Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

APPROVED MINUTES

Advisory Council Public Health Committee Meeting
1:30 p.m., Monday, February 23, 2004

1. **Call to Order – Roll Call.** 1:35 p.m. Quorum Present: Linda Weiner, Chairperson; Diane Bailey, Elinor Blake, Jeffrey Bramlett, Victor Torreano. Absent: Brian Zamora.

2. **Public Comment Period.** There were no public comments.

3. **Approval of Minutes of December 8, 2003.** Ms. Blake moved approval of the minutes; seconded by Mr. Torreano; carried unanimously.

4. **Cumulative Risk Assessment and the Precautionary Principle.** Chairperson Weiner stated that the Committee is reviewing proposed modifications to the District's Toxics New Source Review (TNSR) program. Both Cumulative Risk Assessment (CRA) and the Precautionary Principle are becoming increasingly important to community groups. Health data indicate that adverse impacts occur in low-income areas with multiple pollution sources. The City and County of San Francisco has adopted the Precautionary Principle and its Purchasing Department is evaluating its practical application. The business community is concerned over the possible financial costs that would be incurred in implementing the Precautionary Principle.

   Brian Bateman, Engineering Division Director, stated that TNSR programs have historically focused on the incremental risk from a single project rather than the broader assessment of cumulative risk from other sources within a given area. The risk management policy question that emerges is whether or not the determination of project acceptability should be based on incremental or cumulative risk.

   The application of the Precautionary Principle to a TNSR rule concerns whether or not regulatory agencies should require an alternatives analysis to a proposed project. Although an alternatives analysis is presently conducted within the context of the California Environmental Quality Act (CEQA) review process, the issue is whether or not it should become more routine in the permit review process.

   Cindy Tuck, General Counsel, California Counsel on Environmental and Economic Balance (CCEEB) stated that CRA is important as it addresses the pollution to which people are exposed. However, this is a new issue, and policies that address it should do so appropriately. Regional air toxics modeling indicate that mobile sources—in particular, diesel particulate emissions—contribute the most to air toxics risk. Stationary sources also contribute to air toxics risk but to a lesser extent.

The California Environmental Protection Agency (Cal/EPA) is now focusing on the analysis of air toxics risk at the community level. In 2001, the California Air Resources Board (CARB) adopted its Environmental Justice (EJ) policy in which it committed to assessing and reducing cumulative health risk, and to developing the needed tools to be able to assess and reduce cumulative risk at the neighborhood level. To date, CARB has not issued either guidance documents or policies on CRA but is working to develop tools and policies in this area.

Both CARB and the District continue to adopt regulations and rules to reduce air toxics and more are on the way. CARB will adopt airborne toxic control measures this week for both stationary and portable diesel engines, which air districts will then implement. There are also discussions at the state level on combining air toxics with criteria pollutant regulations for the analysis of cumulative air quality impacts, thus raising further questions on the scope and definition of cumulative air quality impacts. In the meetings of CARB's Environmental Justice Stakeholders Group, CCEEB has noted that ozone and particulate matter (PM) regulatory programs are already cumulative in nature, and therefore the current focus should be on developing the appropriate tools and policies for air toxics issues.

The South Coast Air Quality Management District (SCAQMD) has done ground-breaking work in air toxics monitoring. It estimates that the air toxics cancer risk in that basin is 1,400 in a million with diesel emissions included, and 400 to 600 in a million excluding diesel emissions. For the Bay Area, the most recent air toxics cancer risk estimate is 174 in a million with diesel emissions excluded. The SCAQMD White Paper on Cumulative Risk observes that any given suggested control strategy must be carefully reviewed and not presumed to result in a rule as it may not be necessary or either technically or economically feasible.

The Cal/EPA Advisory Committee on Environmental Justice (ACEJ) has recommended that Cal/EPA develop a definition of "cumulative impacts" which would lump air quality and water quality issues together. In its Alternative Opinion to the ACEJ report, CCEEB noted that such an approach is premature and should not be considered until the means to assess the issues regarding individual media, such as cumulative air toxics risk, are developed.

CCEEB also notes that the ACEJ recommendations are not binding on Cal/EPA or any other agency in California. The Cal/EPA Inter-Agency Working Group and the Cal/EPA Secretary will develop Cal/EPA's EJ Strategy, and Cal/EPA has committed to considering categories of reasonableness, feasibility, legal authority and resource requirements in the strategy development. The measures that ACEJ recommended to address cumulative pollution burden—such as denial of a permit to operate, establishment of buffer zones, and small source relocation—are extreme in CCEEB's view, particularly in the absence of tools that assess cumulative impacts and policies that allow the agency to determine where there is a problem relative to cumulative impacts. Such measures are premature and inappropriate as modifications to a TNSR rule. The District should work further with both CARB and Cal/EPA on these issues.

Regarding issues of precaution, a precautionary approach is inherent in Cal/EPA and District regulatory programs, which are more stringent than the regulatory programs of other states. The risk assessment guidance from the Office of Environmental Health Hazard Assessment (OEHHA) is more conservative than that promulgated by federal EPA. Cal/EPA's ACEJ ultimately decided not to incorporate the term Precautionary Principle into its recommendations.

CCEEB considers the Precautionary Principle to be an extreme form of precaution that is unworkable in practice because it:

a) allows agencies to act on mere on mere allegations of harm for which neither criteria nor evidentiary standards have been promulgated.
b) shifts the burden of proof to the proponent of the project and requires proof of a negative through a series of hypotheticals.
c) provides for no consideration of benefits from a given activity.
d) requires regulators to decide which chemical or product a company can use, but regulators are not trained in product design or manufacturing and are not responsible for product development, safety, liability or warranty.
e) creates significant uncertainty for businesses in obtaining a permit to operate. One manual on the Precautionary Principle even identifies it as a means for stopping the development of new technology. This is counterproductive. Looking at this matter holistically, CCEEB is concerned that this is not good for the Bay Area or California for job creation and retention.

Amy Cohen, Staff Attorney, Environmental Law and Justice Clinic (ELJC), Golden Gate School of Law, stated the ELJC represents a number of community organizations and communities that see the District's TNSR rule-making as an opportunity to address their concerns on health impacts. In July of 2003, the Clinic provided written comments on how the District's TNSR program could include more of the Precautionary Principle and conduct CRA. ELJC staff met with the District in December of 2003 to discuss those recommendations. The challenge is how to obtain District Board support for developing the scientific tools and policies concerning them. The SCAQMD is devoting major resources to the CRA issue. The Bay Area AQMD can take intermediate steps now address CRA until it is able to develop a more comprehensive program.

The ELJC contends that the District's TNSR rule-making does not address cumulative health risk in any context as its incremental approach considers only one project under permit review. This is true for projects at larger facilities such as refineries and other, smaller but high-risk sources, such as dry cleaners, gas stations, etc. Secondly, the risk levels proposed by the District are too high, especially given the absence of considering risk from proximate sources. Sources of risk must be identified and assessed for their significance rather than assumed to be insignificant. District staff stated in rule-making workshops that the Precautionary Principle is fine in principle but not in practice, and requested specific recommendations to consider how the District could incorporate the Precautionary Principle into its permit process. The ELJC provided specific recommendations that translate the Principle into regulatory practice. The District could now incorporate some of these recommendations relatively easily, while others would require the support of the District Board and in some cases budgetary support as well.

Ms. Cohen stated that while the Precautionary Principle calls for more and better scientific data, an informed decision-making process, and places the burden on the proponent of the activity that emits pollution. The assumption that cumulative risk is not a problem places the burden of proof on the public to demonstrate that it is. Since the District has a responsibility to protect the public from harm against air contaminants, the public should not bear the burden to prove that cumulative risk is not a problem. The assertion that there is no evidence of a cumulative risk problem in the absence of studying that problem in practice is unfair and arrives at an answer without having asked the question to begin with.

The District should obtain input on this issue both inside and outside of rule-making. It should not rely on the numbers it has been using for proposed risk limits but instead should ascertain whether there is cumulative harm. Until it has an answer, it should take precautionary measures. The implication is that the risk assessment that the District uses should be conducted more comprehensively.

Mobile and stationary source emissions are both problematic. For residents near freeways and ports a new pollution source is another concern. The District should assess the added risk and work with CARB to find further ways to reduce mobile source emissions to the extent possible. This requires taking measures now to account for overall risks. Other than noting that CARB had not yet developed the tools to assess or the policies to limit cumulative risks, the District has not indicated that it is moving forward on CRA issues.

California's air pollution control officers have noted that they look to the SCAQMD for guidance on the implementation of CRA, but to date that district has not adopted cumulative risk limits. The District has indicated that it would need over $1 million to establish a CRA program. Given that California is operating under fiscal constraints, the ELJC has suggested interim measures. For example, businesses already pay for a risk assessment as part of their application for a permit to operate. This could be expanded to a regional or area study and the costs passed through permit fee increases.

Ken Kloc, Staff Scientist, ELJC, stated that making the Precautionary Principle operational is a major concern of businesses. Reducing threats of harm to public health is the means through which this is accomplished. Risk assessment protects most of the people most of the time, but more sensitive individual and groups are often left unprotected. This gap creates a context for incorporating a principle of precaution into a regulatory framework.

For example, the SCAQMD has conducted relatively sophisticated modeling exercises using the emissions inventory for the State Implementation Plan (SIP) process, and showed where mobile source and stationary source risk overlapped and peaked. Similar calculations were conducted for stationary source risk, and certain areas were identified with high cumulative point source risks. These were then evaluated with census track data to map demographic profiles in relation to the hot spots. The Huntington Park community has a high cumulative point source risk and a high population of people of color. The SIP process in the Bay Area provides both the modeling tools and the emission inventories that would enable such work to be conducted in the Bay Area. This type of mapping could also be adopted as an additional criterion for permit review.

CRA could also be folded into hypothetical modeling for a number of cumulative source scenarios that address a specific number of point sources in an area. The District conducted some of this kind of work in a TNSR review model and found that in one scenario the cumulative risk was more than twice as much as the incremental risk from individual sources.

Criteria pollutants are also toxic. The consideration of the aggregate risk from air pollution is becoming increasingly important. For individuals predisposed to asthma, exposure to PM and a toxic air contaminant is of particular concern. Use of recent guidance from OEHHA on including the toxicity of criteria pollutants in conducting risk assessment would be a step forward to adding CRA to the District's rule-making.

The Precautionary Principle can be added to TNSR through hypothetical modeling. This would establish orders of magnitude by which cumulative risk could be measured and lowered to acceptable levels. The ELJC suggests lowering the level of acceptable risk by a factor of 10 across the board. This is a sound substitute for the absence of funds to conduct the necessary studies at this time. In the next 15 years, CARB wishes to reduce mobile source cancer risk from diesel PM to less than 100 per million. The ELJC believes that the total maximum risk for point sources in an area should be less than that, at perhaps 10 in a million. The District proposes to allow some facilities to use a hazard index of up to 10. However, this index has built-in safety factors and is set at one (1.0): an increase in the hazard index for a project removes protection for the most sensitive person.

Members of the Committee posed questions of the guest speakers, who replied as follows:

- Ms. Cohen noted the Clinic would soon meet with the District's Executive Officer, Jack P. Broadbent, to discuss the status of its recommendations on the TNSR program.

- Ms. Tuck stated that after the tools are developed, the appropriate way to address cumulative air toxics risk would begin by identifying the significant source categories in a community in which cumulative risk is of concern and ascertaining if the source or sources comply with existing regulations. The next step would be to evaluate the regulatory structure, assess whether there are gaps in the existing rules, and if so, then respond programmatically through a rule or rule amendment. Businesses must be treated fairly, and regulatory certainty is critical for businesses to function.

- Ms. Tuck stated that for areas where cumulative risk is a problem and facility compliance has been achieved, there may be mobile or port or other sources that require further assessment. Facilities that are not in compliance will be addressed under existing rules. How to assess a cumulative air toxics risk at the neighborhood level has not yet been resolved by CARB. Questions of modeling, data and policy development must be answered.

- Ms. Tuck observed that a precautionary approach acceptable to CCEEB would be for Cal/EPA to conduct research on product/chemical alternatives and to provide a clearing-house with such information available to businesses. The concern is where regulators mandate the use of alternatives. Companies already implement pollution prevention, and it saves them money.

- Ms. Cohen stated that the Precautionary Principle has been incorporated into many regulations around the world and information on where it has may be found at www.besafenet.com under the "Policies" page in this website.

- Ms. Cohen noted that the next steps for Cal/EPA and CARB to implement the ACEJ recommendations endorsed by Cal/EPA are unknown. In September, the ACEJ adopted its EJ recommendations and the Cal/EPA Interagency Working Group endorsed these in October. There is considerable discussion with the new head of Cal/EPA about the future of this Working Group, but the Cal/EPA Legal Director has committed to move forward on the recommendations and implement them. The Spring 2004 deadline for receipt of implementation suggestions was set in September of 2003, prior to the gubernatorial recall.

- Ms. Tuck added that CCEEB is not opposed to a CRA strategy but supports a uniform program coming out of Cal/EPA. At CARB, a stakeholder group is working on a land-use handbook for local government that addresses cumulative impacts and cautions against siting incompatible uses adjacent to one another.
- Mr. Bateman noted that the SCAQMD is not presently conducting NSR rule development, and its White Paper on Cumulative Impacts did not identify any specific changes to the toxics NSR rule to consider cumulative impacts other than to suggest adding a provision on buffer zones for toxic sources within a radius of a school. Ms. Cohen added there is an appendix to the SCAQMD White Paper that proposes to take some actions related to EJ and CRA. The SCAQMD has taken the key step to study cumulative risk and identify areas of concern.
- Ms. Tuck suggested that a staff member from CARB address the Committee on the issue of status of analytical tools for studying cumulative risk.
- Mr. Hess indicated that at a minimum the Committee would have six months within which to review this topic before the proposed modifications to the TNSR goes are presented to the District Board of Directors.

Chairperson Weiner thanked the speakers for their excellent presentations.

5. **Committee Member Comments/Other Business.** There was discussion of the topics comprising the Committee's work plan for 2004.

6. **Time and Place of Next Meeting.** 12:30 p.m., Wednesday, March 10, 2004, 939 Ellis Street, San Francisco, California 94109.

7. **Adjournment.** 3:03 p.m.

James N. Corazza
Deputy Clerk of the Boards