs.
--SIPs tend to be very focused on attainment demonstration—Surrounded by states that know they can't get there, EPA knows, States know—who are we fooling? CAA requires date certain. But 8-hour ozone—still have date, but key is enhanced rate of progress. Don't wait until end timeline to make adjustments.
--Impossible in some areas (LA) to reach attainment.
--Disincentives at states that have impossible goals—why should they bother and put their sources through this? What incentives could we offer? Also, worry about areas punished for failure of local efforts, where only effective measures are national ones. Did local controls really make a difference?
--National measures can be appropriate. But may be cases where local measures can be effective.
--More challenging as we get closer to background levels.
--Pay attention to areas on the fringe, areas with huge growth—before they fall into nonattainment. Buffer zone?

Climate change implications of air quality program:

--Plenty to deal with already. Group lacks expertise.
--Power plants looking at massive NOx, Sox, mercury controls in next 10-15 years. When you put climate in the mix, cost effectiveness can shut the device down. Don't want to make this investment if this could happen.
--Take into account higher temperatures in our assessments. Key factor in ozone production, etc. Take into account in planning process to address temporal scope, etc.
--AQM system takes temperature into account already. But, climate change is topic that can overwhelm the process.
--How do we plug this into the model? Average increase in temperature leading to increasing number of high ozone episodes focus of NAS.
--In Alaska, people are falling through ice. Global, long term issue. Need to service our constituents—can't just ignore.
--For air quality purposes, we should be addressing climate change variables that affect air quality assessment.
--Too complex, too politically charged for limited ozone assessment.
--Use of historical averages could be faulty.

--If we talk about climate, don't do it as a back door. Note: a number of states are looking at the back door. Leave as low priority issue and see if other groups bring it up.

Prioritized Issues

--Evaluate problem before you set the goals. Use monitoring, inventories, health and environmental data.

--Set goals for most pressing problems. Especially uncontrolled, undercontrolled sources. Residual nonattainment issue. Hot spots..

--Plan for Evaluation—including means to measure health and ecosystem effects. Need measured baseline.

--Identify options to address source of problem. Determine how to address problems we face as we get closer to baseline.

--Evaluate/measure impacts of program using evaluation metrics.

Needs:

RESOURCES, RESOURCES, RESOURCES

Requires open process

Need enhanced tool box